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**PARADISIACAL IMAGERY IN EARLY ISLĀMIC ART**

**by**

**N. J. Johnson**

**A thesis submitted in conformity with the requirements  
for the degree of Doctor of Philosophy  
Graduate Department of Near and Middle Eastern Civilizations  
University of Toronto**

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**Paradisiacal Imagery in Early Islāmic Art**

**Doctor of Philosophy, 1998**

**Nola Jeanette Johnson**

**Graduate Department of Near and Middle Eastern Civilizations**

**University of Toronto**

**Abstract**

This thesis considers the Qubbat al-Şakhrah's construction to have been a regional response, couched in a regional artistic vocabulary, to counter what was perceived to be a serious regional problem, the distracting effect of the beauties of Christian churches and, that `Abd al-Malik's text in the Qubbat al-Şakhrah reflects the ideological threat, by stating Christian beliefs and pointing out their inappropriateness for Muslims. It proposes that the Qubbat al-Şakhrah's ornament represents the Qur'ān's numerous descriptions of Paradise as a wondrous garden of shady groves and trees bearing every kind of fruit. Byzantine art provided the model for the visualization of the paradisiacal imagery, and the art of the Sāsānid empire contributed the fantastical, other-worldly elements that might be imagined of Paradise.

The Qubbat al-Şakhrah's heavenly garden was not an isolated phenomenon, as versions of it are attributed to at least three mosques; furthermore, two distinct, deliberate iconographic images developed from the Qubbah's ornament. One of these shows a hypostyle mosque with a column and vase in its courtyard. A religious context may have been envisaged for this imagery, but there is evidence also of its popular manifestation. The second iconographic image was employed secularly, taking the form of a distinctive arcade through which naturalistic or very stylized vegetation can be seen. This version of the imagery appears as architectural decoration and was used in, or used to point to, areas in which public audiences might be held. Popular versions of the arcade imagery found on portable objects show that birds and animals as well as vegetation might be seen through the

arches.

In the Qubbat al-Şakrah's shape, ornament and text, the building's patron showed himself alert and responsive to the cultural and religious environment. The development of Islāmic iconographical forms suggests that the threat perceived from other religious iconographies continued beyond the erection of the Qubbat al-Şakrah and that Islām was still attempting to define itself, but, as with the Qubbah, contemporary artistic vocabularies were used to construct a Muslim answer to a Muslim need.

## **Acknowledgments**

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## Introduction

The particular circumstance that led to this paper was the recognition that the sites of Qal'at 'Ammān and Qaṣṭal al-Balqa` in Jordan and a number of unglazed clay lamps shared a distinctive architectural motif: serrated arches on plain engaged colonnettes within whose frames might be seen vegetation, geometric patterns or fauna. As instances of the motif accumulated, its appearance was observed to be remarkably similar across the range of examples and its location in architectural contexts, consistent. Furthermore, the search for paradigms led to the discovery that a Qur'ān, found in a Cairo mosque, and some marquetry panels shared another, equally-distinctive architectural motif, namely, what seemed to be a hypostyle mosque with a prominently displayed floral motif in its central courtyard.

For reasons to be discussed, the architectural motifs individually appeared to be related to the Qubbat al-Ṣakhrāh, suggesting that they might be evidence of Umayyad iconography. Neither motif had attracted attention as such, however, nor did a connection between them present itself until the writer saw three illustrations from a Qur'ān found at the Great Mosque of San'ā', Yemen<sup>1</sup> (Figures 1,<sup>2</sup> 2 and 3<sup>3</sup> herein).

An iconography of Umayyad architecture had been explored by J. Sauvaget, who proposed that, differences of detail aside, similar ceremonial usage had imposed common architectural layouts on the prayer halls of mosques and secular halls of audience.<sup>4</sup> For his doctoral thesis O. Grabar<sup>5</sup> examined the remains of several Umayyad princely structures, their decoration and textual material for evidence of the development of an imperial iconography. Both these works contain valued information and opinions, but their theses pre-date the discovery of much of the material on which this paper relies.

As for the two architectural motifs, it might be supposed that reports of finding extensive remains of serrated arches at a number of early Islamic sites would have elicited comment, if only

because of the motifs's repeated use. Some writers have referred to some of their predecessors' work, but there are curious lapses.

In three articles of the 1950's K. Otto-Dorn reported that blind serrated arches were characteristic of Ruṣāfah, and compared them with those at `Ammān.<sup>6</sup> She described Ruṣāfah's blind arcades as typical of Umayyad art and referred to other examples such as those on the façades of Qaṣr al-Ḥayr al-Gharbī and the Small Enclosure at Qaṣr al-Ḥayr al-Sharqī,<sup>7</sup> and on the "Marwān" ewer.<sup>8</sup>

In 1977, H. Gaube compared the serrated arches at `Ammān, Qaṣṭal and Qaṣra Kharānah<sup>9</sup> without mentioning those at Ruṣāfah. He did point out, however, that the blind niches on the façades of Qaṣr Kharānah and the Small Enclosure at Qaṣr al-Ḥayr al-Sharqī were similar,<sup>10</sup> and that serrated horseshoe arches appeared at `Ammān, Qaṣṭal, about the interior windows at Qaṣr Kharānah, and on the courtyard balustrade at Jabal Says.<sup>11</sup> When he does refer to Otto-Dorn's articles on Ruṣāfah, in 1979, it is in connection with the site only, not its decoration.<sup>12</sup> P. Carlier compared Qaṣṭal's serrated arches with those at nearby `Ammān,<sup>13</sup> and later, A. Northedge<sup>14</sup> described the serrated arches at `Ammān without mentioning those at Qaṣṭal, even though he referred to Qaṣṭal in matters of other comparanda.

Only S. Urice appears to have seen any significance in the location of the arches. He remarked that the common context in which the small open arcades at Qaṣr Kharānah, the blind arcades above the sole entry to the Small Enclosure at Qaṣr al-Ḥayr al-Sharqī, and the blind arcades in the Reception Hall at `Ammān occur seemed to be at a "point of passage" between neutral and charged space.<sup>15</sup>

The marquetry panels have fared even less well. M. Jenkins referred briefly to the tripartite decorative arrangement of the one in the Metropolitan Museum of Art, New York,<sup>16</sup> (Figure 109), and M. Rosen-Ayalon has pointed out that the winged motifs in the New York and Cairo panels (Figure 110) resembled those to be seen in the Qubbat al-Ṣakhrāh's mosaics, as well as in the spandrels of the fragment of a Coptic sarcophagus found in Cairo.<sup>17</sup> Rosen-Ayalon's observation is but one in an

iconographic study embracing all of the Haram. As the work is deliberately limited it does not deal with much of the material used by the writer, but a caveat on the study of the Qubbat al-Şakrah would be that it draws rather heavily on Christian and Jewish iconography for an understanding of that monument. F. Sarre's comments are the most interesting, and frustrating, for their lack of specifics. He noted that the architectural motif of the panel in Berlin (Figure 111) "was taken from contemporary mosques" and was "frequently found painted in gold as a decorative border on the pages of earlier Kufic Korans".<sup>18</sup> The Qur'āns are not specified, but he associated the panel's medium with "contemporary Egyptian art, and in particular with the ornamental decoration of the early Korans".<sup>19</sup> Again, the Qur'āns are not specified, but he mentions generally the folios published by B. Moritz.<sup>20</sup>

O. Grabar is another who has drawn attention to Moritz' illustrations,<sup>21</sup> in particular, to the architectural depictions in a Qur'ān found in the Mosque of `Amr b. al-`Ās, Cairo.<sup>22</sup> He identifies mosque structures on two Surah dividers, and connects the column on another folio with the column seen in Figure 3,<sup>23</sup> unfortunately, his wide-ranging analysis of the San`ā' Figures is marred by the elimination from discussion of illustrative details he found "unsettling",<sup>24</sup> an omission for which he is chided by one of his reviewers.<sup>25</sup> The writer was pleased to see the San`ā' and Cairo Figures discussed together, as they are so important to this thesis, but disappointed in the findings. Particular responses to Grabar's comments are found in the chapters following.

This paper deals with the relationship between the two architectural motifs, the San`ā' Figures and the Qubbat al-Şakrah. All three San`ā' Figures are examined in detail, comparanda are presented for their various features and an identification for each is proposed. The new information on the Qubbat al-Şakrah that the San`ā' Figures provide leads to a reconsideration of that monument's origin and decorative programme.

In following the architectural motifs' trail the writer has not examined all monuments said to be Umayyad, nor all of the architecture and decoration of the sites at which the motifs are present. The trail is incomplete, but it has seemed important to record the existence of previously unrecognized

Umayyad iconography and its perceived relationship to the Qubbat al-Şakhrah and the San`ā Figures; to re-examine the Qubbah in light of new information, and to advise that identifications of the San`ā Figures have been made other than those so far advanced.

\* \* \*

The conventions observed in this thesis for the Romanization of Arabic script are those found in the 1997 edition of the Library of Congress' ALA-LC Romanization Tables: Transliteration Schemes for Non-Roman Scripts.<sup>26</sup> In this scheme, medial and final *hamzah* is Romanized as ' ; *alif maqṣūrah* as à; *ayn* as ` , and *tā' marbūtah* as h, or t in construct.

Certain place names and a title are shown according to their Anglicized forms in The Hans Wehr Dictionary of Modern Written Arabic:<sup>27</sup> Cairo, Damascus, Gaza, Mecca, Yemen, caliph.

To avoid confusion when citing place names from their works, the Romanization schemes used by the authors following have been retained: F.-M. Abel et A. Barrois, M. Avi-Yonah, Howard Crosby Butler, C.R. Conder and H.H. Kitchener, Jean-Pascal Fourdrin, Jean Lassus, Margaret Lyttelton, Ruth and Asher Ovadiah, Michele Piccirillo and `Abd al-Jalil `Amr, Aapeli Saarisalo and Heikki Palva, Deborah Thompson, A.D. Trendall, Vassilios Tzaferis.



## Notes

1. Hans-Caspar Graf von Bothmer, "Architekturbilder im Koran," Pantheon 45 (1987): 4; Marilyn Jenkins, "A Vocabulary of Umayyad Ornament," Masāhif San`ā'. Kuwait: Dār al-Āthār al-Islamiyyah, 1985: 19. The codex' inventory number is 20-33.1 and, according to the manuscript's conservator, Ursula Dreibholz, "Treatment of Early Islamic Manuscript Fragments on Parchment, a Case History: the find of Sana'a, Yemen," The Conservation and Preservation of Islamic Manuscripts: proceedings of the third conference of Islamic monuments 1995, p. 140 and n. 11, "20-33" means 20 lines to the page and the lines no longer than 33 cm, while ".1" is that Qur'ān's individual number. This numbering system was worked out by the first director of the San`ā' conservation project, G. Puin.
2. Von Bothmer, "Architekturbilder," p. 12, the first page seen on opening the cover; *idem.*, "Frühislamische Koran-Illuminationen," Kunst & Antiquitäten 1/1986: 24, Abb. 1.
3. Figure 2 herein is Farb. II and Figure 3 is Farb. I in von Bothmer "Architekturbilder," the colour plates in that article having been reproduced as they appear side-by-side in the Qur'ān, the right-hand picture (Figure 2) coming first. Von Bothmer customarily refers to them as "right" and "left" respectively. See "Architekturbilder," p. 5 and n. 27.
4. Jean Sauvaget, La Mosquée Omeyyade de Médine. Paris: Vanoest, 1947, p. 123 ff.
5. Oleg Grabar, "Ceremonial and Art at the Umayyad Court." Ph.D. diss., Princeton University, 1955.
6. Katharina Otto-Dorn, "Bericht über die grabung im Islamischen Rusafa," Archäologischer Anzeiger des Deutschen Archäologischen Instituts (1954) 69: column 152, printed with the Jarbuch des Deutschen Archäologischen Instituts, (1954) band 69. [The two publications were printed together for the years 1889-1961]; *idem.*, "Bericht über die grabung im Islamischen Rusafa," Les Annales Archéologiques de Syrie (1954/55) 4-5 jointly: 54; *idem.*, "Grabung im umayyadischen Rusāfah," Ars Orientalis (1957) 2: 129.
7. Otto-Dorn, "Bericht," 1954, column 152; *idem.*, "Grabung," p. 129.
8. Otto-Dorn, "Grabung," p. 129 and n. 31.
9. Heinz Gaube, "'Ammān, Ḥarāne und Qaṣṭal," Zeitschrift des Deutschen Palästina-Vereins (1977) 93: 73.
10. Gaube, "'Ammān," p. 69.
11. Gaube, "'Ammān," p. 79.
12. Heinz Gaube, "Die syrischen Wüstenschlösser: Einige wirtschaftliche und politische Gesichtspunkte zu ihrer Entstehung," Zeitschrift des Deutschen Palästina-Vereins (1979) 95: p. 206, n. 80.
13. Patricia Carlier, "Qaṣṭal al-Balqa': An Umayyad Site in Jordan," The Fourth International Conference On The History of Bilād al-Shām During The Umayyad Period. Proceedings of the Third Symposium, vol. II, English Section, 1987: 108.
14. Alastair Northedge, Studies on Roman and Islamic `Ammān. Vol. 1, with contributions by Julian Bowsher, Ulrich Hübner, Henry Innes MacAdam, Jason Wood. British Academy Monographs in

Archaeology no. 3, Oxford: Oxford University Press, 1992, p. 89 ff.

15. Stephen K. Urice, Qasr Kharana in the Transjordan. Durham, North Carolina: American Schools of Oriental Research, 1987, p. 75.

16. Marilyn Jenkins, "Islamic Art in The Metropolitan Museum of Art," Arts and the Islamic World (1985) Issue 11 vol. 3. no. 3: 52-53, figs. 1-2.

17. Myriam Rosen-Ayalon, The Early Islamic Monuments on the Haram al-Sharīf: an iconographic study. Qedem 28. Jerusalem: The Hebrew University of Jerusalem, 1989, pp. 48-49, and figs. 29-30.

18. Friedrich Sarre, Islamic Bookbindings. Translated from the German edition Islamische Bucheinbände by F.D. O'Byrne. London: Kegan Paul, Trench, Trubner & Co. Ltd, 1923, an unnumbered caption page for his plate I.

19. Sarre, Islamic Bookbindings, unnumbered introductory page.

20. B. Moritz, ed., Arabic Palaeography. Publications of the Khedivial Library, No. 16. Cairo, 1905.

21. Oleg Grabar, The Mediation of Ornament. The A.W. Mellon Lectures in the Fine Arts, 1989. Bollingen Series XXXV.38. Princeton, New Jersey: Princeton University Press, 1992, p. 164, figs. 131-134.

22. The first 12 plates of Moritz' publication.

23. Grabar, Mediation, figures 134 and 131, respectively.

24. Grabar, Mediation, p. 157.

25. Jane Jakeman, Review of The Mediation of Ornament by Oleg Grabar. Ars Orientalis (1994) 24: 151-152.

26. Randall K. Barry, compiler and editor, ALA-LC Romanization Tables: Transliteration Schemes for Non-Roman Scripts. Approved by the Library of Congress and the American Library Association. Washington: Library of Congress, 1997, "Arabic", pp. 10-19.

27. J. Milton Cowan, editor, The Hans Wehr Dictionary of Modern Written Arabic. Wiesbaden: Otto Harrassowitz, 1961, 1966, 1971. Third edition, Ithaca, New York: Spoken Language Services, Inc., 1976.

## Chapter One: Three Illustrations from a Qur'ān

In 1972 a great quantity of parchment and paper manuscript fragments was found above the ceiling of the Great Mosque at San'ā' when repairs were being made to that building. Based on such criteria as format, layout, script style, decoration of the Surah headings, twenty-five of the parchment fragments were determined to be part of one Qur'ānic codex<sup>2</sup> and likely of the Umayyad period.<sup>3</sup> Amongst those fragments, and the subject of this chapter, were the remains of three full-page illustrations: a geometric figure with trees referred to as the title page (Figure 1); a building with stairs and a centre aisle (Figure 2), and a building with a central courtyard (Figure 3), respectively, verso and recto of a double frontispiece.

Their ruined state notwithstanding, these are remarkable drawings. Unframed, they are the entire focus of their respective pages; it is not possible to say whether they were titled,<sup>4</sup> but this may never have been necessary. While each differs from its fellows, clearly they are linked, first, by their elaborate borders, second, by the naturalistic vegetation in conjunction with the borders. As the most substantial features of Figure 1, and repeated in a modified fashion on numbers 2 and 3, these two elements have more than ornamental significance. A third link is the uniformity of much of the architectural detail and ornamentation that confirms the richness of the buildings; this uniformity has the effect of subordinating lesser features to the leading parts.

Contributing notably to the dramatic effect of the ensemble is the symmetry of the three Figures and the emphasis gained through a hierarchy of scale. For example, the trees in Figure 1 and the arched elements at the upper centres of Figures 2 and 3 are disproportionately larger than other elements of the drawings, suggesting that a greater significance was attached to them. Another example of this hierarchy of scale is to be seen in the apse mosaic of S. Catherine's, Mt. Sinai (Figure 56), where Jesus is the largest of the persons illustrated because he is the most important.

There is much realistic architectural detail yet, as is characteristic of other mediaeval

architectural depictions, representation shifts "discursively" between exterior and interior features.<sup>5</sup> The seeming illogicality of the shifts and the difficulties of understanding and interpreting the results of them is discussed by R. Krautheimer, with special reference to the many depictions and "copies" of the Holy Sepulchre at Jerusalem,<sup>6</sup> and by P. Lampl,<sup>7</sup> in a more general way. The latter refers to compositions of internal and external features as "ideal" renderings of architecture and points to some of the means used to attain them: only quintessential exterior and interior elements were drawn; one part of a building might be the synecdoche for the whole; some features were enlarged in accordance with their importance; actual size and spatial relationships were irrelevant, and numbers were important only if symbolically meaningful.<sup>8</sup> In an examination of "Copies in Medieval Architecture" Krautheimer has interpreted this ideality as evidence that content, usage, and the name or attribution were often more important in the copying or depiction of a structure than the exact reproduction of its physical characteristics<sup>9</sup> but, in a particular instance, has demonstrated how knowledge of a depiction's place of origin and period, contemporary building practices, textual and archaeological evidence have contributed to a reconstruction of that depicted. The instance is the *Ecclesia mater* mosaic (Figure 4) found at Tabarka,<sup>10</sup> and his (Figure 5)<sup>11</sup> and J.B. Ward-Perkins' (Figure 6)<sup>12</sup> interpretation of that building portrait are relevant to problems faced in understanding the San`ā` Qur`ān illustrations.<sup>13</sup>

*Ecclesia mater* has been reconstructed as a basilica with a wide centre aisle and narrower single aisles flanking. It has a gabled façade and a tiled roof above a clerestory whose windows are closed with pierced stone slabs. A central, curtained door in the façade is reached by stairs. In the nave there is an altar with antependium and three candles and beyond are steps which lead up to a three-arched arcade at the chord of the apse. At the left and right walls the arcade is supported on pilasters, and the nave columns end immediately before the raised apse floor. The apse protrudes beyond the building's principal dimensions and has an oculus in its half dome. Mosaics of birds and flowers decorate the basilica's floor, below which is a sarcophagus in a funerary vault.<sup>14</sup>

As disposed in the mosaic, however, the gable has been placed beneath the clerestory supported by a nave column and, like the door at the extreme right, altar and apse arcade have been rotated to face the viewer. Nave and apse share the same floor level, although the reconstructions show otherwise, and the subterranean sarcophagus, floor-level mosaics and truncated columns of an aisle between them and the viewer have all been fitted into the space between the entrance and apse steps.

In both reconstructions the gable's windows have been lowered to clerestory level as their more reasonable position in North African basilicas,<sup>15</sup> and the curtained door, which in the mosaic is found at the extreme right, has been placed at the centre of the façade. Altars in fifth century African basilicas were known to have been in the nave, and the stairs to the left are interpreted as leading up to the raised floor of the apse, because apses then were raised above nave level,<sup>16</sup> rather than down to the funerary vault which may have been sealed.<sup>17</sup>

As to the authors' differences, the apse' oculus is not shown on Ward-Perkins' reconstruction where it could not be seen, whereas Krautheimer has re-located it above the triumphal arch on the grounds it "probably slid down in the rendering from its actual place in the rear gable of the nave".<sup>18</sup> As well, Krautheimer raises the clerestory on arches, because "the horizontal which runs above the columns in the mosaic is the bottom line of the outside clerestory and not an architrave, an element rarely, if ever, used in North African churches",<sup>19</sup> while Ward-Perkins, who also appears to understand the inscription's underline as part of the clerestory, shows it as an architrave and states "There is no trace in any of the Tripolitanian churches of the use of the architrave in place of the arch".<sup>20</sup>

For the most part the authors agree in their interpretation of the mosaic, being distracted neither by its dissection, nor the enlargement or diminution of its several parts; their reconstructions were informed by the detail provided by the mosaicist, and what they knew of building practices of *Ecclesia mater's* time and place.

Another relevant basilical depiction is the *Palatium*, or palace of Theodoric, mosaic in the

nave of the early sixth century Sant'Apollinare Nuovo, Ravenna (Figure 7).<sup>21</sup> Structurally, this secular basilica would have looked much like Ecclesia mater (see Figures 5, 6), in having a high, wide nave, and tiled roof above a clerestory whose windows are closed with shutters. As with Ecclesia mater the clerestory roof is shown sloping towards the viewer. Note that the tiles over the central gable run parallel to the roof ridge, instead of down from the ridge to the eaves. Two reasons for this anomaly can be suggested: one, such an arrangement makes all the tiles directionally harmonious; two, the true alignment of the gable's tiles would have been invisible in this method of depiction.

The aisle columns terminate at a large three-arched arcade which, although at the far end of the nave, has been projected forward, and the combined interior colonnades and exterior clerestory roof can be seen to pass behind it. Where Palatium now has curtains in every bay there were once figures, the outlines of whose heads can be discerned above the curtain rods,<sup>22</sup> and two of whose hands remain on the columns. It is suggested that the presence of the figures was the reason for depicting Palatium in this way, opening up the building like a book, then flattening it out to show all the persons clearly.<sup>23</sup>

Figure 2's building, head-on to and slightly below the viewer's position, is clearly-drawn, essentially two-dimensional,<sup>24</sup> composed of exterior and interior structural components stacked one upon the other, mostly within the limits of elaborate floral bands. From bottom to top, there is a forecourt marked off by two low balustrades behind which columns are seen beneath the building (grid 1-4 E).<sup>25</sup> Three doors with stairs lead inside, where there is a well-defined central aisle (3 A-D), at the farther end of which is the remnant of inclined steps (3B), and a great arch raised on two levels of paired columns (3 A-B). Flanking the arch is a line of vegetation (1-4 A), with stairs again at the extreme left. Because of its inclusion in a Qur'ān, and the particular identification of some features, this building has been identified as a mosque, with which the writer agrees, said to be like that of Damascus.

The Great Mosque of Damascus was tailored to fit an existing, rectangular site in which the

*qiblah* occurred on one of the long walls. In the prayer hall, two arcade-supporting colonnades create three aisles parallel to the long walls; at the extremities the colonnades abut the short walls; at the centre they are intercepted by, and abut, four piers supporting the dome (Figure 8). The effect of the piers is to create a centre aisle of single arches and it is this combination of central, single arches within a two-storied colonnade parallel to the *qiblah* wall that Figure 2's building is said to resemble.<sup>26</sup>

Two points might be made: first, unified, transverse arch systems consisting of a single arch flanked by two tiers of arches did exist in a few Syrian buildings, such as the fourth century (?) church at Tafhā (Figure 9)<sup>27</sup> and the non-Christian second century basilica at Shaqqā (Figure 10),<sup>28</sup> but these were raised on piers set close together in order to support flat stone roofs,<sup>29</sup> and are not the arches depicted in Figure 2. Second, the structure at Damascus is not unified; it has been created from the marriage of different support systems, that of piers for the dome, and columns for the roof. It is argued that Figure 2's "likeness" to Damascus is the result of misunderstanding the juxtaposition of its support structures, about which the artist has conveyed understandable information.

Decorative differences highlight the structural difference of Figure 2's interior. The nave (3 C-D) has marble, or marbled, columns with Corinthian capitals, and richly-decorated arches. The colonnades of the aisles (2 B-E) are comprised of trabeated, lower columns, with plain bases and capitals, supporting shorter columns with the same plain bases but slightly more-detailed capitals on which rest three arches and one gable. Upper and lower columns are chevronned, the architrave has a meander pattern, and in the spandrels are pairs of ivy leaves.

This building is interpreted as a basilica of oblong shape, in which two-tiered colonnades divide the lateral space into aisles perpendicular to the short walls, while at right angles to the colonnades large single transverse arches, raised on columns quite separate from those of the aisles', define the nave. The nave's columns stand just within, but free of the aisle columniations. In keeping with a basilical reconstruction it is suggested that this building likely had a clerestory, and that the transverse arches terminated in diaphragms which abutted it. It seems unlikely transverse arches

would have occurred at every bay, but only intermittently.

The artist has taken great pains to convey the elaborate structure of Figure 2's interior, according to conventions already observed in *Ecclesia mater* and *Palatium*. Here, although architraves are seen to extend from between the tiered colonnades to the springing of the nave's arches (3 B-C), the apparent linkage of these structural elements should be understood as a convention that contributes to the drawing's harmonious appearance, as does the straight line that connects gable, aisle columns and triple-arched arcade in *Ecclesia mater*. In Figure 2 the architraves abut the frame of the centre door (3 D) and the lower columns of the rear great arch (3 A), while the gable of the uppermost colonnade disappears behind the great arch's columns (3 A-C). Such a characteristic occurs in *Palatium*, where it emphasizes the separation of aisle and nave structural elements. The upper colonnade (2-3 A-B) of Figure 2 does not actually pass behind the rear great arch, anymore than the flanking aisles and clerestory roof pass behind the triple arch of basilical *Palatium*.

Like *Palatium*, Figure 2's interior has been opened up and flattened out in order to show clearly the structure of the colonnades and nave, their decoration, and the multitude of lamps. In a reconstruction analogous to *Palatium*'s, the four sets of tiered colonnades might pivot on the gabled bays (2 A-D) which would then be positioned at the farther, short wall. But, rather than assume this exercise would give Figure 2 four lateral aisles to either side of the nave, it is pointed out that the artist had to incorporate four important central elements in his drawing, to *Palatium*'s one: the great rear arch, the two nave arches and the centre doors, each of which has been placed in the context of the aisle colonnades. One may understand from this drawing that there were a number of lateral aisles and nave arches, but the exact number is unknown.

It has been observed that arched and gabled bays occur on the entrance façade of the palace at the Umayyad site of *Qaṣr al-Ḥayr al-Gharbī*, Syria, c.730<sup>30</sup> and on several sixth-seventh century ivories.<sup>31</sup> Those differences may have been for artistic variation or, in Figure 2's case, might indicate some structural distinction in the bay nearest the *qiblah* wall, or in the roofing.



From about the fourth century CE onwards a high nave, clerestory lighting, and two or more longitudinal colonnades are common features of the monumental halls now called basilicas.<sup>32</sup> According to archaeological and textual evidence, Constantine's basilicas of old S. Peter's, Rome, and the Churches of the Holy Sepulchre, Jerusalem, and the Nativity, Bethlehem, were longitudinally colonnaded.<sup>33</sup> Transverse arches are known to have existed in early Christian basilicas, for example, in old S. Peter's, there was one at the juncture of nave and transept,<sup>34</sup> and in the non-Christian Great Hall of the Caracalla Baths, also in Rome, there were several. The reconstruction of the latter in Figure 11,<sup>35</sup> where an ornate transverse support system is raised on columns standing within the margins of the perpendicular colonnades, gives an idea of the contrast in structure and decoration between the colonnades and transverse arches of Figure 2. (It is not suggested Figure 2 had a coffered ceiling.)

There were Syrian, and adjacent regional, precedents for the use of free-standing columns in conjunction with other arched constructions. The late fifth century main church at Alahan Monastery, southern Turkey has four free-standing columns at the crossing as part of the support for a central tower capped with a pyramidal timber roof.<sup>36</sup> At Qal'at Sim'an, c.480-490, free-standing columns with Corinthian capitals stand just within the piers of the arched central entrance in the southern façade, and flank the angled piers on every facet of the martyrium's central octagon.<sup>37</sup>

Evidence of the sumptuous decoration lavished on the naves of Christian basilicas is to be seen at Sant'Apollinare Nuovo, and Sant'Apollinare in Classe, c. 532/6-549 (Figure 12).<sup>38</sup> The latter basilica, which has a transverse arch immediately before the apse, shows the relationship of the diaphragm heading to a typical wooden, double-pitched roof without the intermediary of a ceiling. This is the suggested roofing for Figure 2's columnar structure. H. Butler has described the wooden roofing common in many parts of Syria as double-pitched over the main aisle, with lean to's over the lower side aisles. Such wooden trussing is carved on the stone porch pediments of the convent at Brād, and the chapel at Bātūtā, both in Syria.<sup>39</sup> A hypothetical reconstruction of the basilica of the

Holy Sepulchre has the wooden roof-pitching extended over nave and aisles.<sup>40</sup>

Turning now to the *mihṛāb*<sup>41</sup> (Figure 13) (3 A-B in Figure 2), its frame consists of two orders of paired columns: the lower, on independent bases, is surmounted by a section of architrave upon which rests the upper order, also on independent bases, apparently linked by a narrow impost, more clearly seen in Figure 3, which supports the arch. The frame is interpreted as a free-standing structure, like a two-storey aedicule, the columns being perpendicular to the *qiblah* wall and probably braced against it at the levels of architrave and arch springing.

No exact model for the structure can be pointed to; however, in comparing the architecture in Roman wall painting with the appearance of contemporary buildings, M. Lyttelton has written, "... the frescoes do not necessarily show what was built, but rather the architectural schemes which interested contemporary architects and their patrons".<sup>42</sup> As the *mihṛāb* frame shares characteristics of the ornate architecture in the Damascus mosaics, one may look to realized architectural decoration for inspirational sources.

In the eastern Roman world there are numerous precedents for the decorative use of structural features such as columns, arches and gables to enliven interior and exterior walls.<sup>43</sup> For example, at Baalbek, Lebanon, the interior of the Temple of Bacchus and the Hexagonal and Great Courts preceding it,<sup>44</sup> and at Petra, Jordan, the Khasne, and the Deir, c. mid-first century CE (Figure 14).<sup>45</sup>

Decorative columnar arrangements were a feature of amphitheatre stages also, and at Palmyra, first half second century CE, paired columns supporting an architrave and gable flank the principal entrance. Figure 15<sup>46</sup> shows the relationship of the columns to the amphitheatre's back wall, much as the *mihṛāb*'s frame would relate to the *qiblah* wall in Figure 2. At Lepcis Magna, Libya, the central element of the reconstructed façade of the Great Nymphaeum, c.211,<sup>47</sup> described as "similar to the *scaenae frons* of a Roman theatre"<sup>48</sup> is a two-tier arrangement like the *mihṛāb*'s, composed of single rather than paired columns (Figure 16),<sup>49</sup> the bracing of which is shown in Figure 17.<sup>50</sup> Figures 18<sup>51</sup> and 19,<sup>52</sup> which are respectively the extant remains and suggested reconstruction of the north-western

apse of Lepcis Magna's Severan basilica (dated between 193-216),<sup>53</sup> show interior use of decorative columns and their scale in relationship to the height of that basilica's nave and give an idea of the dramatic quality the *mīhrāb*'s frame conveys.

In Figure 2 faint traces of double lining at the arch springing suggest the hood of a tall *mīhrāb* niche, and von Bothmer advises having seen traces of at least three, eight-pointed stars on a blue ground in the arch area.<sup>54</sup> Other evidence for recessive space is the presence of the lamp, though admittedly this could be hanging from the arch itself. As for von Bothmer's preoccupation with the *mīhrāb*'s width,<sup>55</sup> this may be attributable to the least controllable element in the drawing, the asymmetrical *minbar*.

Lepcis Magna's Severan buildings have been pointed out for their mixture of eastern and western Roman influences, and for the aid they may provide in understanding the drawing. For example, here as in previous basilical examples, greater care was expended on the decoration of the nave than on the aisles and galleries.<sup>56</sup> In Figure 2, the *mīhrāb*'s upper columns rest on low, individual pedestals. The individual free-standing pedestals at Lepcis Magna (see Figures 18, 19) were common in regions of the eastern Mediterranean;<sup>57</sup> they can be seen along the colonnaded street and in the agora at Jarash, Jordan; in the second century CE Roman temple at Qanawāt, Syria,<sup>58</sup> and are a distinctive feature of Syriac canon table architecture like the Rabbula Gospels of 586 CE from the monastery of S. John at Beth Zagba, Mesopotamia, (Figure 20).<sup>59</sup> A further correspondence between architectural decoration and book art is the plain border to the arches in the Qur'ān drawings, and the Rabbula Gospels' architecture, very like the uncarved margins of arch and pilaster decoration at Lepcis Magna and in the blind arcading at the North Gate of Sergiopolis/Ruṣāfah, Syria (Figure 21).<sup>60</sup>

The *mīhrāb* frame has been taken to indicate the possible presence of a dome,<sup>61</sup> due, perhaps, to a misinterpretation of its hierarchical scale. Canopies of one sort or another are well-represented in early non-Islāmic art, and the representation of a dome was entirely within the capabilities of this

illustrator, so if there had been one perhaps it was indicated at the missing top of the illustration. In the writer's opinion, however, there was no dome; the illustration shows only the projecting *mīhrāb* to whose hierarchical significance the rest of the building is subordinate.

Before the *mīhrāb* is the *minbar*,<sup>62</sup> seen at the bottom right of Figure 13, of which several steps, a banister, a vertical member and trace of superstructure remain.

The rich decoration throughout the mosque is illuminated by the lit, globular, glass lamps in every bay.<sup>63</sup> Based in part on discoveries at Jarash, it has been pointed out that suspended glass lamps of various forms seem not to be known prior to the sixth century, suspended here meaning those with loops at the shoulders, as distinct from those meant to be inserted in metal polycandela. Post-Jarash the handled bowl type came into common use, although all glass bowls with attached loop handles may not have been lamps.<sup>64</sup> A rounded glass lamp with loop handles<sup>65</sup> was found at the church of S. George, Jarash, constructed between 529-33.<sup>66</sup>

Crowfoot and Harden point out that while some lamps actually held fuel and wick, others were really lamp "shades", into which a smaller vessel was inserted, and this smaller vessel contained water, an upper layer of oil, wick holder and wick.<sup>67</sup> Such a practice is indicated here, where smaller vase-like shapes can be seen through the glass globes.

Mention has been made of the delimiting floral bands (1-2 A-D), and interpretations of them lead one to believe the artist was fully appreciative of the ambiguity they might engender. They have been referred to as the building's ground plan and elevation, and enclosure walls;<sup>68</sup> and called "unsettling", "incoherent" and "unrelated" to the architecture.<sup>69</sup> As frames, they suggest the marshalling qualities of canon table architecture,<sup>70</sup> and in draughtsmanship and handling of pattern and colour that they might be compared with the architectural frames of the British Museum's manuscript Add. 5111. That manuscript consists of two partial leaves which had been bound into a copy of an 1189 Greek Gospel Book belonging formerly to a monastery on Mount Athos. The four pages, a letter from Eusebius and three canon tables, ascribed to the sixth or early seventh centuries, possibly

of imperial patronage,<sup>71</sup> are in brilliant polychromy on gilt grounds. C. Nordenfalk<sup>72</sup> had suggested Add. 5111's column patterns (Figure 22) were inspired by embroidery like that in the bands of some Vatican silk fragments (Figure 23).<sup>73</sup> In fact, it is the bands of the San`ā' illustrations that are even more reminiscent of the Vatican silks.

A recurrent motif in the San`ā' illustrations, and dominant in the silks, is ivy leaves, small and elongated in all the spandrels, and the bands of Figure 2; or heartshaped and particoloured, in the bands of Figure 3. They are seen in all manner of pre- and early Islāmic decorations, such as a fourth century Roman mosaic from the House of the Seasons, at Thugga, Tunisia;<sup>74</sup> on capitals from the sixth century church of S. Polyeuktos, Constantinople (Figure 24);<sup>75</sup> and throughout the area north-east of Hamāh, Syria, all likely from Christian contexts of the fifth and sixth centuries,<sup>76</sup> on carved, basalt doors at Tell Snān,<sup>77</sup> issuing from a vase on a door jamb at Tell Hazne,<sup>78</sup> and on a lintel at Temānya (Figure 25).<sup>79</sup> The larger, heart-shaped leaves are also featured in the soffit mosaics of the Qubbat al-Şakhrāh.<sup>80</sup>

The parti-coloured Qur`ān version, shown clearly in Nordenfalk's drawing of the Vatican silks' band (Figure 26),<sup>81</sup> appears to have been very popular for it recurs in the bands of several seventh-eighth century silks, all likely from Syria, or said to be adapted from a Syrian design,<sup>82</sup> and may be seen also in the spandrels of a floor fresco at Qaṣr al-Ḥayr al-Gharbī (Figure 27).<sup>83</sup> O. von Falke points to the origin of this leaf in the carvings at Ṭāq-i Bustān.<sup>84</sup> As well, a motif very like the palmettes of Figure 2 is repeated many times on an Egyptian hanging of the fourth-fifth century CE (Figure 28).<sup>85</sup>

This likeness to embroidery is particularly apt. As textile hangings were common interior furnishings, it is argued that the delimitation of the mosque's inner walls is shown by the embroidery-like bands, a convention readily-understood to allude to a richly-decorated interior. And while the bands may point only to the existence of decoration, they could be interpreted as actual decorative bands like those found beneath the windows on the inner surface of the outer wall of the Qubbat al-

Ṣakhrāh (Figure 29).<sup>86</sup> J. Jakeman describes the decorative band of the illustration as a "vital component" that "may in fact be representational, indicating stucco or vegetal relief on the walls of the mosque".<sup>87</sup>

Typically,<sup>88</sup> although more lushly than most canon table architecture, Add. 5111's arcades are crowned with vegetation, and one may reasonably speculate whether this layout influenced the positioning of the upper vegetation here. The Qur'ān groves have been likened to gardens surrounding mediaeval mosques;<sup>89</sup> an evocation of Last Days, al-Ghūṭa oasis south of Damascus, and the riparian gardens in the west portico of the Damascus mosque.<sup>90</sup>

Representation of the created world was frequent in Byzantine art of the late fifth, early sixth centuries.<sup>91</sup> In secular contexts earth might be personified, but in churches it was more likely that a selection of flora and fauna stood for the whole. One such presentation appears as an end panel in a ninth century copy of the world map of the sixth-century geographer Cosmas Indicopleustes, taking the form of a line of fruit trees with underplantings which represent the Earthly Paradise no longer inhabited by men (Figure 30).<sup>92</sup> In a mosaic panel on the floor of Dumetios' Basilica at Nikopolis, a similar grove of trees represents the earth (Figure 31), with the understanding the trees "could signify Earth or Paradise, according to their context".<sup>93</sup> The assemblage of fruitful trees and underplantings in Figures 2 and 3, closely resemble the paradisiacal groves of the map and floor.

The Earthly Paradise of early Christian writers was a place of perpetually temperate climate "in which flowers bloom and fruit are ripe all at the same time and forever",<sup>94</sup> and a similar sentiment is expressed in the Qur'ān at Surah LXXVI, 5 ff., where in Paradise mankind will have "shady valleys, all sorts of delicious fruits, (*passim*) of all seasons, and without a thorn ...".<sup>95</sup> An earlier, secular version of an other-worldly garden is to be found in the Garden Room of the Villa of Livia at Prima Porta, c. 20 BCE, where trees and underplanted flowers of every kind "of all seasons appear together" providing their patron with an individual paradise (Figure 32).<sup>96</sup>

In his unpublished doctoral thesis G. Bisheh discusses the reports of Ibn 'Abd Rabbih and Ibn

Jubayr on the gold cubes called *fusayfisā'* with which the interior walls of the Great Mosque at Madīnah were decorated. Ibn Jubayr reported the upper walls above the marble dado were decorated with various kinds of fruit-laden trees, and that the decoration of the *qiblah* was said to be the most careful.<sup>97</sup> From other sources, Bisheh says "architectural compositions" were included in this decoration and of it a mosaicist is reported to have said "'we have made the mosaic decoration according to the forms of the trees and mansions of Paradise'".<sup>98</sup> J. Sauvaget also quoted Ibn 'Abd Rabbih's description of the gold mosaics and the depictions of diverse trees with fruit-laden branches, and Ibn Najjar's on the trees and mansions of Paradise, but was not convinced of their accuracy.<sup>99</sup> From these descriptions the Madīnah mosaics have been interpreted as resembling the Damascus ones<sup>100</sup> but, without the architectural compositions, they can be comprehended also as looking like the vegetation in Figures 2 and 3. The diverse, fruitful trees of the map and mosaic floor could well have provided models for the trees of Paradise at Madīnah, Damascus and in the San'ā' Qur'ān figures; therefore, Figure 2's *qiblah* wall is interpreted as displaying to either side of the *mīhrāb*, the representation of a paradisiacal garden in mosaic above a decorative band, just as the mosaic trees (and mansions) of Paradise are shown in the west portico of the Great Mosque at Damascus (Figure 33).

Turning now to the exterior. The mosque is entered by three, double-leaf doors above steps (1-4 E) but, unlike von Bothmer and Grabar the writer does not believe they are all on the façade,<sup>101</sup> rather, it is suggested the left and right doors interrupt and flare beyond the decorative band to indicate they are on the sides of the building where, according to this illustrative method, they could not otherwise be seen. This detail may be significant also for showing the building stands alone, not hemmed in by other structures.<sup>102</sup> The middle door shows decorated jambs, and the lintel, relieving arch, tympanum and return moulding of the left door are assumed for all three. That the central door does not have the latter features is undoubtedly because including them would conceal the richly-decorated arch and the hanging lamp above.

The elaborate portal has many Syrian precedents. Inspiration for the jambs and lintel could have been drawn from such monumental entrances as that in the peristyle of the Temple of Bel, Palmyra,<sup>103</sup> or the entrance to the palace at Qaṣr al-Ḥayr al-Gharbī (see Figure 215), where an inscription on the lintel states it is from a sixth century monastery.<sup>104</sup> As can be seen, an arch has been restored above the door. In the churches of Northern Syria from the fifth century onwards there's an increasing richness in the mouldings about entrances and windows.<sup>105</sup> Two examples of decorated frames and relieving arches can be seen, for example in the men's and women's entrances to the basilica of Qalb Lôzé, (Figures 34a, 34b).<sup>106</sup>

Again from churches in Northern Syria comes limited evidence for the filling of relieving arches, either by deeply-carved stone plates, pierced to varying degrees, or stone grills which may have been glazed,<sup>107</sup> as could be indicated by the colouration of the left door's tympanum; however, another illustration provides a notable comparandum for the doors, relieving arches and tympana. This is the "Consecration of the Tabernacle" scene from the synagogue at Dura Europos, destroyed in 256 CE,<sup>108</sup> where the enclosure about the "tent in the desert" has been replaced by a Roman wall in which are embedded three doors (Figure 35).<sup>109</sup> The tympana in both illustrations appear to be identical. Further evidence supporting the doors' appearance is available in the form of a number of carved basalt ones, like that from Tell Snān, Syria, (Figure 36).<sup>110</sup> Although carved as one unit, the layout indicates it is based on double-leaf models. Other doors are decorated with ivy leaves, concentric diamonds and circles, nail heads, and arcades. The testimony of the two illustrations and the basalt doors speaks to a remarkable continuity in at least one aspect of Syrian structural and illustrative tradition.

At Qaṣr al-Ḥayr al-Gharbī, lunettes over doors and window openings were filled with stucco transennae, some of which were fitted with coloured or painted glass cut to shape.<sup>111</sup> The arch above Figure 2's left door is set within an elaborate heading; the remains of similar headings surrounding transennae-filled lunettes were found at al-Gharbī (Figure 37)<sup>112</sup> and have been restored to second-



floor halls of the palace facing onto the central courtyard.<sup>113</sup>

One of the features included in the Tabarka mosaic was the hidden, but known to exist, sarcophagus, and a similar qualification applies to some of the last elements of Figure 2 to be discussed, the forecourt, and steps at the upper left. The writer does not believe this mosque is raised on a podium,<sup>114</sup> nor that it is on a mound or height,<sup>115</sup> nor that the upper left stairs represent a minaret in section,<sup>116</sup> rather, that elements which could have been partly seen, and were known to exist beneath the building have been drawn as preceding it, or being to the rear thereof, and together represent the unique subterranean feature of only one Umayyad mosque. Everything below the level of the door sills plus what seem to be flights of steps at the upper left of the illustration is related to the same structural feature, the passage of the Double Tunnel from its entrance at the foot of the southern wall of Temple Mount to its exit on the Ḥaram al-Šharīf immediately in front of al-Aqṣá Mosque, Jerusalem.<sup>117</sup>

Al-Aqṣá's *qiblah* wall is at the southern extremity of Temple Mount where, in the Second Temple period, the Western Hulda double gate gave access to the Mount via a street at the foot of the southern wall.<sup>118</sup> When the Muslims occupied Jerusalem the Western Hulda was renovated, probably by Caliph 'Abd al-Malik,<sup>119</sup> becoming known as Bāb al-Nabī (the Prophet's Gate),<sup>120</sup> and later as al-Aqṣá al-Qadīmah (Old al-Aqṣá), or the Double Gate, and continued to give public access to what had become known as the Ḥaram al-Šharīf, and specifically to al-Aqṣá.<sup>121</sup>

According to R. Hamilton, the first version of the existing al-Aqṣá Mosque, which he attributes to the Caliph al-Walīd I,<sup>122</sup> was some nineteen metres shorter than the present version on the north-south axis, (north being the front of the building),<sup>123</sup> with the pavement before the façade at the innermost eastern aisle interrupted by the entrance to the Double Gate.<sup>124</sup> At its southern entry (Figures 38a, 38b)<sup>125</sup> the Gate has a vestibule of four domed bays supported by wall pilasters and a central pillar with a Corinthian-like capital (Figure 39).<sup>126</sup> Steps rise from the western bays through the vaulted tunnel (Figure 40)<sup>127</sup> to the platform before the Mosque.<sup>128</sup>

Hamilton speaks of two other structures projecting above the pavement before the first al-Aqṣá's façade, a stylobate about four metres north of the mosque, and the head of the cistern called Bi'r al-Waraqah, the Well of the Leaf.<sup>129</sup> G. Le Strange, quoting Nāṣir-i Khusraw, states: "(viii.a) In the south wall (of the Ḥaram area) is a gate leading to the places for the ablution, where there is running water. When a person has need to make the ablution (before prayer), he goes down to this place, and accomplishes what is prescribed ...",<sup>130</sup> and Nāṣir-i Khusraw continues that al-Aqṣá has been erected over the subterranean passage called Bāb al-Nabī.<sup>131</sup> C. Wilson, to whom Le Strange appealed for help in identifying the various gates into the Ḥaram mentioned by Nāṣir-i Khusraw, (amongst others), explains that the expression "leading to the places for the ablution" must refer to "remains of water-pipes and cells being still shown at this point in the substructures of the Aksâ; for the ancient Gate of the Prophet under the Aksâ can only be the so-called *Double Gate*, long since walled up, but still to be seen closing the southern side of the vaults under the Aksâ".<sup>132</sup>

The two amphorae (2E, 4E) flanking the central stairs are interpreted as a convention for Bi'r al-Waraqah and the ablutions' facility,<sup>133</sup> while the stylobate, which is not represented in the drawing, might have supported the colonnade of a porch.<sup>134</sup> Beyond the porch was an open, paved forecourt extending further north than the present mosque's façade and within this court was the well-head of Bi'r al-Waraqah and a staircase descending to the Double Tunnel.<sup>135</sup> Von Bothmer has interpreted the amphorae as an ablutions' facility and suggested the balustrade partly conceals that area from visitors' eyes.<sup>136</sup> Grabar acknowledges this may be an ablutions' area, but finds the amphorae "much too large and too obvious".<sup>137</sup> As cleanliness is an obligatory preparation for prayer, the vessels affirm that an otherwise unseen washing area does exist.

In Wilson's survey of the Ḥaram the plan of al-Aqṣá Mosque has been superimposed on that of the Double Gate, so one can see the Well of the Leaf is situated south of the present Mosque's north wall, where the "rising vault of the subterranean passage"<sup>138</sup> exited before al-Aqṣá Mosque (Figure 41).<sup>139</sup> Something like the balustrade may have marked off the forecourt from the rest of the

Haram; it is possible also that the balustrade's appearance here is purposeful, like the truncation found in the Tabarka mosaic where the nave columns nearest the viewer have been reduced to stumps so as not to block the farther view, thus allowing the presentation of actual but hidden features. In Figure 2's case the features are the Double Tunnel's termini, something expressive of its subterranean-ness, and the ablutions' area. While the three stairs might be understood as the tunnel's exit before the mosque, placing aspects of the vestibule and inner ramp at the upper left of the illustration might not have expressed logically the southern entrance nor the subterranean qualities of the vaulting. So positions have been reversed. At the top left of the page the flights of steps represent both the southern entrance and the rising ramp of steps within the tunnel. At the bottom of the page, flanking the central stairs, the columns represent the tunnel's known, but concealed vestibule and vaulting in their proper position underneath the mosque.

As the artist chose to place together distinct, widely-separated features in the restricted space of the forecourt, in order to give each due prominence, without implying the one is before or behind the other, the bases and Corinthian capitals of the columns flanking the central stair have been halved to provide space for the amphorae, which do not obstruct either columns or balustrades. The flanking columns (2E, 4E) represent the supports of the vestibule (see Figure 39), while the columns behind the balustrade represent the underlying vaults and are partly-hidden to evidence this. The three sets of stairs should be understood to represent access between the Mosque and the subterranean passage.<sup>140</sup> For balance, there are "between" stairs at each door, those at the sides being halved so as not to mask the columns, or to appear to be behind the balustrade, as they would not be in their position at the sides of the mosque. There is no suggestion in the literature that more than one access stair existed. That these are not unique solutions to apparently conflicting problems of depicting appearance and showing position is evident from the distribution of structural elements in the less complex representation of Ecclesia mater.

As to whether the foregoing may be reconciled with the little that is known archaeologically

of the initial Umayyad al-Aqṣá, Hamilton established that, from the earliest times, the aisles ran north and south, at right angles to the *qiblah* wall, and were from 4m. to c. 6m. wide, although the width of the building itself could not be established.<sup>141</sup> The arcades separating the aisles were supported by columns and attached to the north and south walls by pilasters.<sup>142</sup> No central north-south axis could be established, nor is the number of doors known, other than the traces of one door found at the eastern side of the façade.<sup>143</sup> As for Figure 2's wide nave, while he specifically states there was no wide nave in the first mosque,<sup>144</sup> the illustrative method suggests an explanation. The centre aisle is the same width as the *mihṛāb* and principal door it links, and the width of all three may have been influenced further by the asymmetry of the *minbar*. Width may not have been the nave's true emphasis, rather, its transverse arches, their height and rich ornamentation. Hamilton could not be exact, but his figure 30 indicates at least three flanking aisles on the east side, which may be compared with the two a side at the Church of the Nativity and the Holy Sepulchre's basilica.<sup>145</sup>

In the matter of numbers, the illustration does not necessarily show the actual number of entrances, aisles, or transverse arches in this al-Aqṣá, nor may such accuracy have been especially significant to the illustrator. It was more important to show it was a free-standing basilica, with monumental front and side entrances, and an imposing centre aisle leading to a spectacular *mihṛāb*, and to convey its unique distinction of being the only mosque accessible by a subterranean, public walkway.

The information in the drawing accords with the general characteristics of a "Constantinian" basilica, a practical, quite utilitarian structure with longitudinal walls supporting a wooden roof, but without a dome, relying for renown on the quality of its embellishments, extravagant lighting and, perhaps, such relative novelties as more than one "triumphal" arch and the ornate confection of the *mihṛāb* frame. It has been suggested that the triumphal arch of the present may have been an eleventh century architectural novelty in the eastern Mediterranean.<sup>146</sup> As for the paradisiacal decoration on the *qiblah* wall, it is not impossible merely because we have not heard of it, and quite

likely, considering father and son both supported such decorative themes elsewhere in Jerusalem, Damascus and Madīnah. One may recall H. Stern's argument that the present Umayyad-like mosaics in al-Aqṣá's drum are Fātimid imitations of some Umayyad mosaics that were preserved up to the eleventh century.<sup>147</sup>

Figure 3 depicts another mosque,<sup>148</sup> as symmetrically presented as the previous one, though of very different appearance. This building is raised on a single level of columns and arches evenly disposed around a central square within which is a pedestal supporting a vase with an elaborate floral arrangement (2C). The columns and spandrels are embellished like those of Figure 2, and in all but the central square there are similar, lit, globular, glass lamps. Framing the *mīhrāb*<sup>149</sup> (2A) is one level of paired columns and an ornament-topped arch from which a lamp is suspended; there is no discernible niche hood behind the lamp.

This is certainly a hypostyle mosque without any suggestion of processional nave,<sup>150</sup> as the columns of the arcades, here parallel to the rear wall, occur directly in front of the *mīhrāb*. As in Figure 2, there is a decorative register about the walls, and the representation of a paradisiacal garden above the register on the *qiblah* wall. The three flowers at the base of the *mīhrāb* suggest it too may have had vegetal decoration. There is no *minbar*.

The remains of a double leaf door (4C) in the mosque's side wall can be seen at the bottom right, in all discernible respects similar to the left door in Figure 2 and, by reason of the illustration's apparent symmetry, a like door is postulated for the left side of the building. Too much of the illustration is missing for assurance there was no centre door, however, as the one visible likely took up two ranges of columns, and if a centre door lacked the relieving arch and heading, then, conceivably, it could fit within the lower range of columns, although the lack of exclusivity in the aisle layout seems to preclude a centre door.

The similarity of its embroidery band to the others suggests the courtyard too was decorated, above the arcades perhaps, for it is reported of Ibn Jubayr in connection with the Great Mosque at

Madīnah, that the south wall of the courtyard had mosaic decoration.<sup>151</sup>

Because of the paradisiacal decoration, and the possibility of the *mihrab* being recessed, there is an immediate temptation is to identify this illustration with al-Walīd's reconstruction of the Great Mosque in Madīnah begun 707 CE,<sup>152</sup> however, this structure lacks evidence of the four corner minarets, or the Prophet's burial chamber,<sup>153</sup> the ceiling rests on arches not architraves,<sup>154</sup> and there is the courtyard object.

In sharp contrast to the observed detail of Figure 2's building, it seems those details have merely been transferred here in order to present a building according to its reputed features. This is a bookish construction, a type of building which the artist could put together from patterns and knowledge of other structures. It is interesting, however, that baroque features continue to be evident in this *mihrab*'s frame (2A) which resembles an arched aedicula, for the crowning ornament suggests this ensemble, like that in Figure 2, stands out from the *qiblah* wall. Finials of one sort or another top buildings of every estate in the Damascus mosaics, as well as many arches in the Rabbula Gospels. Motifs like it occur frequently in the miniature arcades of a Qubbat al-Şakrah tie beam (Figure 42),<sup>155</sup> referred to for other reasons by von Bothmer.<sup>156</sup>

Speaking of the decoration of the Qubbat al-Şakrah, M. Rosen-Ayalon drew attention to the "vases on columns" being "invariably connected with the iconography of Paradise".<sup>157</sup> Within the space constraints of Figure 3's courtyard, the pedestal might be construed as a shortened column supporting a vase which differs from those in the Qubbat al-Şakrah in form, not iconographic content.

Inclusion of the vase and column suggests the mosque is being used metaphorically: as a walled compound it reflects vernacular, civil architecture, an enclosure with shaded walks about a well-ordered, well-tended garden, which the vase might represent; an oasis of order within a harsh, chaotic environment; the Dār al-Islām within the Dār al-Ḥarb. Perhaps the vase is a symbol of God's bounty, of a Paradise available equally to the community of Islām, which the mosque represents.

What link Figure 3 and the object may have with the Dome of the Rock will be returned to.

The last of the San`ā' Qur`ān illustrations to be examined, Figure 1, is the remains of an eight-pointed star whose perimeter is defined by an embroidery band. At the star's inner angles are trees with flaring branches, the trunks of which weave alternately through the band, coming to rest on a plaited, gold circle. Inside the circle are the remains of what seems to be another octagon,<sup>158</sup> and there are eight-rayed stars within the embroidery-band angles.<sup>159</sup>

In their principal qualities the trees are like those in Figures 2 and 3, slender of trunk, fruitful, with tapering crowns, however, their dramatically-flaring branches appear to be attached to the trunks by rings. At Damascus<sup>160</sup> and in the Qubbat al-Şakrah, mature trees are flanked by younger ones; new growth springs from trunks where old branches have been cut away, and the impression is given that the star trees' branches reflect that new growth, just moved up so the trunks may weave through the band.

As for the rings, certainly they are a stylistic trait of the San`ā' illustrations, encircling every tree and plant in the paradisiacal gardens and holding together each pair of ivy leaves in the spandrels. Similar rings are a striking feature of the Qubbat al-Şakrah's mosaic and carved marble vegetation, where they appear in like positions, that is, on stems immediately below branching leaf forms, beneath floral shapes, and controlling the exuberant growth of acanthus rinceaux (Figure 43).<sup>161</sup> They are of ancient use in the Iranian world, binding together elements of the Tree of Life, however, there were local examples available to the artists of the Jerusalem mosaics and the San`ā' illustrations, one of which can be seen in Figure 20, where rings encircle the inner cannon table columns at each change of pattern. In this, as in other details the artist has shown himself responsive to his cultural milieu, for his work reflects the cultural heritage of Greater Syria,<sup>162</sup> available to the Umayyads at the beginning of the eighth century. It is in no way suggested all decorative details are Syrian, only that because of a long-established regional exchange of motifs and style characteristics such material was readily available.

Figure 1 has been likened to the frame about Anicia Juliana's donor portrait in the Vienna Dioscorides (Figure 44),<sup>163</sup> however, the encircling trees (1A, 2B, 2C, 2D) must alert one to the fact that the star is more than a geometric framing device.

Encircling trees, or city walls and towers, shown flat is an ancient practice, an example of which comes from the tomb of Rekh-mi-re, Thebes, c.1700 BCE (Figure 45).<sup>164</sup> The Egyptian illustration is meant only to show clearly that the trees surround the pool; it doesn't deny them their natural, upright position any more than does the similar illustrative method used in the c.560 CE mosaic map of Jerusalem in the church of S. George, Madaba, Jordan.

The most important representation there, the basilica and rotunda complex of the Holy Sepulchre (1A), is upside down (Figure 46).<sup>165</sup> Upright, in its present space, its entrance would have appeared, incorrectly, to be near the city wall. Upright, in its true position on the lower side of the lower colonnaded street, not only would its back view have been presented to the viewer, that is, from behind the rotunda with little of the basilica showing, the complex would have masked portions of both colonnaded streets as well as part of a city gate. The conflict has been resolved by means of a very old solution; the Holy Sepulchre complex, like the gates opposite and at the left, has been shown flat. The entrance is in its proper position on the colonnaded street; the identifying façade and great length of the basilica can be seen as can the golden dome of the rotunda in its proper position at the rear of the complex.

What the tomb and the map make clear is that, in the first instance, the flat trees are not the most important feature, and in the second the flat Holy Sepulchre is, so their relevance is not in being shown flat but, like all features of the San`ā' Figures, being depicted in the way best suited to display their essential characteristics and their relationship to the illustration. Other buildings in the map have been turned to face the viewer, while the wall towers below the Holy Sepulchre have not, and these can be understood as further manifestations of relative importance.

As the foregoing suggests, the alignment and positioning of features of the trees in Figure 1 is



pertinent to the statement the artist wishes to make about them, and that is, when the trees are raised to their natural, upright position they bring the embroidery band with them, transforming the star into a star-shaped compound. The trees still surround the golden circle, but now their threading trunks are seen to be rooted on either side of a decorated wall.

That Figure 1 has been likened to Anicia Juliana's portrait frame is due to the geometry underlying both. This geometry has been examined in an attempt to obtain information on Byzantine architectural procedures from an examination of surviving octagonal structures<sup>166</sup> and, of the several theoretical and practical working procedures considered, the ground plan for all could be shown as a circle within which rotated squares of varying size corresponded to the placement of concentric octagonal walls. From a common result of this exercise J. Wilkinson derived the name "star diagram"<sup>167</sup> (Figure 47), lines drawn from the star points giving an octagonal shape. Himyaritic sources have been suggested for the use of star shapes,<sup>168</sup> but that in Figure 1 derives from an established geometric source well-known for the Roman and Byzantine constructional and decorative works based upon it.

As a decorative device the star diagram is the basis for the Herodian ceiling decoration in the vestibule of the Double Gate, Jerusalem (Figure 48),<sup>169</sup> and the floor mosaic in the Propylaea Church, Jarash, c.565 (Figure 49).<sup>170</sup> As an architectural procedure it is a plan and proportional guide for octagonal buildings such as S. Peter's House, Capernaum, mid-fifth century; the church on Mount Gezerim, c.485, and Qubbat al-Şakhrah, Jerusalem,<sup>171</sup> (Figure 50).<sup>172</sup> And it is the basis for Figure 1, which, it is argued, is an imaginative, learned representation of Qubbat al-Şakhrah.

The features of this representation still most clearly discernible are an embroidery band in the form of a star, affirming the genesis of the Qubbat al-Şakhrah's shape and its identity; a golden circle for its dome, and the trees. Having in mind that content, usage or attribution might be significant determinants in a structure's depiction then, according to this drawing, the essence of the Qubbat al-Şakhrah is its decoration.

Today, that building's trees and vines and containers of vegetation are all inside, but originally there are said to have been similar mosaics on the outer walls.<sup>173</sup> Constructing Figure 1 with the trees woven through the decorated wall not only adds credence to these reports, it presents the notion that the external decoration was as significant as the internal. As Title Page, Figure 1 must have been understood as the key to Figures 2 and 3, so the embroidery bands and vegetation of each can be seen as purposeful links. To be considered in the following chapter is why the decoration of the Figures might best be expressed as a grove of fruitful trees.

So far as is known, these Qur'ān illustrations are unique,<sup>174</sup> for there seem to be no other early depictions quite like them. In conception, imaginative presentation, and quality of workmanship the San`ā' Figures must have been exceptional even in their own time; all the same, they are the work of an artist who participated fully in and was not distinct from contemporary artistic practices. Known solutions to problems of position and visibility have been used, and it can be recognized that the artist was knowledgeable about the variety of illustrative options available to him and amenable to using whichever best suited the task, for example, the trees of Figure 1. Furthermore, Figures 2 and 3 demonstrate a mixture of frontality, hierarchy of scale, and naturalism very like that seen in the Damascus mosaics.

## Notes

1. See Introduction, endnote 1.
2. Von Bothmer, "Architekturbilder," section entitled "Die Handschrift," p. 5.
3. Von Bothmer, "Frühislamische," pp. 22-23; *idem.*, "Architekturbilder," section "Die Illumination" p. 12 ff.
4. At "Architekturbilder," p. 8, von Bothmer speculates on whether these drawings bore names.
5. Richard Krautheimer, Early Christian and Byzantine Architecture. The Pelican History of Art. Harmondsworth: Penguin Books Ltd., 1965, p. 201.
6. Richard Krautheimer, "Introduction to an 'Iconography of Medieval Architecture'." Reprinted in Studies in Early Christian, Medieval, and Renaissance Art. New York: New York University Press, p. 115 ff.
7. Paul Lampl, "Schemes of Architectural Representation in Early Medieval Art," Marsyas (1960-61) 9: 6-17.
8. Lampl, "Schemes," Marsyas (1960-61) 9: 7.
9. Krautheimer, "Introduction to 'Iconography'," the section "Copies in Medieval Architecture" pp. 116-130 *passim*.
10. The mosaic was published by Paul Gauckler, "Mosaïques tombales d'une chapelle de martyrs à Thabraca," Fondation Eugène Piot, Monuments et Memoirs (1906) 13: 175-227. Thabraca is present-day Tabarka.
11. Krautheimer, Early Christian, pp. 201-202 and figs. 152, 153. At n. 42 p. 201 Krautheimer acknowledges his fig. 152 is a modified version of Ward-Perkins' fig. 28, see also n. 12.
12. J.B. Ward-Perkins and R.G. Goodchild, "The Christian Antiquities of Tripolitania," Archaeologia (1953) Second series 45: p.57 ff., fig. 28.
13. Gauckler, "Mosaïques" p. 188 ff. thought the work "very incoherent", see Lampl at p.12, n.41.
14. Krautheimer, Early Christian, p. 202; Ward-Perkins is silent on both these features.
15. Krautheimer, Early Christian, p.202.
16. The raised apse fronted by a triple arcade and altar in the nave are "hallmarks" of African church plans c.400, Krautheimer, Early Christian, pp. 202-203.
17. The sarcophagus could be a martyr's, possibly accessible from outside the church, or inaccessible below the altar, Krautheimer, Early Christian, p. 200.
18. *Ibid.*, p.202.
19. *Ibid.*

20. Ward-Perkins and Goodchild, "Christian Antiquities," p. 70.
21. Friedrich Wilhelm Deichmann, Ravenna: geschichte und monumente. 3 vols. Wiesbaden: Franz Steiner Verlag GmbH, 1969, taf. 107, vol. II.
22. W. Deichmann, Ravenna, vol. I, p. 304.
23. *Ibid.*, agrees that internal and external structural features are illustrated together in Palatium, which he refers to as a propylon flanked by lateral porticos, but not as the interior of a basilica.
24. Von Bothmer, "Architekturbilder," p. 7.
25. A rough grid, not to scale, has been used with San'ā' Figures 1, 2 and 3 to indentify more clearly what features are being discussed. The writer thanks Dr. Edward J. Keall for suggesting this procedure.
26. That is, with aisles running parallel to the *qiblah* wall through which cuts the nave, in an arrangement similar to that of the Umayyad Mosque at Damascus, von Bothmer, "Architekturbilder," p. 9; a hypostyle planning of space with a central nave cutting through, Grabar, Mediation, p. 157.
27. Howard Crosby Butler, Early Churches in Syria, Fourth to Seventh Centuries. Edited and completed by E. Baldwin Smith. Amsterdam: Adolf M. Hakkert, 1969, pp. 22, 24, ills. 17-18.
28. Butler, Early Churches, pp. 16-17, ills. 9-10.
29. *Ibid.*, p. 17.
30. Von Bothmer, "Architekturbilder," p. 10.
31. Carl Nordenfalk, Die Spätantiken Kanontafeln. 2 vols. Göteborg: Oscar Isacson's Boktryckeri A.-B., 1938; vol. 1: pp. 266-67, abbs. 30, 31.
32. J. B. Ward-Perkins, "Constantine and the Christian Basilica." Reprinted in Studies in Roman and Early Christian Architecture. London: The Pindar Press, 1994, p. 456.
33. Ward-Perkins, "Constantine," pp. 459-462, and fig. 3.
34. *Ibid.*, p. 463 on the foundations for the "triumphal arch" preceding the transept of the Constantinian basilica of S. Peter, first half of 4th century (n. 69, foundation date not recorded) ; Krautheimer, Early Christian, pp. 55, 59, giving the beginning date as c.319-322.
35. D.S. Robertson, A Handbook of Greek & Roman Architecture. Cambridge: University Press, 1929, pl. XVIII.
36. Cyril Mango, "Byzantium." In Treasures of Turkey. Geneva: Editions d'Art Albert Skira, 1966, p. 92 and pl. on p. 90..
37. Horst Klengel, The Art of Ancient Syria. English Language edition, South Brunswick and New York: A.S. Barnes and Company, 1972, pp. 184, upper illustration, and 189.
38. Krautheimer, Early Christian, figs. 149 and 239, respectively.

39. Early Churches, p. 199; for Brád see illus. 201, and Bātūtā, illus. 204.
40. Krautheimer, Early Christian, pp. 62-63, and fig. 27(a).
41. Identified as such by von Bothmer, "Architekturbilder", p. 6, and Grabar, Mediation, p. 160.
42. Margaret Lyttelton, Baroque Architecture in Classical Antiquity. London: Thames and Hudson, 1974, p. 86. The similarities of Petra's architecture to second style Roman painting, the style of the Damascus mosaics, is the subject of chapter 5 of Judith McKenzie's The Architecture of Petra. Oxford: Oxford University Press, 1990.
43. Barri Jones and Roger Ling chapter "6. The Great Nymphaeum," in J.B. Ward-Perkins The Severan Buildings of Lepcis Magna. An Architectural Survey, ed. by Philip Kenrick, Society for Libyan Studies Monograph No. 2, London: The Society for Libyan Studies, 1993, pp. 83, 85.
44. Lyttelton, Baroque, pp. 234-236, 2nd century CE ff.
45. *Ibid.*, 80 and fig. 15.
46. Klengel, Ancient Syria, p.173 and fig. on p. 154.
47. J. B. Ward-Perkins, The Severan Buildings of Lepcis Magna. An Architectural Survey. Edited by Philip Kenrick, Society for Libyan Studies Monograph No. 2, London: The Society for Libyan Studies, 1993, p. 107.
48. Jones and Ling, "Nymphaeum," p. 79.
49. Ward-Perkins, Severan, fig. 45.
50. *Ibid.*, fig. 44b.
51. Lyttelton, Baroque, ill. 223. Note: Lyttelton's captions were reversed, 223 is the Severan basilica.
52. Ward-Perkins, Severan, fig. 30.
53. *Ibid.*, p. 107.
54. Von Bothmer, "Architekturbilder," p. 6.
55. *Ibid.*, p. 12.
56. J. B. Ward-Perkins "Severan Art and Architecture at Lepcis Magna." Reprinted in Studies in Roman and Early Christian Architecture. London: The Pindar Press, 1994, pp. 57, 59.
57. Ward-Perkins, "Severan Art," pp. 138, 150.
58. Klengel, Ancient Syria, p. 91, lower.
59. Carlo Cecchelli, Guiseppe Furlani and Mario Salmi, eds., The Rabbula Gospels. Facsimile Edition of the Miniatures of the Syriac Manuscript Pluteus I, 56, in the Medicean-Laurentian Library, Florence, Olten and Lausanne: Urs Graf-Verlag, 1959, folio 4b.

60. Klengel, Ancient Syria, p. 181; the 6th century CE walls were built under Justinian, p. 193.
61. Von Bothmer, "Architekturbilder," pp. 11, 12; Grabar, Mediation, p. 159.
62. Von Bothmer, "Architekturbilder", p. 6; Grabar, Mediation, p. 160.
63. Von Bothmer has commented on the desirability of a well-illuminated mosque, and the fact this one has them in every bay, "Architekturbilder," pp. 8, 6; contra Grabar, Mediation, p.159 who states there are no lamps in the centre aisle.
64. Grace M. Crowfoot and D.B. Harden, "Early Byzantine and Later Glass Lamps," The Journal of Egyptian Archaeology (1931) 17: 205; a number of these forms are shown on pl. XXX, 40-47.
65. P.V.C. Bauer, "Glassware." In Gerasa City of the Decapolis, edited by Carl H. Kraeling. New Haven, Connecticut: American Schools of Oriental Research, 1938, pl. CXL.a, no. 30 at top left, and p. 526 where it's described as a bowl.
66. J.W. Crowfoot, "Christian Churches." In Gerasa City of the Decapolis, edited by Carl H. Kraeling. New Haven, Connecticut: American Schools of Oriental Research, 1938, p. 241.
67. Crowfoot and Harden, "Early Byzantine," pp. 207-208.
68. Von Bothmer refers to them as ground plan and elevation, and variously as enclosing, encompassing, rearward walls, "Architekturbilder, " pp. 5, 10, 11; Grabar proposes them as the ground plan and elevation of Figures 2 and 3, Mediation, p. 157.
69. Grabar, Mediation, pp. 157, 173.
70. *Ibid.*, p. 166.
71. Henry Shaw and Frederic Maddan, Catalogue of Ancient Manuscripts in the British Museum. Part 1 (Greek), London: Printed by Order of the Trustees, 1881; p. 21, pl. 11; *idem.*, Illuminated Ornaments selected from Manuscripts and Early Printed Books from the sixth to the seventeenth centuries. London: William Pickering, 1833; page second, the gospel book was bought for the British Museum in 1785, from Dr. Askew's library; in the editor's opinion it was of sixth century and, because of its quality, must have been executed for a monarch; plates I-IV. Kurt Weitzmann, Late Antique and Early Christian Book Illumination. New York: George Braziller, 1977, p. 116, suggests a late sixth early seventh century date and thinks it likely originated in Constantinople.
72. Nordenfalk, Die Spätantiken, vol. 1: 144-45, wherein he likens Add. 5111's fol. 11a (his taf. 3) to the Sancta Sanctorum textile reproduced in his abb. 15.
73. W. Fritz Volbach, Early Decorative Textiles. Translated from the Italian edition of 1966, Feltham, Middlesex: The Hamlyn Publishing Group, 1969, catalogues 51 and 52, two fragments of the same silk serge of the eighth century, in the Museo Sacro, Vatican, and either from Syria or derived from a Syrian example.
74. M.H. Fantar, general editor, De Carthage à Kairouan. 2000 ans d'art et d'histoire en Tunisie. Catalogue of an exhibition held in Paris 20 October 1982-27 February 1983. Paris: Association Française d'Action Artistique, 1982, catalogue #232.

75. Martin Harrison, A Temple for Byzantium. The Discovery and Excavation of Anicia Juliana's Palace-Church in Istanbul, foreword by Steven Runciman, Austin, Texas: University of Texas Press, 1989, figs. 150, 170.
76. Jean Lassus, Inventaire Archéologique de la Région au Nord-Est de Hama. 2 vols. Beirut: N.p., N.d., p. xii.
77. Lassus, Inventaire, fig. 215; and also at Ğerġanaz, fig. 3.
78. *Ibid.*, fig. 33.
79. *Ibid.*, fig. 110, p. 103.
80. Marguerite Gautier-van Berchem, "The Mosaics of the Dome of the Rock in Jerusalem and of the Great Mosque in Damascus," in K.A.C. Creswell, Early Muslim Architecture. 2 vols. 2nd edition. Oxford: Clarendon Press, 1969, 1: 266, 268.
81. Nordenfalk, Die Spätantiken, vol. 1, p. 145, Abb. 15.
82. Volbach, Early Decorative, catalogues 46, (?), 8th century; 49, Syrian (?), 7th century; 50, Syrian (?), 7th century.
83. Daniel Schlumberger, Qasr el-Heir El Gharbi. Avec contributions de Michel Écohard et Nessib Saliby. Paris: Librairie Orientaliste Paul Geuthner, 1986, pl. 34.
84. Otto von Falke, Decorative Silks. 3rd ed. London: A. Zwemmer, 1936, in fig. 61, on a statue of Khosro II at Tāq-i Bustān, and seen also in a Coptic version in fig. 35.
85. Volbach, Early Decorative, pp. 57 and 68, catalogue no. 32.
86. K. A. Creswell, Early Muslim Architecture. 2 vols. 2nd edition. Oxford: Clarendon Press, 1969, I:1, pl. 10c, one band out of many in that building.
87. Jakeman, Review of Mediation, p. 152.
88. Grabar, Mediation, p. 173.
89. *Ibid.*, pp. 160-61.
90. Von Bothmer, "Architekturbilder," p. 11.
91. Henry Maguire, Earth and Ocean: the Terrestrial World in Early Byzantine Art. University Park and London: The Pennsylvania State University Press, 1987, p. 6 and *passim*.
92. Maguire, Earth, pp. 22-23 and fig. 13.
93. *Ibid.*, p. 23.
94. *Ibid.*, p. 25.
95. L. Gardet, "Djanna," Encyclopaedia of Islam. 2nd edition, p. 447, just one of numerous examples listed.

96. Roger Ling, Roman Painting. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press, 1991, p. 150 and fig. 158.
97. Ghazi Izzeddin Bisheh, "The Mosque of the Prophet at Madīnah Throughout the First-Century A.H. with Special Emphasis on the Umayyad Mosque". Ph.D. diss., University of Michigan, 1979, Ibn 'Abd Rabbihi and Ibn Jubayr p. 217 and n. 72. Also Creswell, EMA, I:1.147.
98. Bisheh, The Mosque of the Prophet, p. 217 and n. 73.
99. Sauvaget, La Mosquée, pp. 80-81.
100. Bisheh, The Mosque of the Prophet, pp. 217-218.
101. Von Bothmer, "Architekturbilder," p. 10; Grabar, Mediation, p. 162.
102. J.W. Crowfoot, Early Churches in Palestine. London: British Academy, 1941, 37, who remarks that "Few churches stood free with no other buildings abutting them".
103. Klengel, Ancient Syria, p. 133.
104. Schlumberger et al, Qasr el-Heir, pp. 10, 26-28.
105. Butler, Early Churches, p. 220 ff.
106. Jean Lassus, Sanctuaire Chrétienne, pl. XXXIII.1, .2, of which .1 is a true arch, and .2 an arcuated lintel. This basilica, in the region between Antioch and Aleppo, is dated by Lassus as 6th century, Sanctuaire, p. 63, and by Butler as late 5th century, Early Churches, p. 72.
107. Ill. 282 shows an example of a pierced stone plate, while ill. 128 shows the window of Dêr Sêtā church where the remains of an openwork grill which may have been glazed were found, Butler, Early Churches, pp. 243-244. Stone grills are illustrated also on pls. 13.1-4 and 14.4-5 in t. 1 of Le Cte. de Vogüé's Syrie centrale: architecture civile et religieuse du Ier au VIIe siècle. Paris: J. Baudry, 1865-1877.
108. Kurt Weitzmann and Herbert L. Kessler, The Frescoes of the Dura Synagogue and Christian Art. Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1990, p. 11.
109. Weitzmann and Kessler, Dura Europos, fig. 80.
110. Lassus, Inventaire, pl. XLIII.1, one of three doors from Tell Snān; his figures 213 right, 215 bottom left, show similar doors, all of which are probably Christian, of the 5th-6th centuries. Other stone doors are illustrated on de Vogüé's Syrie centrale, pl. 83.
111. F.B. Flood, "The Tree of Life as a Decorative Device in Islamic Window-fillings: The Mobility of a Leitmotif," Oriental Art (1991/92) NS 37, #4: p. 210, fig. 2, and n. 8 quoting a summary analysis published by Jean Lafond in La Vitrail, Paris, 1966. Claustra at Qasr al-Ḥayr al-Gharbī are shown in Schlumberger et al, Qasr el-Heir, pls. 76-80 inc., of which 76.i, 77.c, 78.a and b. are semicircular.
112. Schlumberger et al, Qasr el-Heir, pl. 75 a. and b.
113. These entrances were to halls VI and VII respectively, for which see entrances 9 and 10 on pl. 43b.



114. Von Bothmer, "Architekturbilder," 10, who so interprets the half columns and steps behind the balustrade.

115. Grabar, Mediation, p. 158.

116. Von Bothmer, "Architekturbilder," pp. 6, 8.

117. Information on the Double Gate is available from a number of sources, none of which give everything one might like to know, but those most helpful include: Charles W. Wilson, Ordinance Survey of Jerusalem. Facsimile of the 1865 edition, Jerusalem: Ariel Publishing House, 1980; for construction details, general layout, and particularly for the plan of al-Aqsá superimposed over that of the Gate, indicating position of the Well of the Leaf relative to the Mosque's present north façade. Charles Warren and Claude Reignier Conder, The Survey of Western Palestine. London: The Palestine Exploration Fund, 1884, for noting that masonry changes where the tunnel originally opened into the present Mosque also necessitated cutting away ducts to the Well of the Leaf. P.L.-Hughes Vincent and P.M.-A. Steve, Jérusalem de l'ancien Testament. Recherches d'Archéologie et d'Histoire, Paris: Librairie Lecoffre, 1956, particularly, for a good photo of the capital of the large pillar in the tunnel's vestibule. Myriam Rosen-Ayalon, Early Islamic, for setting out the circumstances of the Islāmic reconstruction of the tunnel. Amikan Elad, Mediaeval Jerusalem and Islamic Worship. Leiden, New York, Cologne: E.J. Brill, 1995, for information on the Jewish gates of Temple Mount. Benjamin Mazar, asst. by Gaalyah Cornfeld & D.N. Freedman, The Mountain of the Lord. Garden City, New York: Doubleday & Company, Inc., 1975, for modern photos of part of the vestibule, and the only one (though partial) of the Herodian stucco ceiling decoration. Melchior de Vogüé, Le Temple de Jérusalem. Paris: Noblet & Baudry, 1864, the only one to provide a drawing of the vestibule, to which the Vincent/Steve photograph of the column most helpfully relates; a reasonable drawing of the cupola decoration, and a very useful longitudinal section of the Mosque above the tunnel. It is to be regretted that his drawings are so frequently reproduced without acknowledgement. And, of course, R.W. Hamilton, The Structural History of the Aqsa Mosque. London: Geoffrey Cumberlege, Oxford University Press, 1949.

118. Elad, Medieval, p. 97; Meir Ben-Dov, In the Shadow of the Temple. Trans. from Hebrew by Ina Friedman. Originally published 1982. Jerusalem: Keter Publishing House, 1985, pp. 135-36.

119. Rosen-Ayalon, Early Islamic, p. 45; Michael Hamilton Burgoyne, "The Gates of the Haram al-Sharīf." In Bayt al-Maqdis. 'Abd al-Malik's Jerusalem, Part One, edited by Julian Raby and Jeremy Johns. Oxford Studies in Islamic Art IX. Oxford: Oxford University Press, 1992, p. 110.

120. Elad, Medieval, p. 97.

121. Ben-Dov, Shadow, p. 286, thinks that, because of its proximity to Umayyad palatial complex at the foot of the southern and western walls of Temple Mount, the Double Gate did not serve the general public, with which Rosen-Ayalon, Early Islamic, p. 33 and n. 3 disagrees.

122. Between 709 and 715, Hamilton. Structural, p. 74.

123. *Ibid.*, p. 60.

124. Hamilton, Structural, p. 63; Warren & Conder, Survey, p. 167, point out the masonry change at 190 ft. from the Mosque's southern wall indicating where the passage originally exited inside the present mosque and the consequent cutting away of the duct to the Well of the Leaf, when the Double Gate's tunnel was extended to its present exit point 260 ft. from the southern wall.

125. Burgoyne, "The Gates," figs. 3, 4.

126. Vincent & Steve, Jérusalem, Pl. CXXIV.1.

127. De Vogüé, Le Temple, Pl. IV, top.

128. Wilson, Ordinance, pp.38-39.

129. Hamilton, Structural, p. 63; von Bothmer, "Architekturbilder", p. 6, points out the ewers undoubtedly indicate ablutions; cf. Grabar, Mediation, p. 160, indicates the constructions before the building could be for ablutions, but, at p. 162, not likely before Ottoman times.

130. Guy Le Strange, Palestine Under the Moslems. A description of Syria and the Holy Land from A.D.650 to 1500. Translated from the works of The Mediæval Arab Geographers. Original edition 1890. Published with new introduction by Walid Khalidy. Beirut: Khayats, 1965, 178. The writer is conscious of some discrepancy between Hamilton's statement that Bi'r al-Waraqah's well-head projected above the pavement before the mosque, and Nāṣir-i Khusraw's that one descended to the place of ablution.

131. Le Strange, Palestine, 178-179.

132. *Ibid.*, p. 182.

133. Hamilton, Structural, p. 64 n.1, notes also that two well-heads for Bi'r al-Waraqah may have existed in Umayyad times; Wilson, Ordinance, p.39, re conduit linking Bi'r al-Waraqah to other cisterns having been cut when the present exit of the Double Gate was made.

134. Hamilton, Structural, p. 65.

135. *Ibid.*, p. 65.

136. Von Bothmer, "Architekturbilder," p. 6.

137. Grabar, Mediation, pp. 160, 162, 173.

138. Hamilton, Structural, p. 63; cf. von Bothmer, "Architekturbilder," pp. 7, 10, where these partial columns are interpreted as a podium.

139. Wilson, Ordinance, sheet 1, where the Double Gate's subterranean route lies immediately west (reader's left) of the Well of the Leaf.

140. Hamilton, Structural, p. 65.

141. *Ibid.*, pp. 60, 61, 73.

142. *Ibid.*, p. 61.

143. *Ibid.*, pp. 6, 60-61.

144. *Ibid.*, p. 60, widened subsequently when a dome was built.

145. Krautheimer, Early Christian, pp. 60-63, and ill. 26, 27(A).

146. Oleg Grabar, The Shape of the Holy: Early Islamic Jerusalem. With contributions by Mohammad al-Asad, Abeer Audeh, Saïd Nuseibeh. Princeton: Princeton University Press, 1996, p. 151.
147. Henri Stern, "Recherches sur la mosquée al-Aqṣá et sur ses mosaïques," Ars Orientalis (1963) 5: 27-47. Grabar agrees with Stern and relates al-Aqṣá's Fātimid mosaics to the "Umayyad decorative vocabulary of the late seventh and early eighth centuries", Grabar, Shape, p. 151.
148. Von Bothmer, "Architekturbilder," p. 5; Grabar, Mediation, p. 160.
149. Von Bothmer, "Architekturbilder," p. 6.
150. *Ibid.*
151. Creswell, EMA, I:1.147 and n. 2.
152. Bisheh, The Mosque of the Prophet, p. 211.
153. *Ibid.*, pp. 211, 214.
154. *Ibid.*, p. 215.
155. Creswell, EMA I:1. pl. 27.b. There is one on the ciborium in a ninth century Arabic gospel book instanced by Grabar, Mediation, fig. 135, p. 166.
156. The central vine scroll of the Qubbat al-Ṣakhrāh tie beam mentioned in the previous note is compared to a vine on a Surah divider from San'ā' Qur'ān 33-20.1 and another vine on the Himyaritic door post of the mosque at Sarha, Von Bothmer, "Architekturbilder," p. 14, abbs. 16, 20, 22.
157. Rosen-Ayalon, Early Islamic, p. 46, and ill. 31.
158. Von Bothmer, "Frühislamische," p. 24, and "Architekturbilder," pp. 12-13.
159. Von Bothmer, "Frühislamische," p. 24.
160. The likeness of Figure 1's trees to those in the Damascus mosaics, and the encircling quality has been observed by M. Jenkins, "Umayyad Ornament," p. 22.
161. K.A.C. Creswell, A Short Account of Early Muslim Architecture, revised and supplemented by James W. Allan, Aldershot: Scolar Press, 1989, fig. 19 is Figure 43 herein. For acanthus rinceaux see Creswell/Allan's fig. 13.
162. This conclusion reached also, from examination of specific Umayyad ornamental forms observed in the fragments, Jenkins "Umayyad Ornament," p. 23. Yemen, Syria and possibly what is now Saudi Arabia have been presented as sources for the Figures, Grabar, Mediation, p. 156. Pre- and early-Islāmic aspects of Yemeni art have been suggested as sources in von Bothmer, "Architekturbilder," pp. 8, 9, 10.
163. Von Bothmer, "Frühislamische," p. 25; Grabar, Mediation, p. 156; a full-page reproduction of folio 6 verso, Cod. Vind. Med. gr.1, of the Nationalbibliothek, Vienna, can be found on p. 136 in Harrison, Temple.

164. Seton Lloyd, The Art of the Ancient Near East, Praeger Paperbacks 1961, London: Thames and Hudson, 1961, fig. 133.
165. Cover shot on pamphlet "Jordanie, visages et lieux de passe," published by the Jordan Tourism Board.
166. John Wilkinson, "Architectural Procedures in Byzantine Palestine," Levant (1981) 13: 156.
167. Wilkinson, "Architectural," p. 158.
168. Von Bothmer, "Architekturbilder," pp. 8, 11.
169. Wilkinson, "Architectural," 156; De Vogüé, Le Temple, pl. VI. The drawing of the Herodian ceiling decoration in Benjamin Mazar, "Herodian Jerusalem in the Light of the Excavations South and South-West of the Temple Mount," Israel Exploration Journal (1978) 28: fig. 1 is more idealized than the photograph of it in Mazar, Mountain, allows.
170. Wilkinson, "Architectural," p. 158; F.M. Biebel, "Mosaics." In Gerasa City of the Decapolis, edited by Carl H. Kraeling. New Haven, Connecticut: American Schools of Oriental Research, 1938, pp. 316-18, pl. LXII.b.
171. Wilkinson, "Architectural," *passim*.
172. Creswell & Allan, Short Account, fig. 5.
173. Trees, flowers, and something angel-like, Gautier-van Berchem, "Mosaics," vol. 1 part 1 pp. 226-27; Rosen-Ayalon, Early Islamic, pp. 20, 22.
174. Grabar, Mediation, p. 156.

## Chapter Two: The Qubbat al-Şakhrāh

In the previous chapter it was argued that Figure 1 was a representation of the Qubbat al-Şakhrāh, the essence of which, according to that drawing, was its ornament, indicated by the embroidery of the star band and the trees. Further, its trees and the paradisiacal garden representations of Figures 2 and 3 derived from the image of a line of fruit of trees used in Byzantine art to denote the Earthly Paradise of Cosmas Indicopleustes' world map and Earth in Dumetios' basilica at Nikopolis. This chapter considers the reasons for the Qubbah's existence and the sources that were available to be tapped for its architecture and decorative programme.

Umayyad appropriation of a familiar image would not have been strange to contemporary non-Muslims. At its birth Christian imagery "borrowed, and kept, the Greco-Latin iconographic language as commonly practised at the beginning of our era everywhere around the Mediterranean".<sup>1</sup> Christian iconography expressed itself in the verbal and visual language of its times, so the models on which Christian images were based were understandable to contemporary non-Christians, but by adding to or changing some of the details a Christian artist might transform an image common to the period into a Christian image.<sup>2</sup> An example of this is Jesus' entry into Jerusalem (Figure 51),<sup>3</sup> adapted from the *adventus*, a sovereign's visit to a city of his empire (Figures 52, 53).<sup>4</sup> Other categories of early Christian images evolved from "image-signs", whose particular traits, not the image, defined the subject for the informed viewer, and whose value lies in a brevity commensurate with being understandable and unequivocally decipherable,<sup>5</sup> to detailed depictions of the subjects they were meant to evoke. Fish and a basket of loaves in one such image-sign are understood as "communion" (Figure 54)<sup>6</sup> and, in a later depiction, fish and loaves are present at the Last Supper (Figure 55).<sup>7</sup> In the process of constructing a definitive religious art some images dropped by the wayside because of the difficulty in visually encapsulating the subject;<sup>8</sup> others were so closely identified with a particular event they faded from use because they lacked continuing relevance.<sup>9</sup>

As to the Umayyad's need of this image and the circumstances that may have led to its acquisition, one of the reasons advanced for the Qubbah's construction has been that it was envisaged as a rival for the splendid buildings of other religious denominations.<sup>10</sup>

Al-Muqaddasī reported of his (al-Muqaddasī's) uncle that al-Walīd spent money on the Great Mosque of Damascus rather than on roads and repairing fortresses in order to distract the Muslims from the beauties of such Christian churches as those at Lydda (al-Lidd) and Edessa (al-Ruhā'), and `Abd al-Malik erected a Dome for the Rock to distract Muslims from admiration of the magnificent Dome of the Resurrection.<sup>11</sup> The Dome of the Resurrection, or Anastasis Rotunda, was the round building erected over Jesus' tomb in Jerusalem,<sup>12</sup> an architectural shell "... beautified with choice columns and with much ornament, decorating it with all kinds of embellishments", in an "... enormous space open to the clear sky",<sup>13</sup> set apart from the basilica<sup>14</sup> which formed part of the complex of the Holy Sepulchre.

In his reporting on the regional problem of the attraction Christian churches generally and the Dome of the Resurrection particularly had for Muslims in Greater Syria, al-Muqaddasī says `Abd al-Malik feared the Dome of the Resurrection would become more powerful in Muslim hearts,<sup>15</sup> part of the fear, one may speculate, could have been that Muslims were considered incapable of producing something comparable. Perhaps the Qubbah was a test of strength.

`Umar b. al-Khaṭṭāb had prayed on the mount sacred to Jews and Muslims, and commenced the clearing away of its rubbish, but rejected including the Rock in his mosque's qiblah because such a practice suggested adherence to Jewish worship practices.<sup>16</sup> Nevertheless, the Rock came to be honoured in a spectacular way. Various reasons for its sanctity have been advanced. Along with its *qubbah*, it has been considered part of an Umayyad building programme to "sacralize" the Ḥaram,<sup>17</sup> specifically, it has been associated with the events of the Last Days, and in this connection A. Elad refers to M. Rosen-Ayalon's examination of all the Umayyad Ḥaram monuments for their iconographical linkages.<sup>18</sup> In support of the Rock's special qualities Rosen-Ayalon cites a tradition

that the origin of "Earth Water" [sic] lies beneath it,<sup>19</sup> and says the roles of the world's *omphalos*, and *Axis Mundi* where only the Tree of Life would grow were appropriated to it.<sup>20</sup> Also, the Rock is traditionally associated with the location of Solomon's Temple,<sup>21</sup> and has been considered the place of Abraham's sacrifice.<sup>22</sup>

A recent article by J. van Ess draws attention to a discounted *hadīth* which states that, during the Prophet's Night Journey (*isrā*) Gabriel went with the Prophet to the Rock and said, "Here your Lord ascended to Heaven ...".<sup>23</sup> Although this tradition is known to have been accepted by a reputable early traditionalist, `Abd Allāh b. al-Mubārak (died 797 CE),<sup>24</sup> such anthropomorphism was later considered scandalous and the *hadīth* was rejected and called a forgery.<sup>25</sup> The notion of God's footprint on the Rock was referred to as Syrian paganism, and the footprint was claimed for Abraham, "... when he made it [the Rock] a *qibla* for all mankind",<sup>26</sup> van Ess understands this as an Hijāzī attack on a *hadīth* of Syro-Palestinian origin. As to how `Abd al-Malik might have reacted to such a tradition, van Ess states the Caliph may "have taken the anthropomorphism for granted or failed to see any theological difficulty in it".<sup>27</sup> It is this hypothesis of God's ascension from the Rock that O. Grabar now accepts as the reason for building the Dome, combined with the tradition of the Prophet's *isrā*' to Jerusalem, possibly even to the Ḥaram, that Grabar thinks may have been in place by the end of the seventh century.<sup>28</sup> Perhaps belief in God's ascension from this anciently-holy site was the reason, or part of the reason, for `Abd al-Malik ennobling it with a *qubbah*. In building the Dome for the Rock from which God ascended to Heaven, Muslims could surely claim to have surpassed the Christians who had only Jesus' footprint in the Church of the Ascension.<sup>29</sup>

The octagonal shape, which has been pointed to as an Islāmic quality, its "eight-ness" suggestive of the eight principal gates of Paradise,<sup>30</sup> had been used throughout Europe and the Near East to the seventh century<sup>31</sup> and M. Écochard draws attention to the appropriateness of the octagon for magnifying whatever object is at its centre, for instance, the column of a stylite, an emperor's tomb, or a rock.<sup>32</sup> These particular octagons are, respectively, around the pillar of S. Simeon Stylites

at the heart of the cross-shaped complex of Qal`at Sim`ān (end of the fifth century);<sup>33</sup> the mausoleum of Diocletian at Spalato, 303,<sup>34</sup> and the Qubbat al-Şakrah.<sup>35</sup>

Unlike other octagons with which it has been compared, the Qubbah fully realized its ambulatory potential; auxiliary structures do not detract from its central focus, and it is easily accessible by four, equi-distant doors. Its internal symmetry is emphasized by magnificent, but thematically repetitive ornamentation, aside from `Abd al-Malik's texts, suggesting a visitor might enter and leave by any door without impairment of the experience.<sup>36</sup> Indeed, its symmetry and prominent isolated position<sup>37</sup> suggest it was conceived as omni-directional; complete in itself. One may conclude, therefore, that in the Rock's housing the Caliph had availed himself of a well-established, centrally-planned building whose walls were amenable to adjustment for terrain, the shape of that being honoured,<sup>38</sup> and offered suitable working surfaces for a contemplated decorative programme because, unlike Christian iconography which started tentatively and grew incrementally, on the evidence of the Qubbah a form of Islāmic religious art burst forth fully grown.<sup>39</sup>

It cannot be supposed that, having felt constrained to meet the challenge of the Christian churches, `Abd al-Malik found it easy to initiate a programme of religiously-purposeful imagery, but, once the decision was made, it is reasonable to assume that work of surpassing quality and splendour was envisaged. Amongst the kinds of images Muslims might have admired and whose presentation they may have sought to emulate is the glittering gold and blue Transfiguration mosaic (Figure 56)<sup>40</sup> in the apse of the basilica of S. Catherine, Mt. Sinai, c.600 CE.<sup>41</sup> Befitting the high significance of this depiction is the dignified, large-scale, frontal presentation of Jesus in spotless white; the supra-natural quality of the event is indicated by the mandorla about him; the background is luminous gold, and supporting the wondrous, almost unimaginable scene, is a text.

As for the content of the new imagery, the Qur`ān does not recount the life of its Prophet, and even if it had figural scenes concerning the history of Islām, they could not be illustrated; the one consistent theme that might, however, is *jannah*, the garden of Heaven, Paradise.<sup>42</sup>



Some years ago it was observed that the Qubbah's naturalistic trees might connote the Earth as they did at Nikopolis, but if such iconography was intended, it played only a minor role, as "such a symbolic theme is not unlikely, in view of the fact that it recurs in a more developed fashion in the decorative repertory of later Umayyad structures".<sup>43</sup> The same scholar thought the trees would probably be suggestive of Paradise in a Christian setting, but not in a Muslim one because they were unaccompanied by the houris of the Qur'ān's Paradise,<sup>44</sup> this after having noted the Qubbah's decoration eschewed "animated figures" for religious reasons.<sup>45</sup>

Another indication of the fruitful trees' customary role comes from E. Kitzinger in whose opinion archaeologists and even Bishop Dumetios' contemporaries might have interpreted the Nikopolis' panel as a paradisiacal representation had it not been for the inscription:<sup>46</sup> "Here you see the famous and boundless ocean Containing in its midst the earth Bearing round about in the skilful images of art everything that breathes and creeps ...".<sup>47</sup> But for the inscription, it was thought, the Bishop's contemporaries might not have readily grasped "the meaning with which familiar motifs had been invested in this instance".<sup>48</sup> That the very similar line of trees on Cosmas Indicopleustes' map denotes Paradise is twice mentioned.<sup>49</sup>

Attention has been drawn to the resemblance between the Earthly Paradise trees and those of Nikopolis' Earth;<sup>50</sup> between Earth's trees and those of the Qubbat al-Sakrah,<sup>51</sup> and between the trees of the San'ā' Figures and all those foregoing, yet none of the trees in question are quite alike; in the Qubbah's case the trees are physically separated but still have been considered as a group. The physical resemblance seems to be that each example is composed of various kinds of fruitful trees with new growth by them, or underplantings; the iconographic one, that such assemblages were frequently understood as paradisiacal.

Stylistically, Kitzinger likened Earth to the Garden Room at Primaporta (see Figure 32) in a general way,<sup>52</sup> but considered its schematic arrangement of trees and birds closer to an heraldic arrangement of animals and trees on the floor of the new baptistery chapel, Mount Nebo.<sup>53</sup> In fact, all

the groups of trees have much in common with the garden picture-panels of Roman painting. Figure 57 shows a Third Style garden with undergrowth and a line of fruit trees having tapered and spreading foliage.<sup>54</sup> Figure 58, a Fourth Style garden, has tall reeds and date palms,<sup>55</sup> and an arrangement of settled and flying birds very like that of Earth's. The schematism attributed to Earth derives from Roman garden paintings' characteristically shallow depth of field, essential two-dimensionality, and carefully delineated fruit and foliage,<sup>56</sup> features noted of the paintings of the Garden Room also.<sup>57</sup>

Not all fruit trees were thought to have symbolical or metaphorical meanings,<sup>58</sup> of course, but they did have consistent paradisiacal characteristics, derived from Biblical and non-Biblical traditions. In Paradise no seasonal excess disrupted the peaceful existence of its inhabitants; it was a temperate place of ever-blooming flowers and ever-bearing fruit. Paradise might be Eden in which is "the tree of life with its twelve kinds of fruit, yielding its fruit each month";<sup>59</sup> or the Elysian fields at the world's end, where there is neither snow nor harsh winds, but the daily refreshment of the West Wind blowing in from the ocean.<sup>60</sup> A sixth century Christian poet who wrote that the earthly Paradise from which man had been justly driven was now inhabited by angels, said it was a seasonless place whose fruits and flowers "fill the whole year".<sup>61</sup>

In Nikopolis' "familiar motif" the apple, pear and pomegranate trees draw their paradisiacal association from Homer, as does part of its inscription.<sup>62</sup> Having crossed the wide seas to Phaeacia after his enforced stay on Calypso's enchanted island, pear, pomegranate and apple were three of the fruit trees Odysseus saw in Alcinous' god-given garden, fruit that "... never fails, nor runs short, winter and summer alike. It comes at all seasons of the year ....."<sup>63</sup> The stories Odysseus related at the court of Alcinous were the subject of a series of paintings on his wanderings "through landscape".<sup>64</sup> "Odyssey landscapes" may even have become a standard topic, for Vitruvius reports they appeared in Roman houses during the Second Style of Roman painting.<sup>65</sup>

On the walls of S. Sergius, Gaza, c.536, there was a mosaic with " 'pear trees, pomegranate trees and apple trees bearing splendid fruit,' blossoming in all seasons alike ...",<sup>66</sup> allowing Choricus

to observe that in this respect the King of the Phaeacians was rivalled.<sup>67</sup> Kitzinger himself questioned whether the convention of combining these three trees was due to Homeric influence,<sup>68</sup> and H. Maguire thought it possible that Choricus intended to show that the Homeric fruit were seen as "images of Paradise".<sup>69</sup>

Choricus' descriptions have been disparaged because he was a panegyrist<sup>70</sup> and trained to praise.<sup>71</sup> In fact, his words timelessly evoke the paradise desired by the inhabitants of hot, dry Mediterranean lands. On the walls of S. Sergius' lateral apses there grew "... ever-burgeoning trees full of extraordinary enchantment: these are luxurious and shady vines, and the zephyr, as it sways the clumps of grapes, murmurs sweetly and peacefully among the branches ... Most elegant of all is the vase containing, I imagine, cool water", from which "the vine motif was represented as growing".<sup>72</sup>

In the Qur'ān, Paradise is temperate, seasonless, without want, and a way of expressing this latter, understood actually or metaphorically,<sup>73</sup> is by the abundance of every kind of fruit:

Sūrah XLIII.73	"Ye shall have therein Abundance of fruit, from which Ye shall have satisfaction.
Sūrah XLVII.15	"... In it [the Garden] There are for them all kinds of fruits.
Sūrah LXXVI.13-14	"...They [the Righteous] will see there neither (The sun's) excessive heat Nor (the moon's) excessive cold.  And the shades of the (Garden) Will come low over them, And the bunches (of fruit), There, will hang low In humility.
Sūrah LXXVII.41-42	"As to the Righteous they shall be amidst (Cool) shades and springs (Of water).  And (they shall have) Fruits, - all they desire". <sup>74</sup>

Images by themselves, like words, were neutral<sup>75</sup> until appropriated for some special purpose;

they were an accepted way of conveying information about the state or religion<sup>76</sup> and, in their acquisition of particular traits, could present or make reference to otherwise unwieldy parcels of knowledge; they implied more than they showed.<sup>77</sup> Images already invested with particular meanings might be appropriated and transformed, as had imperial iconography by Christians,<sup>78</sup> so a line of fruit trees with paradisiacal associations might, by adding to or changing the details, become *jannah*. The new imagery had to be the least offensive to Muslims, yet able to be as sumptuously-presented as any Christian religious art. Temperate fruitfulness was Qur'ānic and could be interpreted without a single animate being. And there must have been recognition that the stylized vegetal motifs present in both Byzantine and Sāsānid art, and the use of bejewelling to enhance the qualities of motifs of every kind, indicated a way of transforming the earthly fruit trees into their other-worldly versions in a heavenly garden.

The implications of the line of fruit trees are key to the Qubbat al-Şakrah's decorative programme. In conventional representations of Earth or Ocean one might delight in the species that were displayed but imagined the rest, for such conventions were practical ways of dealing with insuperably large topics. If the pear, pomegranate and apple allusion was recognized, the rest of Alcinous' garden was recalled: the sweet fig, the olive, grapes, vegetable beds, the two springs, the beneficent West Wind, the garden's enclosing hedges.<sup>79</sup> The fruit trees with their wealth of associations were transformed into a Qur'ānic vision of Paradise. Convention and allusion were dispensed with and in their stead were presented a multitude of non-earthly trees and plants, adorned as befitted Heaven, and eternally bearing all together a superabundance of every kind of fruit. Looking beyond the line of trees a mind's eye had seen a whole paradisiacal garden, and it is this imagined reality which the Qubbah manifests. One no longer stood before an image, one entered it.

In this welcoming grove supra-natural fruiting trees ring the outer surface of the octagonal ambulatory, on whose inner surface are naturalistic trees bearing dates, almonds and olives, and amphorae, acanthus bases and cornucopiae from which issue luxuriant vines bearing the most diverse

fruit. Acanthus bases, their vines heavy with fruit are on the outer surface of the circular arcade and on the inner surface, eight amphorae exude fruitful acanthus rinceaux. In the drum, fruit-laden rinceaux issue from other amphorae. On the soffits of the octagonal arcade there are floral shapes; rosettes; garlands and rinceaux bearing pomegranates, grapes, apples, figs, olives, pears, dates, marrows, limes;<sup>80</sup> ivy, grape and fig leaves are spread with pomegranates, olives, cherries, cucumbers, citrus fruit, dates, corn, green figs, pears, apples, prunes and quinces,<sup>81</sup> while other fruits are presented in baskets.<sup>82</sup> And grapes are everywhere,<sup>83</sup> growing from pots of all kinds, trailing from fantastical vines on almost every tie beam; on every side endless displays of fruitfulness emphasize the infinite abundance of Paradise.

The flourishing vines draw attention to their "fruit", an eclectic mixture of recognizable edibles, flowers and stylized motifs. Their models are the ubiquitous vines scrolling out of amphorae and acanthus bases on countless church and synagogue floors about the Mediterranean that appear to bear such "fruit" as birds, beasts, men, women, flowers, fruit, harvest vignettes, hunting scenes, religious symbols and so on. This perceptive adaptation of contemporary visual imagery realizes the dominant paradisiacal quality of the seasonless association of every kind of fruit and flower. It not only brings together all kinds of "natural" fruit and foliage on the Qubbah's vines and trees, but, by adding the "non-natural" fruit of every kind of ornamental feature it imbues the paradise images with supra-natural qualities.

An earlier, purely vegetal version of the fruitful vine may be cited, from the mosaics of the Great Palace, Constantinople, dated between 450 and 550 CE, (Figure 59).<sup>84</sup> A border in the area of the Peristyle has exuberant scrolls issuing from acanthus cornucopias bearing cherries, pears, artichokes, grapes, pomegranates, and many flowers, all with the most diverse leaves, of which the excavator says, "Almost every kind of flower and vegetable seems to have been included".<sup>85</sup> A modest version of the Peristyle mosaic, known from an Egyptian textile attributed to the fifth century (Figure 60),<sup>86</sup> has a border of acanthus scrolls bearing assorted fruits and flowers.

The high significance of the Qubbat al-Ṣakhrah's garden is evident from the honour done its presentation: the background is luminous gold; the trees are formal, dignified; their supra-natural qualities are indicated by jewel encrustation and their vitality by the extraordinarily diverse fruit they bear,<sup>87</sup> and supporting these wondrous, almost unimaginable scenes is a text.

*A propos* the Qubbah's ornamentation, Choricus' response to the visual imagery of his churches ought not to be lightly dismissed by we who have a surfeit of images. Surely there were like reactions from those privileged to stroll about the Qubbah's shaded walks amidst its "ever-burgeoning trees full of extraordinary enchantment"; to see its luxuriant vines growing from vases undoubtedly filled with cool water, to pause beneath its leafy canopies dripping with numberless clumps of grapes.

Another appreciation of imagery's illusionistic qualities is related of the *qitf*, the great carpet "*Bahār-i Kisrā*", "The King's Spring", 60 cubits by 60, taken by the Muslims at the fall of Madā'in in 637. On it were pictures of roads, rivers and houses, and its edges were "planted" with spring vegetables of silk. In winter, Sāsānid kings were said to have sat and drank on it, amidst its gold and silver blossoms and jewelled fruit, and imagined themselves in a garden.<sup>88</sup> And what fantastical journeys must have been undertaken by those who could wander through the countryside and visit the cities and villages of the extraordinary map at S. George, Madaba.<sup>89</sup>

Building and imagery combined suggests that the Qubbah was meant to be a personal sensory experience of the literal or metaphorical reward of the blessed in heaven. The relative sameness of images overall, their arrangement in continuous friezes between which the visitor passes, and the absence of distracting auxiliary structures, has led to the inner of the ambulatories being described as like "two hedges ... framing an unending alley" between which the visitor walks;<sup>90</sup> a sensation the architectural elements do not effectually interrupt.<sup>91</sup>

The ambulant's steps are directed by the texts found on the outer and inner surfaces of the octagonal ambulatory, starting from the outer southern facet, moving clockwise to the south-eastern

facet and `Abd al-Malik's dedicatory inscription, then, turning to the inner surface, from the southern facet counter-clockwise to the end at the south-western facet.<sup>92</sup>

On the less well-lit outer surface of the ambulatory where rosettes or other ornaments divide the text,<sup>93</sup> repeated stressing of God's singularity, Muhammad's role as God's messenger, and repetitions of the Basmala predominate. On the better-lit inner surface which lacks the text dividers,<sup>94</sup> the text includes the Basmala, the stressing of God's singularity, the declaration that Islām is the true religion and Suwar 4:171-172 and 19:33-36, denying Jesus' divinity<sup>95</sup> and, by extension, inveighing against the dogma of his resurrection. The excerpts from Suwar 4 and 19 speak directly to Muslims of the dangers of incorrect belief which the attraction of the Dome of the Resurrection could engender, countering such testimonies as that following Jesus' appearance after the event of the Resurrection:

Mt. 28:18-19 "And Jesus came and said to them,  
'All authority in heaven and on earth has been given to me.

"Go therefore and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit ... "

`Abd al-Malik's contemporaries would have understood the Suwar periphrastically, that is, God makes you aware of Christian belief, which their Dome of the Resurrection commemorates, but you, as Muslims, believe otherwise. Sūrah 19:37-40 [not in the Qubbah] warns of the perils to befall non-Muslims on the Day of Judgement.

That the texts support al-Muqaddasī's reasons for the Qubbah's construction is not a new idea. At the time he proposed that the images of jewelled crowns in the Qubbah's mosaics were in the nature of trophies, O. Grabar stated the inscriptions could have a Muslim-only meaning, clarifying al-Muqaddasī's statement.<sup>96</sup> N. Rabbat states that the texts against the deification of Jesus support al-Muqaddasī, and that they complement the building as a response to the attraction of Christian churches.<sup>97</sup> It is only with the document that the San`ā' Figures represent that marrying of text and images becomes possible.<sup>98</sup>

Whatever indication of the Rock's sanctity there may have been in the missing part of Figure 1

is speculative. Perhaps, there was a footprint, or, some contemporarily-understood euphemism for it.

The qualities ascribed to the Rock may have been as varied then as now and, for their own reasons, the Umayyads may have been content to maintain it as the locus of some holy, but ambiguous continuum.

Among the Qubbat al-Şakhrāh's mosaics the naturalistic trees and the thicket of reeds are understood to be the remains of this heavenly garden's model. They were retained in the adaptive process, as models seem to have been in Christian transformations, in as close a proximity to each other as the decorative programme allowed, that is, on the flanks of four adjacent piers on the inner side of the octagonal ambulatory.<sup>99</sup> As naturalistic and stylistic trees are rendered with equal care, and as all the pier flanks could as easily have had pots of plants, the retention of the trees indicates that importance was attached to acknowledging their origin in the model.

Although modified by the addition of jewel encrustation, trees and reeds alike markedly resemble their Roman originals. One sees this in the interlaced branches, careful fruit placement and new growth from, or saplings beside, mature trees. In these respects the Qubbah's olive and almond trees and their flanking saplings (Figures 61, 62)<sup>100</sup> are very like the trees and undergrowth in Figure 57. Saplings flanking mature trees are a commonplace in Roman garden paintings, and their appearance in the Qubbat al-Şakhrāh speaks to this natural phenomenon, not to a manifestation of Christian symbolism;<sup>101</sup> only in isolation, out of the model's context, might the jewelled trees with flanking saplings be considered euphemisms for the Christian cross. It is of interest that a shorter version of the thicket of reeds (Figure 63)<sup>102</sup> exists on the triumphal arch above the Transfiguration mosaic at S. Catherine's (Figure 64), where it is identified as the Burning Bush before which Moses is seen removing his sandals.<sup>103</sup> The ensemble of apse and triumphal arch at S. Catherine's is considered the work of one team of mosaicists,<sup>104</sup> dated on epigraphic grounds c. 600 CE.<sup>105</sup>

External ornament was essential to the Qubbat al-Şakhrāh's realization. Christians must have been aware of their churches' attractions for Muslims and they needed to know the challenge of their



religious art had been met. As they were unable to enter the building,<sup>106</sup> what Christians saw of it from the outside had to be more than "decoration"; therefore, some external intimation of the interior's purposeful imagery was a requisite. The trees woven through Figure 1's perimeter wall attest the equal significance of internal and external imagery and substantiate reports of their similar appearance. Having in mind Choricius' and Paul the Silentiary's metaphorical descriptions of the Gazan churches and Hagia Sophia<sup>107</sup> respectively, it is possible the Qubbat al-Şakrah's glittering dome and external ornament were meant to be interpreted as the likeness of a heavenly pavilion rising out of a paradisiacal garden. As such an illusion might be best served in the distant view, the location of the Rock at the focal centre of the Haram was a fortuitous circumstance. The writer cannot agree with O. Grabar's conclusion that the Qubbah's external ornament was a "colourful decoration", "exclusively for visual effect".<sup>108</sup> In this planned response to the Christian challenge, imagery and building shape would have to have been designed together because of what seems to be their complementary roles.

On the subject of ornamentation, M. Gautier-van Berchem has provided a wealth of detail in her painstaking research into the Qubbah's mosaics; something may be added, however, on regional examples of elements in its visual vocabulary, and on the relationship between the Qubbah's imagery and the wider world of Byzantine art.

Notable features of some Qubbah soffits (Figure 65),<sup>109</sup> are large, heart-shaped leaves bearing fruit and vegetables. A heart-shaped leaf bearing fruit found somewhere in Madaba is illustrated by M. Gautier-van Berchem,<sup>110</sup> and other comparanda now known of suggest the Umayyads made use of an established, widespread symbol of plenty. Sites at which heart-shaped leaves bearing fruit, vegetables and even a fish and other leaves have been found, include: the chapel of Khirbat al-Kursi, Jordan, second half of the sixth century;<sup>111</sup> a baptistery at Kafr Kama, about 5 km. north east of Mount Tabor, second quarter of the sixth century<sup>112</sup> and a church at Kursi-Gergesa, on the east shore of the Sea of Galilee, late fifth to mid-sixth century.<sup>113</sup> In the "House of the Worcester Hunt" at Daphne, circa sixth century, the leaves cover the pavement in the "Mosaic of the Leaf" room, in the centre of

which is a bust of Ge, Earth, holding a scarf filled with produce.<sup>114</sup>

At the Church of the Lions, Umm al-Raṣās, Jordan, dated either 574 or 589 CE, (Figure 66)<sup>115</sup> the pavement before the apse has heart-shaped leaves bearing fruit; birds with fluttering Sāsānid neck ribbons, and two pieces of fruit with their cutting knives - one curved, one straight - alongside. This latter calls to mind the strangely-shaped fruit and straight knife in the bath mosaic at Umayyad Khirbat al-Mafjar.<sup>116</sup> As well, between the rondels in the north and south borders of this pavement, there are small, paired ivy leaves flanking square bases. This same presentation of small ivy leaves is found in the border of a silk, possibly Syrian, seventh-eighth century (Figure 67);<sup>117</sup> both examples are reminiscent of the paired ivy leaves in the spandrels of Figures 2 and 3.

The rings about the vegetation of the San`ā' Figures, alerted us to the significance of this feature in the Qubbah where similar rings control its exuberant vines. They can be seen about acanthus rinceaux in the borders of the Hall of the Seasons, Madaba, Jordan, sixth century, (Figure 68);<sup>118</sup> controlling vines on the synagogue floors at Ma'on (Nirim) c.538 CE (Figure 69)<sup>119</sup> and Shellal, 561-62 CE,<sup>120</sup> both near Gaza; in the Great Palace border (see Figure 59) about the inner columns of a Rabbula canon table (see Figure 20), and about the vines on the Justinianic pavement of the Sabratha basilica, post 533 CE (Figure 70).<sup>121</sup>

A prominent feature of the Qubbah's images is the bejewelling of containers. This has been likened to "crowns, bracelets, necklaces, and breastplates",<sup>122</sup> referred to in the manner of votive objects dedicated to a sanctuary.<sup>123</sup> Some motifs do resemble crowns and diadems, perhaps copied from such features on Byzantine mosaics, or from Sāsānid and Byzantine spoils of war, but to distinguish this bejewelling from that elsewhere in the Qubbah is to give it an independent character it does not possess.<sup>124</sup> Like the supra-natural trees and fruit and the fantastical containers of this imagined realm, jewel encrustation is an attempt to express the inexpressible, to heighten the out-of-this-world qualities of the equally non-real vegetation, just as Christians sought to express heavenly attributes with nimbi, mandorlas, and rays of light. The crowns and necklaces and so on were familiar

models, the adornments of princes, and here, the adornments of heaven.

Local examples of bejewelling are two jewel-collared vases known from Jordanian pavements: one at the Church of the Lions, Umm al-Raṣās, (Figure 71),<sup>125</sup> and the other at the north church, Ešbus (Hesban), c. sixth century (Figure 72).<sup>126</sup> On the Sabratha pavement (see Figure 70) three of the rings are actually jewelled coronets which, it has been noted, may be the only other extant examples of such a motif outside of the Qubbah.<sup>127</sup>

Bejewelling in the form of pearl bands featured on the very stylized vegetation of a page from Ms. Add. 5111 (see Figure 22) is of particular interest, as a possible foretaste of the Qubbah's jewel-encrusted vegetation. Pearl bands are found on the following Jordanian pavements: around vines or acanthus rinceaux at the Church of the Apostles, Madaba, 578 CE,<sup>128</sup> and the Church of Bishop Sergius, Umm al-Raṣās, 587-588 CE,<sup>129</sup> about birds' necks at the new baptistery chapel, Mount Nebo, 597 CE,<sup>130</sup> and about birds' necks and acanthus rinceaux at the Church of the Lions.<sup>131</sup>

On a Byzantine silk found in the coffin of S. Cuthbert, died 687 CE, (Figure 73), the "Nature Goddess" rises from the sea holding a scarf filled with pomegranates, pears and possibly apples. Jewels depend from her collar, hair and belt, and there are pearl bands about the necks and wings of the flanking ducks.<sup>132</sup> In her hands she carries vertically-sectioned objects, in style very like the Qubbah's formal trees.<sup>133</sup> A late sixth early seventh century date is postulated for the silk.<sup>134</sup> Features very like the carried objects are found on a silk with the monogram of the Emperor Heraclius (610-641) (Figure 74),<sup>135</sup> while a stylized vegetal motif again reminiscent of the Qubbah's supra-natural trees alternates with a natural leaf about the rim of a silver paten from Constantinople, c. 570 (Figure 75).<sup>136</sup>

The striking placement of vases directly above capitals on the inner face of the octagon<sup>137</sup> is a feature of Add. 5111's folio 11a (see Figure 22), and another example from a floor mosaic is cited by H. Stern (Figure 76).<sup>138</sup> Several examples of vases actually on capitals are known from Ma'īn, Jordan, and one containing a tree is shown in Figure 77.<sup>139</sup>

In the matter of texts, those beneath the Transfiguration and on the silver patten that contribute to the imposing effect of those artefacts state only that the former was executed through the efforts of Longinus and his second-in-command Theodore,<sup>140</sup> and that Bishop Eutychianus provided the latter.<sup>141</sup> The text on the frieze of the architrave in the church of SS. Sergius and Bacchus, Constantinople, (between 527 and 536),<sup>142</sup> is the dedicatory inscription of Justinian and Theodora.<sup>143</sup> Conversely, the interpretive inscription at Nikopolis, described as exceptional in floor mosaics,<sup>144</sup> seems to have more in common with the monumental inscriptions of two buildings prior to the Qubbah.

The first, in support of a building's attribution, is in the Lateran or Sistine Baptistery, Rome, c.432-440 CE,<sup>145</sup> on the ambulatory side of the architrave on the octagonal canopy over the font (Figures 78.a, 78.b).<sup>146</sup> In Lateran circles after 435 this font was regarded as the Fountain of Life,<sup>147</sup> and the eight verse inscription, described by P. Underwood as "overwhelmingly concerned with the doctrine that baptism is a rebirth" supports that idea. To paraphrase roughly, the outpourings of the virginal womb of Mother church, from which "her children" are born, and the blood from the wounded Jesus, metaphorically contribute to the notion that "This is the fountain of life", in whose cleansing waters sinners may bathe and be reborn.<sup>148</sup> This building was referred to by K.A.C. Creswell on account of its octagonal shape, not its inscription,<sup>149</sup> and by M. Rosen-Ayalon for its shape and inscription as a prototype of the Qubbah.<sup>150</sup>

The second is in the church of S. Polyeuktos, Constantinople, 524-27 CE, erected by the Byzantine princess Anicia Juliana in honour of that military saint,<sup>151</sup> where a poem in praise of the princess, her lineage and the church,<sup>152</sup> was carved in the nave's entablature and outside the narthex.<sup>153</sup> By her church, the poem claims, Anicia Juliana surpassed the wisdom of Solomon, whose Temple's size and decorative features she sought to evoke.<sup>154</sup> In raised letters 11cm high,<sup>155</sup> on an entablature which followed a succession of niches, arches and corner blocks around the central nave, the lines were surmounted by a twisting, very naturalistic grapevine (Figure 79).<sup>156</sup>

Prior to the dedication of Hagia Sophia in 537, S. Polyeuktos was reputed to have been the

most sumptuous church in Constantinople<sup>157</sup> and shares with Add. 5111 superior workmanship, notable Sāsānid influence, and a striking juxtaposition of naturalistic and stylistic features. The excavator commented on the range of sculpture found, from extraordinarily realistic to very stylized, and the frequent juxtaposition of these extremes on the same block,<sup>158</sup> and while the naturalistic material is attributed to Hellenistic and Roman traditions, the stylistic is described as clearly Sāsānid<sup>159</sup> whose origins are largely attributed to textiles taken as booty by the Byzantines.<sup>160</sup> Examples of the ornament are the vase on a pier face in Figure 80,<sup>161</sup> a vegetal panel from the area of the apse (Figure 81),<sup>162</sup> and a screen motif (Figure 82).<sup>163</sup> M. Harrison has drawn attention to the parallels between this stylized vegetation and that in the Qubbah<sup>164</sup> and, considering the extent to which other aspects of sixth century Byzantine art appear to have influenced the Umayyads, the possibility cannot be ignored that so notable a conjunction of text and ornament might well have been known to the Qubbah's designers.

The relationship between the paradisiacal imagery of the San`ā' Figures and the Qubbat al-Şakrah can be established, and how the imagery's model was adapted for that building can be demonstrated. What cannot be indicated is the way in which the model was actually presented on the qiblah walls in Figures 2 and 3; thus, the lines of fruitful trees in those two Figures are probably best understood as image-signs, defining the subject, not the image, for the informed viewer.

As to whether the model of the paradisiacal grove was used at the Great Mosque at Damascus, the writer believes so. Very briefly, there, the viewer stands beyond the encircling waters and sees through a grove of immense trees a fertile land of idyllic rural scenes and bejewelled palaces. The latter, in place of the bejewelled vegetation, are also formal, two-dimensional, frontally-presented; that these mosaics seem to be without Persian influence<sup>165</sup> signifies no more than that Sāsānid-derived art could supply appropriate models for the jewelled vegetation at Jerusalem, while Roman-derived art could supply the appropriate models for the architecture here. The resemblance between the trees of Figure 1 and those of the Great Mosque has been noted,<sup>166</sup> those identified in the foreground of the

Barada panel are chiefly fruit trees - olive, apricot, walnut, fig, plum, pear or apple - and poplars and cypress.<sup>167</sup> In layout only, the arrangement of the Barada panel suggests the paradisiacal grove was combined with a model like the riverine frieze at S. John the Baptist, Jarash, 531, (Figure 83)<sup>168</sup> within whose border "people move toward walled cities and shrines" along a tree-studded river bank, while the river itself is filled with aquatic life and plants.<sup>169</sup> Titled cities were included in the frieze, of which the one remaining is Alexandria,<sup>170</sup> but the trees present are neither monumental nor dominant, and are not included in a later riverine frieze about the nave of the church of S. Stephen, Umm al-Raṣās, CE756.<sup>171</sup>

From reports of the innumerable towns "identified" in the Damascus mosaics,<sup>172</sup> it would seem the courtyard frieze can be associated, in part, with the taste for cosmographic and geographic representations on pavements in the Eastern Mediterranean at its most popular in the sixth century.<sup>173</sup> Here too convention and allusion seem to have been set aside in favour of the most complete rendering of the view beyond the trees.

`Abd al-Malik's text, the paradisiacal imagery and the San`ā' Figures support the reasons al-Muqaddasī gives for the construction of the Qubbat al-Ṣakhrah. By his defence of `Abd al-Malik and al-Walīd, it could be argued from the silence on the matter that al-Muqaddasī's uncle, and prior generations, understood the reasons for the Qubbah's construction. O. Grabar comments on the terseness of the earliest texts about the Qubbah, as though the events described "were either commonly known or of little importance."<sup>174</sup> The silence and terseness give substance to J. van Ess' comments that the Rock may have been honoured in accordance with the Syro-Palestinian *hadīth*. One may speculate that al-Walīd felt secure enough of public opinion to go ahead with the installation of paradisiacal imagery in the Great Mosques of Madīnah and Damascus.

The Qubbat al-Ṣakhrah was an extraordinary response to a particular regional problem; couched in the architectural and artistic vocabularies of the times, it expresses a Muslim solution to a Muslim problem. Some evidence of its influence will be examined in the chapters following.

## Notes

1. André Grabar, Christian Iconography: A Study of Its Origins. The A. W. Mellon Lectures in the Fine Arts, 1961. Princeton: Princeton University Press, 1968, p. xlv.
2. Grabar, Iconography, p. xlvi.
3. *Ibid.*, fig. 123, pp. 44-45.
4. Grabar, Iconography, figs. 124, 125, p. 45. See also Sabine G. MacCormack, Art and Ceremony in Late Antiquity. Berkeley, Los Angeles, London: University of California Press, 1981, pp. 65-66 on Christian appropriation and transformation of imperial *adventus* imagery.
5. Grabar, Iconography, p. 8.
6. *Ibid.*, fig. 5, p. 8, rather than the Miracle of the Loaves and Fishes.
7. *Ibid.*, fig. 237, p. 95.
8. *Ibid.*, p. 112 ff. on unsuccessful attempts to achieve a "satisfactory iconography of the dogmas of the Trinity".
9. Like Constantine's Chi-Rho symbol, Grabar, Iconography, pp. 38-39, 125.
10. Shelomo Dov Goitein, "The Historical Background of the Erection of the Dome of the Rock," Journal of the American Oriental Society. (1950) 70: 106; cf. Rosen-Ayalon, Early Islamic, p. 14 who does not believe Goitein offers "any other interpretation" for its building.
11. Shams al-Dīn Abū `Abd Allāh Muhammad al-Muqaddasī, Ahsan al-taqāsīm fī ma`rifat al-aqālīm, 2nd ed., Leiden: 1967, p. 159 lines 4-11; Goitein, "Historical," p. 106.
12. Moshe Gil, A History of Palestine, 634-1099. Translated from Hebrew by Ethel Broido; rev. edition of Palestine During the First Muslim Period (634-1099), originally published in Hebrew by Tel Aviv University, 1983; Cambridge: Cambridge University Press, 1992, p. 93.
13. Eusebius, Vita Constantini III, 34, 35. Translated by Cyril Mango in The Art of the Byzantine Empire 312-1453. Medieval Academy Reprints for Teaching. Toronto, Buffalo, London: University of Toronto Press, 1986.
14. Cyril Mango, Byzantine Architecture. Originally published in Italian, Milan: Electa Editrice, 1974. English paperback edition London: Faber and Faber Limited, 1986, p. 46.
15. Al-Muqaddasī, Ahsan, p. 159, lines 10-11.
16. The History of al-Tabarī. vol. XII. The Battle of al-Qādisiyyah and the Conquest of Syria and Palestine A.D. 635-637/A.H. 14-15. Translated and edited by Yohanan Friedmann. Albany: State University of New York Press, 1992, pp. 193-196.
17. Amikan Elad, "Why did `Abd al-Malik build the Dome of the Rock? A re-examination of the Muslim sources." In Bayt al-Maqdis. `Abd al-Malik's Jerusalem, Part One, edited by Julian Raby and Jeremy Johns. Oxford Studies in Islamic Art IX. Oxford: Oxford University Press, 1992, p. 48 ff.

- 18.Elad, "Why did `Abd al-Malik," p. 51 and n. 90.
- 19.Rosen-Ayalon, Early Islamic, p. 53
- 20.*Ibid.*, p. 71.
- 21.Priscilla P. Soucek, "The Temple of Solomon in Islamic Legend and Art." In The Temple of Solomon: archaeological fact and medieval tradition in Christian, Islamic and Jewish art, edited by Joseph Gutmann. Missoula, Montana: Scholars Press, 1976, p. 73.
- 22.Oleg Grabar, The Formation of Islamic Art. New Haven and London: Yale University Press, 1973, p. 55; this as part of a general discussion on the Rock and its *qubbah*, pp. 48-67.
- 23.Josef van Ess, "'Abd al-Malik and the Dome of the Rock. An analysis of some texts." In Bayt al-Maqdis. `Abd al-Malik's Jerusalem, Part One, edited by Julian Raby and Jeremy Johns. Oxford Studies in Islamic Art IX. Oxford: Oxford University Press, 1992, p. 92 and n. 18.
- 24.Van Ess, "'Abd al-Malik," p. 92 and n. 20.
- 25.*Ibid.*, p. 92.
- 26.*Ibid.*, p. 93; the transmission chain referring to this rebuttal is given in n. 29.
- 27.*Ibid.*, p. 98.
- 28.Grabar, Shape, pp. 113-114.
- 29.Van Ess, "'Abd al-Malik," p. 101.
- 30.Gil, Palestine, p. 95.
- 31.Michel Écochard, Filiation de Monuments grecs, byzantins et islamiques: une question de géométrie. Paris: Librairie Orientaliste Paul Geuthner, 1977, pp. 1-54 *passim*; there is reference to other polygonal structures as well.
- 32.Écochard, Filiation, p. 39.
- 33.*Ibid.*, pp. 13-17.
- 34.*Ibid.*, pp. 27-28.
- 35.*Ibid.*, pp. 17-18, 21.
- 36.Grabar, Shape, pp.106-107.
- 37.*Ibid.*, pp. 104-105, on its visibility from different parts of Jerusalem.
- 38.Écochard, Filiation, p. 39.
- 39.Nasser Rabbat, "The Meaning of the Umayyad Dome of the Rock," Muqarnas (1989) 6:12 , says of the Qubbah, "... it even manifested a full-fledged, stylistic, structural, and ornamental program".



40. Michele Piccirillo, The Mosaics of Jordan. Amman: American Centre of Oriental Research, 1993, fig. 712.
41. Ihor Ševčenko, "Inscriptions." In The Monastery of Saint Catherine at Mount Sinai: The Church and Fortress, edited by George H. Forsyth and Kurt Weitzmann. Ann Arbor: The University of Michigan Press, N.d., p. 19.
42. L. Gardet, "Djanna," Encyclopaedia of Islam, 2nd edition.
43. Richard Ettinghausen, Arab Painting. "Treasures of Asia" series no. 4. Lausanne: Editions d'Art Albert Skira, 1962, p. 22.
44. Ettinghausen, Arab, p. 22.
45. *Ibid.*, p. 20.
46. Ernst Kitzinger, "Studies on Late Antique and Early Byzantine Floor Mosaics: I, Mosaics at Nikopolis," Dumbarton Oaks Papers No. 6 (1951), pp. 100-102 and n. 79.
47. Kitzinger "Studies: I," 100-101; Maguire, Earth, p. 22.
48. Kitzinger, "Studies: I," pp. 101-102.
49. *Ibid.*, p. 102, nn. 79 and 63.
50. Maguire, Earth, pp. 22-23.
51. Ettinghausen, Arab, p. 22.
52. Kitzinger, "Studies: I," p. 95.
53. Kitzinger, "Studies: I," p. 95; see Piccirillo, Mosaics, fig. 196 for illustration.
54. Ling, Roman, pl. XIII A, "Garden paintings with Egyptianising statues and pictures, Pompeii I 9, 5 (House of the Orchard), bedroom 8, east wall, c. A.D. 40-50".
55. *Ibid.*, fig. 161, "Garden with shrine of Egyptian deities, Pompeii VI 2, 14 (House of the Amazons), garden (east wall). third quarter of 1st century A.D."
56. *Ibid.*, pp. 150-152.
57. *Ibid.*, p. 150.
58. Maguire, Earth, pp. 17-20.
59. Revelations 2:22 and Genesis 2:9. All Biblical quotations are from The New Oxford Annotated Bible, revised standard edition, eds. Herbert G. May and Bruce M. Metzger, New York: Oxford University Press.
60. *Odyssey*. Translated by E.V. Rieu. Harmondsworth: Penguin Books, 1964, Book IV, p. 74; the material for this paragraph from Maguire, Earth, p. 25.

61. The poet is Avitus, Maguire, Earth, pp. 23, 25, nn. 34, 53
62. Kitzinger, "Studies: I," p. 101 and n. 76, *Illiad* XVII, 447, *Odyssey* XVII, 131. The wording is similar in both; in the latter, Odysseus says to the suitor Amphinomus, "Of all the creatures *that breathe and creep about* on Mother Earth ...", see Rieu, *Odyssey*, Book XVII, p. 279.
63. Rieu, *Odyssey*, Book VII, p. 115.
64. Some of these still exist, and Ling's figs. 108-111 show some of the sections; they are dated c.50-40 BCE, from the Esquiline, Rome. Ling, Roman, p. 108.
65. Ling, Roman, pp. 107, 110.
66. Choricus, *Laudatio Marciani I*, 77 ff. In The Art of the Byzantine Empire 312-1453. Medieval Academy Reprints for Teaching. Translated by Cyril Mango. Toronto, Buffalo, London: University of Toronto Press, 1986, p. 63 and n. 40, *Odyssey*, VII, 115; XI, 589.
67. Maguire, Earth, p. 7, n. 12, quoting from *Laudatio Marciani I*, 35, eds. Foerster and Richsteig, II.
68. Kitzinger, "Studies: I," n. 54. He notes also that in the pavement before the font at the baptistry on Mount Nebo, S. J. Saller identified three of the five trees as pear, pomegranate and apple, pp. 65-66, nn. 52-53.
69. Maguire, Earth, p. 7.
70. *Ibid.*, pp. 6-7.
71. MacCormack, Ceremony, pp. 4-5.
72. Choricus, *Laudatio Marciani I*, 32 in Mango Art, p. 62, and n.38 from which Mango says "the vine motif was represented as growing."
73. Editorial note 4671 by A. Yusuf Ali, translator of and commentator on The Holy Qur'an, that "'fruit' and 'eating' are metaphorical".
74. All quotations are from A. Yusuf Ali's translation of The Holy Qur'an.
75. MacCormack, Ceremony, p. 121 and n. 148.
76. Grabar, Iconography, p. xlv.
77. *Ibid.*, p. 8.
78. MacCormack, Ceremony, pp. 65-67.
79. Rieu, *Odyssey*, Book VII, p. 115.
80. Gautier-van Berchem, "Mosaics," p. 265, figs. 214-217, plates 23.a, 23.c, 25.b, 26.d.
81. *Ibid.*, pp. 266-269, figs. 218-227, plates 20.b, 21.c, 26.c, 26.f, 34.b.
82. *Ibid.*, p. 274 and figs. 270-271, and a third basket which could not be photographed.

83. *Ibid.*, pp. 269-270, figs. 233-236, plates 15.b, 17.b, 24.b, 25.c-d, 25.f.

84. D.T. Rice, ed., The Great Palace of the Byzantine Emperors. 2nd report. London: Geoffrey Cumberlege, 1958, p. 160.

85. Rice, Great Palace, 2nd report, pp. 126-127 and fig. 48a, referring to a section of border scrollwork found below 'Torun Sokak', in the SE to NE area of the Peristyle (see plan on p. 3); Gerald Brett, W. J. Macaulay, Robert B. K. Stevenson, The Great Palace of the Byzantine Emperors. Being a first report on the excavations carried out in Istanbul on behalf of the Walker Trust (The University of St. Andrews), 1935-38. London: Geoffrey Cumberlege, 1947, fig. 40b.

86. Volbach, Early Decorative, cat. 17.

87. Grabar, Shape, p. 88, full of "life-creating force", the "'other' world of the trees is shown as a living world"; these are "non-terrestrial trees" about a shrine or sanctuary.

88. Avinoam Shalem "The Fall of al-Madā'in: Some Literary References Concerning Sasanian Spoils of War in Mediaeval Islamic Treasuries," Iran (1994) 32: 78-79; The History of al-Tabarī. vol. XIII. The Conquest of Iraq, Southwestern Persia, and Egypt, the Middle Years of 'Umar's Caliphate, 636-642/A.H. 15-2. Translated and edited by Gautier H.A. Juynboll. Albany: State University of New York Press, 1989, pp. 31-33.

89. Piccirillo, Mosaics, fold-out figure between pp. 80 and 81.

90. Grabar, Shape, p. 75.

91. *Ibid.*, p. 76.

92. Sheila S. Blair, "What is the Date of the Dome of the Rock," 59-87. In Bayt al-Maqdis. 'Abd al-Malik's Jerusalem. Part One, edited by Julian Raby and Jeremy Johns. Oxford Studies in Islamic Art IX. Oxford: Oxford University Press, 1992. This article gives a clear idea of the inscription's starting point, and where its various parts are located and, in Appendices 1 and 2, English translation of the inscription on each face of the ambulatory; to be read in conjunction with Christel Kessler's "'Abd al-Malik's Inscription in the Dome of the Rock: A Reconsideration," Journal of the Royal Asiatic Society N.S. (1970) 1: 2-14, which gives the Arabic text, drawn according to its physical appearance. Erica Cruikshank Dodd and Shereen Khairallah, The Image of the Word. A Study of Qur'anic Verses in Islamic Architecture. 2 vols. Beirut: The American University of Beirut, 1981, vol. II, p. 210, lists the 72 AH/691 CE texts by Sūrah and verse, and location.

93. Kessler, "'Abd al-Malik," n. 14, and p. 11; Blair, "Date," p. 86.

94. Kessler, "'Abd al-Malik," p. 11; Blair, "Date," pp. 86-87.

95. Rabbat, "The Meaning," p. 16, and *idem.*, "The Dome of the Rock Revisited: Some Remarks on al-Wasiti's Accounts," Muqarnas (1993) 10: p. 70; cf. Grabar, Shape, pp. 67-68, who concludes the reading of these Suwar (pl. of Sūrah) provides a "fairly neutral" image of Jesus.

96. Oleg Grabar "The Umayyad Dome of the Rock in Jerusalem," Ars Orientalis (1959) 3: pp. 57, 55-56.

97. Rabbat, "Revisited," p. 70 and n. 61.

98. The writer is aware of the enormous body of scholarship on the Qubbat al-Şakhrāh not even touched on in this chapter. It has not been disregarded, instead, attention has been drawn to the evidence the Qur'ān Figures provide for a re-assessment of the building's imagery.
99. Grabar, Shape, on piers 338°, 292°, 246° and 202° in fig. 22.
100. Gautier-van Berchem, "Mosaics," figs. 211 and 212.
101. Rosen-Ayalon, Early Islamic, p. 60, who identifies jewel-encrusted naturalistic trees as euphemisms for the Christian cross flanked by saplings.
102. Gautier-van Berchem, "Mosaics," fig. 213.
103. Kurt Weitzmann, "Introduction to the Mosaics and Monumental Paintings." In The Monastery of Saint Catherine at Mount Sinai: The Church and Fortress, edited by George H. Forsyth and Kurt Weitzmann. Ann Arbor: The University of Michigan Press, N.d., p. 14, pl. CLXXIV; Exodus 3:5.
104. Weitzmann, "Introduction," p. 14.
105. Ševčenko, "Inscriptions," p. 19.
106. Rosen-Ayalon, Early Islamic, p. 16.
107. Paulus Silentiarius, *Descr. S. Sophiae*, 186 ff. [563 CE] in Mango, Art, p. 80 ff.
108. Grabar, Shape, pp. 114-115.
109. *Ibid.*, fig. 54.
110. Gautier-van Berchem, "Mosaics," fig. 230.
111. Michele Piccirillo and `Abd al-Jalil `Amr, "A Chapel at Khirbet el-Kursi-Amman," Liber Annuus (1988) 38: 361-382, date on p. 369.
112. Aapeli Saarisalo and Heikki Palva, "A Byzantine Church at Kafr Kama," Studia Orientalia (1964) 30:3-15; date on p. 15.
113. Vassilios Tzaferis, "The Excavations of Kursi-Gergesa," Atiqot, English Series, (1983) 14 (whole volume), date on p. 5.
114. Doro Levi, Antioch Mosaic Pavements. Princeton, N.J.: Princeton University Press, 1947, pl. 90c, p. 365, Room 2.
115. Piccirillo, Mosaics, fig. 338, p. 236, the church was completed in the "month of Desius of the seventh indiction [A.D. 574 or 589]".
116. R.W. Hamilton, Khirbat al-Mafjar, Oxford: At the Clarendon Press, 1959, pp. 336-37, pls. LXXXLV top, LXXXVL, and colour pl. XCIX a (not XCVIII as stated).
117. Volbach, Early Decorative, cat. 48, pp. 89, 95.
118. Piccirillo, Mosaics, figs. 41, 42 and pp. 76, 26.

119.M. Avi-Yonah, "The Mosaic Pavement." In The Ancient Synagogue of Ma'on (Nirim). Reprinted from Bulletin III of Louis M. Rabinowitz Fund for the Exploration of Ancient Synagogues, 1960; p. 34, Ma'on is near Gaza, a dating of c. 538 is suggested, and it is likely to be from the same school as the Shellal mosaic.

120.A. D. Trendall, The Shellal Mosaic and Other Classical Antiquities in the Australian War Memorial Canberra. 4th edition. Canberra: Australian War Memorial, 1973; p. Shellal is near Gaza and dated to 561-62, and p. 24, likely to be from the same school as the Ma'on mosaic.

121.Maguire, Earth, p. 61 and fig. 71, mosaic from the nave of Justinian's basilica built at Sabratha after its recapture from the Vandals in 533.

122.Grabar "The Umayyad Dome," p. 47.

123.Grabar, "The Umayyad Dome," p. 47 ff.; in Shape, p. 73 n. 72 he advises this view has been criticized by him and others in recent years.

124.The writer disagrees also with the dominant thematic role M. Rosen-Ayalon assigns to precious stones and jewellery, Early Islamic, pp. 49, 52 ff.

125.Piccirillo, Mosaics, fig. 374.

126.*Ibid.*, fig. 424, pp. 250, 17.

127.Maguire, Earth, p. 61.

128.Piccirillo, Mosaics, p. 106, figs. 80-86 inc., 93.

129.*Ibid.*, p. 234, figs. 367, 368, 370, 371.

130.*Ibid.*, p. 150, fig. 196.

131.*Ibid.*, figs. 338, 378.

132.J.F. Flanagan, "The Figured Silks." In The Relics of Saint Cuthbert, edited by C.F. Batiscombe. Oxford: Oxford University Press, 1956, pl. LIII, fig. 1, pp. 505-513.

133.Flanagan, "Figured," p. 511.

134.*Ibid.*, p. 513.

135.Volbach, Early Decorative, p. 118, cat. nos. 53-54.

136.Handbook of The Byzantine Collection, Washington, D.C.: Dumbarton Oaks, 1967, cat. 63.

137.Particularly noted by Grabar, Shape, p. 90, and rather ambiguously by M. Rosen-Ayalon, Early Islamic, p. 46, where it is not entirely clear whether it is vases filled with foliage, or vases filled with foliage and set above columns, that are "invariably connected with the iconography of Paradise".

138.H. Stern, Le Calendrier de 354. Paris: Librairie Orientaliste Paul Geuthner, 1953, pl. XLIII, fig. 3, and p. 218; it is in the Dumbarton Oaks collection, provenance unknown, but thought to be North African, c. 5th-6th century.

- 139.G. Vaccarini, "I capitelli di Ma'in," Liber Annuus (1989) 39: p. 69 foto 3.
- 140.Ševčenko, "Inscriptions," p. 19.
- 141.Handbook of The Byzantine Collection, Washington, D.C.: Dumbarton Oaks, 1987, p. 18.
- 142.Martin Harrison, A Temple for Byzantium, The Discovery and Excavation of Anicia Juliana's Palace-Church in Istanbul, foreword by Steven Runciman, Austin, Texas: University of Texas Press, 1989, p. 24, fig. 17. SS. Sergius and Bacchus is the present-day Küçük Aya Sofya Camii, see Mango, Byzantine Architecture, p. 59.
- 143.Richard Krautheimer, Early Christian and Byzantine Architecture. The Pelican History of Art, edited by Nikolaus Pevsner. Harmondsworth, Middlesex: Penguin Books, 1965, p. 163.
- 144.Kitzinger, "Studies: I," p. 101, as something other than a dedicatory or laudatory label.
- 145.Paul A. Underwood, "The Fountain of Life in Manuscripts of the Gospels." Dumbarton Oaks Papers (1950) No. 5, p. 44.
- 146.Underwood, "Fountain," pp. 54-55.
- 147.*Ibid.*, p. 54.
- 148.*Ibid.*, pp. 54-55; the complete Latin text and English translation are given on p. 55.
- 149.Creswell, EMA, vol. 1, part 1, p. 112 and fig. 48.
- 150.Rosen-Ayalon, Early Islamic, pp. 63-65.
- 151.R.M. Harrison, Excavations at Saraçhane in Istanbul. vol. 1, Princeton: Princeton University Press and Dumbarton Oaks Research Library and Collection, 1986, p. 4, martyred in Melitene in Cappadocia probably in January 250. This church's inscription mentioned also by O. Grabar, Shape, p. 71.
- 152.Harrison, Temple, p. 33 and n. 9. The poem is preserved in the Palatine Anthology, Greek Anthology I, 10, "a collection of ancient verses and epigrams which was compiled in about the year 1000".
- 153.Harrison, Excavations, p. 5, of which lines 1-41 were carved in the nave's entablature, and lines 42-76 outside the narthex, (the marginal scholia in the *Palatinus* 23 edition of the Anthology indicates the position of the lines inside and outside the church); pp. 117-120, confirm the information given in the scholia, and deal with the interior lines recovered in excavation, all or part of lines 9, 15/16, 25, 27, 30, 31, 32.
- 154.Harrison, Excavations, p. 410; Temple, pp. 137-139: in the vision of Ezekial the Temple is said to have been 100 cubits long by 100 cubits wide when the platform on which it stood was included. S. Polyeuktos' size had been problematical to the excavators but the conclusion reached was that it measures 100 by 100 long, or royal, cubits, the same unit used for Solomon's Temple. Moreover, decorative features of the Temple such as "palm-trees, capitals like lilies, capitals festooned with network, pomegranates, and open flowers" are all part of S. Polyeuktos' decorative repertoire.
- 155.Harrison, Temple, p. 81.

- 156.*Ibid.*, pp. 34, 81, 91, fig. 88.
- 157.*Ibid.*, p. 40.
- 158.Harrison Excavations, p. 415; Temple, p. 119.
- 159.Harrison, Temple, "Sasanian" p. 122 ff.
- 160.*Ibid.*, p. 122.
- 161.Harrison, Excavations, fig. 155, p. 133; Harrison, Temple, figs. 118, 122, p. 100: two piers with this design stand in Venice's Piazzetta, where they are called *pilastri acritani* because they are said to have come from Acre. From similar remains found during excavations in Istanbul they have been proved to have come from the ruins of S. Polyuktos, likely taken during the fourth Crusade, c.1204.
- 162.Harrison, Temple, fig. 134.
- 163.Harrison, Temple, fig. 164.
- 164.Harrison, Temple, p. 124.
- 165.Ettinghausen, Arab, p. 26.
- 166.In chapter one, and by M. Jenkins, "Umayyad Ornament," p. 22.
- 167.Gautier-van Berchem, "Mosaics," p. 339.
- 168.Ernst Kitzinger, "Mosaic Pavements in the Greek East and the Question of a 'Renaissance' under Justinian," fig. 18. Reprinted in The Art of Byzantium and the Medieval West: Selected Studies, edited by W. Eugene Kleinbauer; Bloomington: Indiana University Press, 1976.
- 169.Piccirillo, Jordan, p. 288.
- 170.Kitzinger, "Renaissance," p.52.
- 171.There are boats, fishermen, fish, shells, etc. in that frieze which is surrounded by another of named cities including Lydda, Gaza, Jerusalem, Madaba; there is a line of fruit trees in the panel before the apse steps, Piccirillo, Mosaics, p. 238 and figs. 345, 380, 383. S. Stephen's nave seems to be accomplishing in a double frieze what the S. John the Baptist and, possibly, the Great Mosque, sought to do in one.
- 172.Ettinghausen, Arab, p. 28.
- 173.Kitzinger, "Renaissance," 218 ff., and referred to obliquely and without notes by Ettinghausen, Arab, p. 28.
- 174.Grabar, Shape, p. 111.

### Chapter Three: The Hypostyle Mosque

It has been argued that the San`ā' illustrations not only draw attention to previously unknown paradisiacal imagery in the earliest Umayyad al-Aqṣá, and another mosque, but link its occurrence to the deliberate introduction of an Islāmic iconography in the Qubbat al-Ṣakhrah.

The imaginative and highly-accomplished drawings that memorialize the Qubbat al-Ṣakhrah, al-Aqṣá and the hypostyle mosque indicate an awareness of Umayyad achievement, for they record Muslim ability to work with the cultural and artistic inheritance they had by conquest, and to create things Islāmic therefrom. Of particular relevance to this chapter is the hypostyle mosque in Figure 3. Extending this beyond the San`ā' Figure attests that the Qubbah's imagery was part of a larger iconographical programme, of whose textual evidences we seem to know nothing, but to whose visual evidences we may point. That this is the case is suggested by the fact that, while the illustration of the hypostyle mosque in Figure 3 is, as far as we know, stylistically unique, it is not iconographically so, and this proposition will now be considered.

Discovery of the San`ā' illustrations renewed some interest in the architectural representations in another early Qur`ān, found in the Mosque of 'Amr b. al-`Āṣ, Cairo, ten Surah dividers of which were published in twelve plates by B. Moritz.<sup>1</sup> This anonymous, undated manuscript,<sup>2</sup> formerly in the Khedivial Library now the Dār al-Kutub, Cairo, and published without accession number or supporting notes, is identified by A. Grohmann as Maṣāḥif [sic] 139,<sup>3</sup> and by E. Whelan as #18953.<sup>4</sup> It has been known of since the early nineteenth century when 38 of its folios were acquired for what is now the Bibliothèque Nationale, Paris,<sup>5</sup> identified as ms. Arabe 324c;<sup>6</sup> and 12 others for the Herzogliche Bibliothek in Gotha, Germany, identified as Cod. Ar. 36 by A. Grohmann<sup>7</sup> and as ms. 462 by E. Whelan.<sup>8</sup> In addition to the Moritz' plates, one folio from ms. Arabe 324c has been published by E. Tisserant,<sup>9</sup> one folio from the Herzogliche Bibliothek group identified as ms. 462 was published by J. H. Moeller,<sup>10</sup> and one from the Herzogliche Bibliothek group identified as Cod. Ar. 36, by Sarre and



Martin, after it had been exhibited at Munich in 1910.<sup>11</sup> The writer doesn't know if Moeller and Sarre and Martin published the same, or different, folios.

According to his caption on the plates, Moritz dated the Qur'ān I-II century AH, and later as c.100 AH;<sup>12</sup> c.725 CE was suggested by Grohmann,<sup>13</sup> with which M. Jenkins agrees.<sup>14</sup>

From illustrations and written descriptions it is known that this Qur'ān's Surah dividers go from margin-to-margin and are, at times, narrower to the right, giving a stepped appearance to the bands which are formed of numerous geometric and braided patterns. Both band termini have marginal ornaments, which may include architectural elements, and sometimes, above the band to the left of the Surah ending, there are arcades. The Surahs are not titled, but names have been inserted in a recent hand, as have part of the first and last lines of each sheet, (perhaps by librarians?).<sup>15</sup>

A striking aspect of the divider ensembles is the stylistic difference between the marginal devices and the arcades; the former having a sketchy, impressionistic appearance, the latter, composed of registers of tiny squares, with the contrast more remarkable where both styles appear on the same divider. In connection with these differences, it should be pointed out that E. Whelan is of the opinion that only Moritz' plates 1-5 qualify as Umayyad;<sup>16</sup> this seems to be a misunderstanding of Moritz' comment that the Persian style had entered Umayyad sacred art and the Sāsānid palmette could be found alongside the Byzantine-Coptic ornaments on plates 2-5.<sup>17</sup> Perhaps due in part to the European acquisitions mentioned above, 246 of the Cairo Qur'ān's 586 folios said to exist in 1893 had been replaced in 1830,<sup>18</sup> and this, in conjunction with the "markedly different character" of their ornaments, has lead Whelan to conclude that Moritz' plates 6-12 are some of the replacements;<sup>19</sup> however, as Moritz was a former director and organizer of the Khedivial Library,<sup>20</sup> it seems unlikely that he would have published any of the 1830 replacement folios as part of a first-second century AH manuscript. Moreover, the marked stylistic difference between elements of the illuminations is a purposeful characteristic, and this apart from the likelihood that different illuminators may have contributed to the drawings. Some details of the arcades and marginal ornaments will be noted

generally, then more specifically.

Moritz' plate 1, and the detail in plate 2 (Figure 84),<sup>21</sup> shows the divider between Surahs 37 and 38 has a line of horseshoe arches with hanging lamps and stepped merlons along the roof edge, while three stylized motifs are spaced evenly along the arcade; the marginal ornaments have all but disappeared from the band ends. The divider between Surahs 46 and 47,<sup>22</sup> reproduced on plates 4 (Figure 85) and 5<sup>23</sup> (Figure 86) shows both marginal ornaments, and a more elaborate arcaded structure ornamented with three stylized motifs similar to those on plates 1 and 2. Figures 85 and 86 illustrate the most complete divider on the Moritz' plates. A short arched segment without columns or merlons appears on plate 7 (Figure 87), between Surahs 56 and 57, and an arcade with stepped merlons on plate 11 (Figure 88), between Surahs 66 and 67. On plate 6<sup>24</sup> (Figure 89) there is a double row of arches in the central field of the divider between Surahs 48 and 49.

In ms. Arabe 324c, the divider on folio 32r has, at the end of Surah 69, "... des arcs surmontés d'une bande de carrés rouges et blancs que soment des triangles verts - certains d'entre eux supportent une palme". As this arrangement is compared with Moritz' plates 2, 5 and 11,<sup>25</sup> one may understand the arcade has the stepped pyramids of Figures 84 and 88, and the arcade ornaments of Figures 84 and 86. On f. 39r (Figure 90),<sup>26</sup> the divider shows the narrower band to the right, both marginal ornaments, and has, at the end of Surah 75, a line of horseshoe arches with triangles above the arches and stepped pyramids above the columns.<sup>27</sup> The arches surmounted by stepped pyramids on f. 44r are compared with those on Moritz' plates 1-2 (Figure 84).<sup>28</sup>

As for the marginal devices, their flora appears to have been based on the style of the courtyard bouquet in the San`ā' Qur'ān's hypostyle mosque, and could generally be described as bouquets also. The Cairene version is composed of similar impressionistic flowers and attenuated ivy leaves, along with a sort of simplified palmette and lance-shaped forms with the impressionistic flowers at their apices.

On Moritz' plate 3 (Figure 91) an isolated column bearing such a bouquet is flanked by

attenuated leaf shapes and floral semi-circles, and a similar columnar composition appears on Moritz' plate 9 (Figure 92). At the inner margin of f. 42v of ms. Arabe 324c is a "palmette composite", described further as two lance-shaped palmettes supporting a semi-circle enclosing an isolated column.<sup>29</sup>

Marginal ornaments on ff. 23r,<sup>30</sup> 44r,<sup>31</sup> and 46v<sup>32</sup> of ms. Arabe 324c are composed of "trois palmes lancéolées", and that of 23r is compared with the motif of Moritz' plate 7 (Figure 87).

Figure 86's marginal ornament shows half palmettes (?) supporting a shell-like arch over a bouquet. On Moritz' plate 10<sup>33</sup> (Figure 93) a bouquet like that in Figure 86 is placed beneath an arch supported by two columns. The inner marginal ornament of f. 39r of ms. Arabe 324c, (see Figure 90),<sup>34</sup> a vegetal motif within an arch carried by two columns,<sup>35</sup> has been compared with that in Figure 93, as has the outer marginal ornament of f. 43r, which has two arches carried by three columns from which vegetal motifs go out.<sup>36</sup> Figure 85's ornament has two rows of linked circles arcing about a rosette above half palmettes, as well as some of the horizontal projections seen in the arcade of Figure 86.

In addition to the ms. Arabe 324c folios mentioned above, ff. 30r, 32r, 34v, 36v, 38r, 44r, and 46v are reported to have a "palmette composite" at the divider's two extremities.<sup>37</sup> This is a catch-all phrase, acknowledging the presence of a marginal ornament, but, without an illustration or a supplementary explanation, there is no clue to the ornament's actual appearance. For example, as can be seen from f. 39r (Figure 90), "Aux deux extrémités, une palmette composite; dans la marge extérieure, c'est un motif végétal disposé dans un arc de cercle, tandis qu'à l'intérieur, .....", (see notes 26 and 34, above) the phrase covers a number of forms.

The Herzogliche Bibliothek folio exhibited at Munich in 1910 is shown in Figure 94; it divides Surahs 44 and 45, and the latter's title, al-Jāthaliya, appears on the plate, inserted in a cursive script. The right marginal ornament has a spiked rosette beneath an arch on two columns with floral elements radiating from the arch, as can be seen in Figure 93 also. At the left margin, lance-shaped

palmettes support a semi-circle over a bouquet similar to that in Figure 86.

According to the plates and descriptions, above, a fairly limited repertoire of marginal and arcade motifs was distributed among the Surah dividers: arcades, and bouquets with, or without, isolated columns, and arched forms. Of these, the arcaded structure in Figure 86 has been interpreted as a hypostyle mosque appearing to have receding pitched roofs; with a centre axis emphasized by the central floral composition, and an entrance apparently separated from the building;<sup>38</sup> the pedestal and column of the central motif is not mentioned, nor have the horizontal projections on the structure's left side been accounted for.

Figure 86 is understood as a reproduction of the hypostyle mosque in the San`ā' Qur`ān (Figure 3), shown in longitudinal section. Two straight posts delineate a central courtyard rather than an axial aisle, and in the courtyard, on a column raised on a substantial base, is an elaborate motif, the top section of which is repeated at the mosque's extremities. Neither the curtained entrance nor the horizontal projections which define the extremities are anomalous to the structure; rather, they reflect an adaptation to the divider's limited space of the handling of longitudinal section as seen in the layout of Ecclesia Mater (Figure 4). The central entrance there is placed at the extreme right, while in lieu of Ecclesia Mater's apse, the corresponding wall of the mosque is marked with a stylized motif and a number of horizontal projections. Due to the limited detail one cannot say exactly where the artist of the Cairo Qur`ān meant the curtained entrance to be, but, *a propos* the speculation there was no central door in Figure 2, it can be argued that in this drawing a side entrance has been placed at the extreme right.

That there are curtains here instead of ornate doors seems to express ordinary practice; for example, curtains that have been gathered up and knotted are illustrated in Ecclesia mater, and at the side entrances to a basilica depicted in a floor mosaic at el-Bāra, Syria dated mid-sixth century (Figure 95).<sup>39</sup> It is reported also that curtains were placed at the four gates of the Umayyad Mosque at Madīnah in 138 AH/775-76 CE.<sup>40</sup> As for the frieze of triangles above the arches, this is but one

version of the pyramidally-shaped merlons that appear over arcades in the Cairo Qur'ān, and which are interpreted as artistic variations of a contemporary architectural feature. Stepped, or, one may say, pyramidally-shaped, merlons are commonly found on buildings in the Umayyad period. They are to be seen on the façade of Qaṣr al-Ḥayr al-Gharbī;<sup>41</sup> and were recovered from the Reception Hall of the Umayyad Palace at the Citadel at 'Ammān.<sup>42</sup>

The forms rising out of the arcades in Figure 84 (on Moritz' plates 1-2) and, by extension, Figure 86,<sup>43</sup> have been described as "winged palm-leaves",<sup>44</sup> and "pomegranate bushes".<sup>45</sup> They do have elements suggesting both wings and pomegranates, and there are numerous Sāsānid examples of winged pomegranates (Figure 96)<sup>46</sup> occurring as repetitive motifs in stucco wall decorations, but in bestowing the above labels neither writer has addressed the reason why such a motif appears as the principal ornament of a mosque, and of a column in a mosque's courtyard, or its uncommon embellishments. A winged pomegranate does become more understandable, however, if considered as a member of a class of Sāsānid motifs, like that found on a capital at Tāq-i Bustān (Figure 97),<sup>47</sup> which provided so much inspiration for the Qubbat al-Ṣakrah's supra-natural trees. And it is suggested that, in an attempt to capture the exotic appearance of the Qubbah's paradisiacal imagery, an artist less able than the mosaicists at Jerusalem has used the more easily-drawn winged pomegranate as the basis for the Cairene arcade motifs, which are analyzed as follows.

At the centre of many of the Qubbah's supra-natural trees and vines is an element like a vertically-sectioned bulb (Figure 98),<sup>48</sup> which constricts at the top to a point or tuft, and from which, according to available space and the artist's fancy, the varying widths of the outer layers spread or curl about (Figure 99)<sup>49</sup>, with minor stems supporting fruit, flowers and other adornments (Figure 100).<sup>50</sup> In the Cairo Qur'ān the "pomegranate" represents the vertically-sectioned core and the "wings" its outer layers, while the semi-circular stems with the nobby terminations that frame the core element are an attempt to copy the upraised grape bunches or other small motifs that similarly frame the core on a number of the Qubbah's motifs. The small flowers between the "wings", the horizontal projections,

and the pendant circles of the column represent the diverse fruit, flowers and other motifs.<sup>1</sup>

By placing a Qubbat al-Şakhrāh motif on the column, instead of the San`ā' Qur`ān's Byzantine-style vase and floral arrangement, the artist of the Cairo Qur`ān has understood clearly that it was the Qubbah's paradisiacal imagery to which the San`ā' Qur`ān's artist referred; in fact, the artist of the Cairo Qur`ān has gone so far as to acknowledge their mosaic origins by styling the arcade motifs in registers of tiny squares. Having a recognizably paradisiacal motif at the arcade's left and continuing the motif's elements down the side indicates the farther wall, as well as showing that a representation of Paradise had been attributed to that wall in Figure 3. The motif above the entrance can be understood as emphasizing the paradisiacal imagery as much as for reasons of symmetry.

In Figure 84 the arcades have neither entrance, nor central courtyard and column, but their general similarity to those in Figure 86, the paradisiacal motifs, and the lit, globular glass lamps which have been compared with the lamps of the San`ā' Figures,<sup>51</sup> evoke the hypostyle mosque, as would seem to be true also of ms. Arabe 324c's f. 32r, which has a "palme" between some of the arches. Other arcades described or illustrated above may lack specific details associated with the San`ā' illustration, but in the Cairo Qur`ān they ought not to be dismissed as just something to complete the line.<sup>52</sup>

Figure 86 shows the first of the "copies" of Figure 3. As far as one can tell, there is no especial reason for its placement at this point in the manuscript, although originally that may have been otherwise. Because the style of the arcades strongly suggests mosaics and Sāsānid-inspired flora, and the style of the marginal ornaments, Figure 3's Byzantine-inspired courtyard flowers, it seems that both needed to be present to affirm the known relationship between the Qubbat al-Şakhrāh and the San`ā' Figures. There may never have been a great number of arcade illuminations in the Cairo

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<sup>1</sup>Because of the difficulties in making clear copies of the black & white and coloured photographs of the Qubbah's mosaics, the writer has supported Figure 98 with the less detailed drawings of Figures 99, 100. The Shape of the Holy's colour figures 38-49, and EMA I:1's black & white plates 13, 16, 22 are commended to the reader for showing the details described in this paragraph.

Qur'ān, but they are a purposeful inclusion, as is the isolated column of the margins.

The resemblance of the column in Figure 91 to that in the San`ā' illustration (Figure 3) has been remarked,<sup>53</sup> and it is striking, despite the floral semi-circles flanking and the lack of a vase between the column and the bouquet. Repetition of this motif in both its Byzantine and Qubbah modes in the same Qur'ān suggests it had, or was in the process of being imbued with, a special meaning, and that a role independent of the mosque was envisaged for it. As the column ensemble had been "excised" from the octagonal ambulatory, this role could have been as an image-sign for the Qubbat al-Şakrah itself, its paradisiacal imagery, or both. Already characterized by a mixture of Sāsānid and Byzantine elements, the column and bouquet could have been part of the "search for an identifying original imagery"<sup>54</sup> discussed in connection with the images on some early Islāmic coins, one of which has a bust of a Sāsānid monarch on the obverse and the Prophet's lance, or *'anazah*, in a niche on the reverse, (Figure 101).<sup>55</sup> As this coin is dated 75 AH/695 CE,<sup>56</sup> O. Grabar has questioned whether the niche actually represented a *mihṛāb* at a date that is prior to al-Walīd's innovation of the recessed *mihṛāb*,<sup>57</sup> or was just a mark of honour.<sup>58</sup> The arches over bouquets in the Cairene marginal ornaments might be examined for the same reason.

It is tempting to think of the arch in Figure 86 as an elaboration of the *mihṛāb* with three flowers in the mosque of Figure 3; it may be so, of course, as may the arches in Figures 93 and 90, but another explanation is possible. The marginal ornaments of the Cairo Qur'ān and a number of carved wood panels from al-Aqşá Mosque appear to reflect the newly-created paradisiacal imagery.

Prior to al-Aqşá's restoration between 1938-42,<sup>59</sup> the twenty wooden tie beams spanning the nave were supported on the walls by consols, and those parts of the consols projecting over the nave were masked with carved panels; such panels being used similarly on minor nave beams.<sup>60</sup> The beams' made-to-measure panels,<sup>61</sup> which are attributed to the second Umayyad building of al-Aqşá, c. 715-16 CE,<sup>62</sup> have a consistent theme of bountiful vegetation: vines laden with flowers, leaves, fruit, and small containers of these things, swirl out of pots, baskets and acanthus bases, their ebullience

only just constrained by the rings which draw the rinceaux together (Figures 102, 103).<sup>63</sup> Some panels include arches with elaborately-scalloped hoods, lacy or flower-covered extrados, and flowers about the arches themselves, (Figures 104, 105);<sup>64</sup> the arch with radiating flowers seen on a beam end (Figure 106)<sup>65</sup> is very like that of Figure 93. Among the Cairene marginal ornaments there are equally-fanciful arches that encompass lush bouquets. While all of the panels recovered are illustrated by R. Hamilton,<sup>66</sup> none include the isolated column; but, it should be noted, that of the forty possible from the principal nave beams only thirty-two panels still exist.

Al-Aqṣá's panels are of interest for several reasons: their vital flora shows relatively little Sāsānid influence yet is very suggestive of that seen in the Qubbah in its abundance; in the overflowing containers; the inclusion of stylized vegetal elements and controlling rings, and the supra-natural combination of diverse fruits and flowers (Figure 107).<sup>67</sup> There is even a tree with entwined branches (Figure 108)<sup>68</sup> that resembles those of the San`ā' Figures, the Damascus mosaics, and the Qubbah itself.

Arches filled with vegetal and other forms are common in Umayyad art, (found often on artefacts where the likelihood of their being mihrābs is improbable). The carved al-Aqṣá panels were originally parallel to the ground about 16 m. up, and not easily seen,<sup>69</sup> so while their and the Cairene arches could be mihrābs,<sup>70</sup> they might be examples of other views of Paradise, still to be considered.

This chapter began with the proposition that other representations of the hypostyle mosque exist, and the writer draws attention to them now: three published marquetry panels<sup>71</sup> in the collections of the Metropolitan Museum of Art, New York, (Figure 109);<sup>72</sup> the Museum of Islāmic Art, Cairo (Figure 110),<sup>73</sup> and the Islamic Department of the State Museums, Berlin, (Figures 111, 112).<sup>74</sup>

All the panels are agreed to be Egyptian work,<sup>75</sup> continuing in a long Greco-Roman through Coptic tradition,<sup>76</sup> and exemplify the skill and patience<sup>77</sup> that is required to produce the mosaic-like patterns composed of tiny pieces of ivory, bone and wood, inlaid or affixed to a wooden base.<sup>77</sup> The New York panel's provenance is the Fayyūm, and that published by Z. M. Ḥasan, from the area of



'Ayn al-Şīrah;<sup>78</sup> the Berlin panel's provenance is not stated.

F. Sarre reported that the right side of the panel in Figure 111, had been cut away, and the remainder "brought up to the size of the contemporary Korans"<sup>79</sup> in order to make of it the front cover for a Qur'ān. All that remained of the back cover was the piece in Figure 112, described as being in the same technique,<sup>80</sup> but without saying it came from the same panel as Figure 111. While Sarre talks about the "oblong form and large measurements of the cover", corresponding to the shape of early Kufic Qur'āns,<sup>81</sup> and that it "need scarcely be doubted" the panel fragments formed the case of an early monumental "show" Qur'ān,<sup>82</sup> he does not speculate on what the panel might have been used for prior to its cutting down.

M. Dimand said the Berlin fragments had been "wrongly regarded as a bookcover", and thought the panels probably belonged to a *turbah*, or tomb casing.<sup>83</sup> In the absence of clear evidence, Z.M. Hasan called both the Berlin and Cairo panels part of a box or chest.<sup>84</sup> The size of the artefacts, their similarity, and one of the find spots must have played a role in Dimand's opinion: the New York panel is 18 3/4 in. H x 76 1/2 in. W; the Berlin "front cover" is 19 7/16 in. H x 26 6/16 in. W,<sup>85</sup> and Cairo's fragments are said to come from the cemetery at 'Ayn al-Şīrah.<sup>86</sup> The New York panel is the most complete, and by observation its workmanship is rather more refined than that on display in Cairo, but there's such a high degree of uniformity amongst the three, extending to the patterns for upper and lower bands, for each arcade, and in which arcade pattern change may occur, as to suggest all are from the same workshop and closely-related in time.

It is a commonplace of later Islāmic art that patterns and designs of all kinds move from one medium to another. In this change of medium, a balance had to be struck between the meticulously-arranged patterns of marquetry, and maintaining the mosque's distinguishing characteristics of arcades, central courtyard, and the placement and appearance of motifs that recognizably linked it with paradisiacal imagery.

As in Figure 86, the architectural representations on the marquetry panels are laid out

horizontally. The panels are divided into well-defined, unequal thirds, five arcades being set within a frame of mosaic diapers<sup>87</sup> to either side of an emphasized central square. In each example the extreme left and right arcades are narrower than the others.<sup>88</sup> In Sarre's opinion, the arcade as an "architectural motif" came from contemporary mosques and was "frequently found painted in gold as a decorative border on the pages of earlier Kufic Korans".<sup>89</sup> There are neither curtained entrances nor mihrāb indicators visible; nor may they have been necessary. These are bold, uncluttered representations; a box, or tomb casing, with such a panel on one, or both long sides would make an architectural statement.

Between each arcade is a column with a bulbous capital, an impost, and a vase from which rises a "winged thistle", in the New York and Berlin examples, and "winged pomegranates" at Cairo,<sup>90</sup> the latter showing three of these motifs above the vase. Column and vase ensembles are cut from thin plates and whether thistles or pomegranates resulted may have depended on the cutter's skill. The columns, with their vases, only suggest a structural role, but their inclusion here is quite as striking a feature as the similar placement of vases above capitals in the Qubbah's octagonal ambulatory. As well, these thistles and pomegranates may be compared with similar forms rising through the arcades in Figures 84 and 87.

The centre third of each panel is the mosque's central courtyard standing on its edge, this being the means of showing the nature of a floor otherwise invisible in a two-dimensional representation. In *Ecclesia Mater* (Figure 4), the nave's mosaic floor is illustrated standing on its edge to show the birds and vegetation thereon.

In this adaptation of Figure 3 it is possible that the flowers, vase and column might not have transferred easily to marquetry. Such a large-scale element in the composition may not have been sympathetic to the medium's especial characteristic, meticulous geometric patterns formed of thousands of tiny pieces. It is speculated that the courtyard's bouquet of flowers was transformed into another, more easily-worked vegetal motif associated with fruitfulness, the vine on the carved central boss

(Figure 113),<sup>91</sup> about which the craftsman was able to demonstrate his skill. Attention is drawn to another marquetry panel from Egypt, on a box of the sixth-seventh century CE (Figure 114).<sup>92</sup> This chest has circular mosaics about carved bosses so it may be the Islāmic panels follow a stylistic tradition.

These three marquetry panels mix Byzantine and Sāsānid-inspired features in a manner that reflects both the Qubbat al-Ṣakhrāh and the San`ā' Figures. Their notable resemblance to Figure 3 is not diminished by differences in medium and presentation.

In assigning a date to the Berlin fragments, Sarre pointed to the bulbous capitals and mosaic design as "observable in the art of the contemporary Tulunid period", comments repeated by Grohmann.<sup>93</sup> On the Coptic chest of Figure 114, most clearly seen between the two central panels of the bottom row of arcades, are bulbous capitals that bear comparison with those on the Islāmic panels. It may be that the capitals in Figures 109-111 merely indicate less skilful workmanship than that in Figure 114. The Berlin fragments' workmanship is quite coarse.

As argued above, a Tūlūnid attribution for Figures 109-111 could be considered only without knowledge of the San`ā' and Cairo representations of the mosque. Aḥmad b. Tūlūn, eponymous founder of the dynasty, promoted `Abbāsīd Sāmarrā'-style decoration in the mosque named for him, not things Umayyad. M. Dimand dated the New York panel to the early `Abbāsīd period;<sup>94</sup> this too must be rejected. The four "copies" of San`ā' Figure 3, which is one of three illustrations the writer has identified as Umayyad, are of that same period.

One may speculate that the mosque and column were attempts to visualize an idea in which the mosque's symmetrical structure was used metaphorically as, say, a reference to the Muslim community as whole, the *ummah*, to its coherence in religious observance, and its equality before God; while the column in its midst may have reminded of the paradisiacal reward for faithfulness.

Whatever Figure 3 was really meant to express, for a while it was sufficiently well known and vital to be reproduced, and four "copies" of it remain. As an Egyptian origin is attributed to all the

**copies, perhaps special regional factors contributed to the propagation and demise of this iconographic motif. The isolated column may have been "tried out" in the search for a more wieldy image, but it too faded from use, or maybe it was discarded because it did not serve the state's interest so well as the architectural motif to be examined next.**

## Notes

1. B. Moritz, ed., Arabic Palaeography. Publications of the Khedivial Library, No. 16. Cairo: 1905.
2. François Déroche, Catalogue des manuscrits arabes. Deuxième partie, Manuscrits musulmans. Tome I, 1. Les Manuscrits du Coran. Paris: Bibliothèque Nationale, 1983, p. 75.
3. A. Grohmann, "The Early Islamic Period from the Seventh to the Twelfth Century," in The Islamic Book, by Thomas W. Arnold and Adolph Grohmann. Germany (?what city): The Pegasus Press, 1929, p. 22.
4. Estelle Whelan, "Writing the Word of God: Some Early Qur'ān Manuscripts and Their Milieux, Part I," Ars Orientalis 20 (1990): 120, and n. 72, who states the number 18953 comes from the "anonymous catalogue of the Cairo collection", Fihrist al-kutub al-'arabiyyah, of 1310/1893.
5. Collected by J.-L. Asselin de Cherville, dragoman to the French Consulate in Egypt 1806-1822, see Henri Dehérain, Orientalistes et antiquaires, Silvestre de Sacy, Ses contemporains et ses disciples. BAH, t. XXVII. Paris: Librairie Orientaliste, Paul Geuthner, 1938, pp. 93-95 in particular, and chapter VI *passim*; Déroche, Catalogue, p. 13, n. 2; Whelan, "Writing: Part I," nn. 34, 74.
6. Whelan, "Writing: Part I," n. 72, and Déroche, Catalogue, p. 75.
7. Grohmann, "The Early Islamic Period," p. 22; see also the note following.
8. Collected by U. J. Seetzen, see Whelan, "Writing: Part I," nn. 72, 74, and as well, her note 34 for other background information on European acquisition of various Qur'ān folios, and the difficulties that can be encountered reconciling early catalogue numbers and descriptions of contents with current catalogues.
9. This folio, 39r, is illustrated in Eugenius Tisserant, Specimina Codicum Orientalium. Bonn: A. Marcus et E. Weber, 1914, plate 42, with corresponding catalogue entry on p. xxxii; see also Whelan, "Writing: Part I," n. 72; Déroche, Catalogue, p. 76.
10. J.H. Moeller (also identified as J.H. Möller, I.J. Müller) Paläographische Beiträge aus den Herzoglichen Sammlungen in Gotha. Heft 1. Erfurt, 1844, pl. XIV; Whelan, "Writing: Part I," n. 72.
11. Published as tafel 1, in heft 1 of F. Sarre, F.R. Martin, eds., Die Ausstellung von Meisterwerken Muhammedanischer Kunst in München 1910. Munich: F. Bruckmann A.-G., 1912. Neither folio nor accession numbers are mentioned in the plate caption. See also Grohmann, "The Early Islamic Period," p. 22, and n. 94, and Ernst Kühnel, "Ausstellung von Meisterwerken mohammedanischer Kunst in München (Mai bis Oktober 1910)." Der Islam (1910) 1: I. Teil: 186.
12. B. Moritz, "Arabia Petraea," Mélanges de la Faculté Oriental, Université Saint-Joseph (108) 3: p. 430.
13. Grohmann, "Early Islamic Period," p. 22.
14. Jenkins, "Umayyad Ornament," n. 17, in which she states also that ninth-tenth century CE is given by D. James, Qur'ans and Bindings from the Chester Beatty Library, (London, 1980) p. 23, but without supporting data.

15. Déroche, *Catalogue*, p. 75. Moritz' plate 1 shows the cursive text of the beginning of the first line on this sheet (from Surah 37), as well as the title given for Surah 38. Cursive text indicating the beginning of the sheet can be seen at the top right of Tisserant's plate 42, upper illustration.

16. Whelan, "Writing: Part I," p. 120, and n. 75: "This difference was implicitly recognized by Moritz, who cited only plates 1-5, representing three pages, in connection with the supposed 'Umayyad' ornamental bands in this Qur'ān"; see also n. 74.

17. Moritz, "Arabia," p. 430, "Ich möchte auch daran erinnern, dass der persische Stil selbst in die heilige Kunst der Omajjaden gedrungen ist: in den Ornamentleisten des von ca. 100 A.H. stammenden Korans der Vice-königl. Bibliothek findet sich neben byzantinisch-koptischen Ornamenten das sassanische Palmetto (2)", and n. 2: "*Arabic Palaeography*, taf.2-5".

18. Whelan, "Writing: Part I," p. 120 and nn. 73, 74, this information given in the 1310/1893 *Fihrist*, in which the original folios are said to have twelve lines to a side, while the 1830 replacements have eleven lines to a side. Exactly what Surahs or parts thereof were replaced is not stated.

19. It has led her also to criticize Déroche for comparing the illuminations on ms. Arabe 324c folios with those on Moritz' plates 6-12, "Déroche does not seem to have recognized that these folios belong to the later portion of the manuscript ...", Whelan, "Writing: Part I," n. 74.

20. *Ibid.*, Part I," n. 63.

21. Plate 1 shows a nearly-complete page, with the sheet's opening words at Surah 37:175 written in.

22. Rather than the more usual *Muhammad*, the title of Surah 47 is shown as *al-Qitāl*, which is described as a Magribī title, see Rudi Paret, *Der Koran, Kommentar und Konkordanz*. Stuttgart, Berlin, Cologne, Mainz: Verlag W. Kohlhammer, 1971, p. 546.

23. A severely-edited version of plate 5 appears as the upper half of fig. 134 in Grabar's *Mediation*, entirely omitting the left marginal device; while the lower half of fig. 134 is an edited version of plate 2, showing the divider between Surahs 37 and 38. The illustration entry on p. xvi omits mention of Moritz' plate 2.

24. Shown as plate 133 in Grabar, *Mediation*, and referred to on p. 164.

25. Déroche, *Catalogue*, p. 75.

26. This is plate 42, upper illustration, in Tisserant, *Specimina*.

27. Déroche, *Catalogue*, p. 76.

28. *Ibid.*, p. 76.

29. *Ibid.*, p. 76.

30. *Ibid.*, p. 75 - inner marginal ornament.

31. *Ibid.*, p. 76 - inner marginal ornament, which is compared with that of f. 23 v<sup>o</sup>.

32. *Ibid.*, p. 77 - inner marginal ornament.

33. Richard Ettinghausen and Oleg Grabar, The Art and Architecture of Islam: 650-1250. Pelican History of Art. London: Penguin Group, 1987, p. 120, where the marginal ornament on this plate appears as fig. 101, identified as `Abbāsīd, of the ninth-tenth century.
34. The detail of this marginal ornament is shown in the lower illustration of Tisserant's Specimina plate 42.
35. Déroche, Catalogue, p. 76.
36. *Ibid.*, p. 76.
37. See descriptions of 44r and 46v, above.
38. Grabar, Mediation, p. 164.
39. Jean-Pascal Fourdrin, "Église E.5 d'el Bāra," Syria (1992) 69: 171, and pl. 97. El-Bāra is on the east side of the Orontes River, mid-way between Hama and Antioch.
40. Sauvaget, La Mosquée, p. 76, and n. 3.
41. K.A.C. Creswell, A Short Account of Early Muslim Architecture, revised and supplemented by James W. Allen, Aldershot: Scolar Press, 1989, fig. 81.
42. Northedge, "The Umayyad Palace," fig. 56 and pl. 29, E.F/1.
43. It seems likely the comments following apply to the "palme" of Déroche's description (Catalogue, p. 75) on f. 32r of ms. Arabe 324c also.
44. Grohmann, "Early Islamic Period," p. 22 and n. 92, said of the arcade motifs on plates 1-2 (folio 214b).
45. Jenkins, "Umayyad Ornament," n. 17, said of the similar devices on Moritz' plates 1-2.
46. Jens Kröger, Sasanidischer Stuckdekor, Mainz am Rhein: Verlag Philipp von Zabern, 1982, taf. 21,3 and catalogue 75, p. 67, found at Umm al-Za`ātir approximately 2 kilometres east of the Tāq-i Kisrā; see also taf. 38,5 from Ma`ārid, and taf. 63,1 from Nizāmābād.
47. Kröger, Sasanadischer, taf. 40,2; see also M. Gautier van Berchem, "Mosaics," EMA I:1, p.286 ff. and figs. 311-313.
48. Grabar, Shape, fig. 39.
49. M. Gautier van-Berchem, "Mosaics," fig. 311.
50. *Ibid.*, " fig. 152.
51. Jenkins, "Umayyad Ornament," n. 17.
52. Grabar, Mediation, p. 164.
53. *Ibid.*, p. 164.

54. Grabar, Formation, p. 94.

55. Grabar, Formation, p. 94 and fig. 15; see also George C. Miles, "Mihrāb and 'Anazah: a study in early Islamic Iconography," Archaeologica Orientalia in Memoriam Ernst Herzfeld. Locust Valley, New York: J.J. Augustin Publisher, 1952, pp. 156-171 *passim*, and plate XXVIII.3.

56. Miles, "Mihrāb," p. 171.

57. In his rebuilding of the Great Mosque at Madīnah, 88-91 AH/707-710 CE, Bisheh, The Mosque of the Prophet, 1979, p. 201.

58. Grabar, Formation, p. 94.

59. Hamilton, Structural History, p. iii.

60. Their placement is described in p. 83 ff.; their position on the tie and corner beams is shown in figs. 42 and 45 respectively, and they are illustrated in plates L-LXXI of Hamilton, Structural History.

61. Hamilton, Structural History, p. 84.

62. From the section "An Alternative History of the Aqsa Mosque," which, according to n. 116, was supplied by R. W. Hamilton, Creswell & Allen, A Short Account, p. 82.

63. Hamilton, Structural History, plates LII.3E and LXI.14E, respectively.

64. *Ibid.*, plates L.1E and LIV.6E, respectively.

65. *Ibid.*, plate LXXI.13.

66. *Ibid.*, plates L-LXXI.

67. *Ibid.*, plate LXV.19W.

68. *Ibid.*, plate LVI.8E.

69. Creswell, "Islam's Newly Revealed Artistic Inheritance from Byzantium: Hellenistic Panels in the El Aksa Mosque," Illustrated London News, 16 January 1937, p. 94.

70. Fawzi Zayadine, "Islamic Art and Archaeology in the Publications of Marguerite Gauthier-van Berchem," Annual of the Department of Antiquities of Jordan (1984) 24: 209.

71. They are referred to in a general way in The Dictionary of Art, v. 16, p. 523, in the article on "Ivory," by Ralph Pinder-Wilson.

72. M.S. Dimand, "An Egypto-Arabic Panel with Mosaic Decoration," Bulletin of The Metropolitan Museum of Art (1938) 33: 78-79, identified as Acc. no. 37.103, Lee Fund; Dimand, A Handbook of Muhammadan Art. 3rd edition, New York: The Metropolitan Museum of Art, 1958, p. 124, where it is called a "Copto-Arabic plaque"; Marilyn Jenkins, "Islamic Art in The Metropolitan Museum of Art," Arts and the Islamic World (1985) issue 11 vol. 3. no. 3: 52-53; Rosen-Ayalon, Early Islamic, ill. 30, pp. 48-49; Tardy Les Ivoires. Deuxième Partie, Paris: Tardy, 1977, p. 87, fig. 44.



73. Zakī Muḥammad Ḥasan, Works of Dr. Zakī Muḥammad Ḥasan, v. 2 "Al-Fann al-Islāmī fī Miṣr," Beirut: Raed al-Arabī, 1401H/1981M, plate 35, where the caption states this panel is in the Museum of Arabic Antiquities. In v. 3, "Funūn al-Islām", of Works, p. 493, Z.M. Ḥasan states there is another panel in the Museum of Islāmīc Antiquities, College of Art, University of Fuad I. What seems to be the panel shown here in Figure 112, is in the Museum of Islāmīc Art, Cairo, identified by a wall plaque as #9018.

74. F. Sarre, Islamic Bookbindings, trans. from the German edition Islamische Bucheinbände by F.D. O'Byrne, London: Kegan Paul, Trench, Trubner & Co. Ltd., 1923, unnumbered "Introductory" page and fig. 1, the "back cover" (Figure 114), and unnumbered page with the caption to plate 1 (Figure 113); Grohmann, "Early Islamic Period," pp. 33-34, where the panel is said to be in the Kaiser Friedrich Museum, Berlin, fig. 16 and n. 150.

75. Sarre, Islamic Bookbindings, unnumbered introductory page; Grohmann, "Early Islamic Period," p. 33; Dimand, "An Egypto-Arabīc Panel," p. 78.

76. Ḥasan, "Funūn," p. 493; Jenkins, "Islamic Art," p. 52.

77. Cedar base for the Cairo panel, according to Ḥasan, "Al-Fann al-Islāmī," p. 114; cedar also for the Berlin panel, Sarre, Islamic Bookbindings, unnumbered caption page, and ficus, according to accession information for the New York panel.

78. Ḥasan, "Al-Fann al-Islāmī," p. 115; in "An Egypto-Arabīc Panel," p. 79, Dimand states that the "Arabic Museum of Cairo possesses six fragments with similar mosaic work, most of which come from the early Islamic cemetery of 'Ain al-Sīrah".

79. Sarre, Islamic Bookbindings, unnumbered caption page.

80. *Ibid.*

81. *Ibid.*, unnumbered introductory page.

82. *Ibid.*

83. Dimand, "An Egypto-Arabīc Panel," p. 79. He refers to it as a coffin panel on p. 124 of A Handbook.

84. Ḥasan, "Al-Fann al-Islāmī," p. 115, "*ṣundūq*"; also in his "Funūn," p. 493.

85. Sarre, Islamic Bookbindings, unnumbered page caption to plate 1.

86. Dimand, "An Egypto-Arabīc Panel," p. 79.

87. Grohmann noted the "intersecting zigzag bands" of the borders of the Berlin panel were like the same pattern on Coptic bindings, and thought they had presumably been taken over from the latter, "Early Islamic Period," p. 33.

88. Sarre refers to the arcade originally having five wide arches and a narrower one on each flank, however, there are only four wide and one narrower to be seen on all three examples, Islamic Bookbindings, unnumbered caption page.

89. *Ibid.*, unnumbered caption page to plate 1.

90. Hasan, "Funūn," p. 493.

91. Detail of Figure 109, Metropolitan Museum of Art panel.

92. Tardy, *Les Ivoires*, Deuxième Partie, pl. 43, the caption of which reads, "Coffre à bijoux. Bois et incrustations d'ivoire. Trouvé en Nubie dans une tombe de l'époque byzantine. Art Copte VI<sup>e</sup>-VII<sup>e</sup> s. Musée Egyptien, Le Caire".

93. Sarre, *Islamic Bookbindings*, unnumbered caption page; Grohmann, "Early Islamic Period," p. 33; Hasan, "Al-Fann al-Islāmī," p. 114-115 also places both the Cairo (Figure 112) and Berlin panels in the Ṭulūnid period.

94. Dimand, *A Handbook*, p. 124.

## Chapter Four, Part 1: The Serrated Arch

The San`ā' illustrations allowed us to see Qubbat al-Ṣakrah's paradisiacal imagery as a response to the powerful, established iconographies in the new Islāmic empire and, it is argued, the initial stage in a wider scheme to foster an Islāmic iconographical programme. Evidence of the "San`ā'" iconography in the Cairo Qur`ān and on marquetry panels was discussed. How long-lived, or widely-used the congregational mosque and isolated column image-signs may have been, the writer cannot say. Perhaps they faded from use, or were discarded for some reason other than "local" appeal, because there existed in what is now Jordan and Syria a quite different "local" image-sign whose presence as decoration has had but passing notice, and whose popular copies are unrecognized

This motif, a distinctly-framed arcade through which views of paradise are to be had, seems to have been as carefully crafted as that above mentioned. There is reason to state it was employed purposefully in architectural contexts that indicated those areas' special qualities or functions and that the presence of the form went hand-in-hand with a structural concomitant. In some instances the depiction of the arcades' imagery maintains the illusory qualities of the Qubbat al-Ṣakrah's ornament whence it derives; in others, the architecture imposes its own conditions and these seem to have prevailed over the maintenance of illusion. At times the distinctive frame itself might appear independently and be understood as referring to the more usual arcade with a view. Manifestations of the new iconographic form are considered in this chapter, but there is no comprehensive examination of sites at which it occurs, nor are all Umayyad sites examined.

Attention is drawn first to the Reception Hall of the Umayyad palatial complex of Qal`at `Ammān, constructed over two Roman courtyards that were built on a large artificial platform jutting from an underlying hill.<sup>1</sup> It is the southern-most building in Figure 115.<sup>2</sup> This well-preserved building is at the entrance to the palace complex; it was the principal gate and may have been also the

Majlis al-`Āmm, or hall of public audience, through which supplicants would have passed on the way to a Majlis al-Khaṣṣ, or hall of private audience, in the north building,<sup>3</sup> (see Figure 115).

A. Northedge has described the Hall as a "four-iwan" structure built by someone familiar with the Byzantine cross-in-square,<sup>4</sup> a locally-constructed "alien" design<sup>5</sup> that includes four pseudo-squinches in the transition zones of the semi-domes covering the east and west *īwānāt*; "pseudo", because their outlines have been carved onto masonry that gradually rounds out above them, apparently the work of those who "did not know how to build the real thing".<sup>6</sup> Other "alien" features include the Hall's tunnel-vaulted north and south *īwānāt*; exterior, rectangular buttressing as seen at the Sāsānid Tāq-i Kisrā, Ctesiphon, and an interior façade of blind niches described as descendants of those on the exterior façades of the Tāq-i Kisrā, and the Parthian palace of Assur.<sup>7</sup> R. Ghirshman's reconstruction of the Great Hall of third century CE Bīshāpūr, with four sets of three *īwānāt* facing a central court which was encircled with a row of separate niches resting on a ledge,<sup>8</sup> was considered by Northedge for the influence it might have had on the Reception Hall's architecture, and dismissed for want of convincing evidence.<sup>9</sup> E. J. Keall has referred to Ghirshman's reconstruction as improbable.<sup>10</sup>

Northedge reconstructs the Hall as an hypaethral court with stepped merlons, vegetally-decorated front and back, about the outer and inner roof edges<sup>11</sup> (Figure 116).<sup>12</sup> There were interior and exterior cornices, and the latter's decoration includes registers of serration (also known as saw-dog-tooth, zigzag, *zackig-*, *zacken-*, *zickzack*.) and bead and reel.

A. Almagro Gorbea, of the Spanish archaeological team at the site, considers the Vestibule (Reception Hall) to be in the form of a Greek cross with pseudo-squinches, and states that, while the courtyard covering is impossible to determine, a stone dome is logical as the building is strong enough to support it.<sup>13</sup>

Northedge disputes the dome theory on the grounds of there being insufficient supporting structures, and argues also that as the decoration has been carved in local limestone it could withstand weathering in the hypaethral court as execution in stucco could not.<sup>14</sup> This latter reason is

questionable, as the decoration of the blind arcade about the towers flanking the entrance to the Small Enclosure at Qaṣr al-Ḥayr al-Sharqī is of moulded, reed-reinforced stucco,<sup>15</sup> and stucco is used for the above-gate decoration at Qaṣr Kharānah.<sup>16</sup> The Hall may have had a later, wooden, roof against the cold Jordanian winter.<sup>17</sup> Almagro Gorbea presents alternate façade reconstructions, one of which shows the buttressing as the lower part of large blind arches with only two external blind niches (Figure 117); his other reconstruction shows the exterior buttressing suggested by Northedge.<sup>18</sup>

Figure 118<sup>19</sup> shows the interior niche arrangement, with Northedge's crenellation-cornice reconstruction. There were twenty-four blind niches in the top register, eight in the middle one, and one hundred and six in the lowest register which form a continuous arcade about the entire inner area, above a pronounced moulding some 1.6 m. from the floor.<sup>20</sup>

Niche ornament is predominantly floral, and regimented to fit confined spaces. The niches are individually decorated, 49.5% of which decoration still exists or is known of through photographs.<sup>21</sup> Patterns vary not only from niche to niche, but between back, niche head and spandrel. Actually, the arch face and spandrel arrangement resembles the *alfiz* of Umayyad Spain, and is so called by the Spanish team.<sup>22</sup>

As striking as their ornament must have been originally are the niches themselves, for their distinctive structure binds together the entire decorative programme. Each consists of two plain, attached colonnettes without capitals, set on low bases, and supporting an arch with a serrated extrados.<sup>23</sup> Additionally, in the Hall's lowest register the niches are set on what might be called a plinth, directly above the moulding, where they become an arcade by virtue of being placed closely side-by-side, although each niche remains discrete, that is, intermediate arches do not share supports, the arch of every niche is raised on its own colonnettes. The niches do not protrude beyond the wall plane, the arch faces recede progressively to a further-recessed niche back.

Kīsh, Umm al-Za`ātir, al-Ma`ārid, Nizāmābād, Tepe Hissar, Tepe Mil, Chal Tarkhan-Eshqabad are among the sites Northedge mentions that between them have contributed all the basic

motifs to the decoration of the Hall,<sup>24</sup> whose ground plan, architectural detail and decoration he concludes to be entirely in the Sāsānid and post-Sāsānid tradition.<sup>25</sup> This should be reconsidered.

At `Ammān there are neither pattern-sheathed pillars, as at, say Dāmghān,<sup>26</sup> nor pattern-sheathed *īwānāt*, like those reconstructed at Umm al-Za`ātir,<sup>27</sup> nor are other parts of the walls "papered" with field patterns. So far as is known, the Hall's vaults and dado were plain, the absence of holes in the stonework making it "unlikely that a marble or stucco revetment was attached".<sup>28</sup> Some of the Hall's niche decorative programmes are now incomplete and others are difficult to make out, but what could be discerned has been drawn, and the clear drawings from Northedge's book are used here as the basis for discussing features of the decorative programme.

The vegetation in the niche backs may be attached to a slim straight trunk, or it "grows" from a ground of three semi-circles; sometimes the vegetation is seen through a lattice. A series of independent circles containing rosettes and other vegetal elements, often with interstitial leaves, is a common arrangement (Figures 119,<sup>29</sup> and 120).<sup>30</sup> Uncircled rosettes with interstitial leaves appear on many soffits of the Qubbah's octagonal arcade,<sup>31</sup> and circled ones with leaves are border motifs in the western *riwāq* at the Great Mosque, Damascus.<sup>32</sup> On many of al-Aqsá's panels continuous vines completely encircle leaves and flowers, giving a very similar appearance. Rosettes have long been used in Jewish sepulchral art, and `Ammān's alternation of rosettes and other vegetal forms with interstitial leaves may be compared with those on the sarcophagus in Figure 121, and the coffin in Figure 122.<sup>33</sup> Figure 120's slim straight trunk supporting stylized scrolls filled with various floral motifs may be compared with the more naturalistic versions in Figures 107 and 109. Common also to the Hall and the wooden panels are groups of three leaves, upright or inverted on the panels, used to inaugurate change in a vegetal structure (Figures 108, 120, 102).

In seeking comparanda for the Hall's grapes Northedge focussed his attention on the few accompanying leaves and the vine's entwining of a straight stem,<sup>34</sup> but the distinctive characteristic of the `Ammān grapes is that bunches are paired (Figures 123,<sup>35</sup> 124,<sup>36</sup> 125<sup>37</sup>), either in the same loop, or

side-by-side along a stem. In five drawings of the Qubbah's mosaic scrolls in which grapes appear (Figure 126)<sup>38</sup> the bunches are paired in the same loop. One Qubbah tie beam has grape bunches on a leafless, stylized vine,<sup>39</sup> while others show paired bunches alternating with paired leaves, one to either side of a central stalk,<sup>40</sup> an arrangement found also on the cupola of the Double Passage (Figure 48). Paired grape bunches in the same loop are found at the Subsidiary Palace, Chal Tarkhan-Eshqabad, for whose decoration an Umayyad date is proposed,<sup>41</sup> but this was not the comparandum taken from that site. The Coptic chest in Figure 114 has grape bunches of a shape comparable with those at `Ammān, and few accompanying leaves.

Figures 127 and 128,<sup>42</sup> at `Ammān and Figure 129<sup>43</sup> at al-Aqṣá, show vegetation on lattices; rosettes in diamond grids appear at `Ammān (Figure 130),<sup>44</sup> and on a wooden panel at al-Aqṣá (Figure 131).<sup>45</sup>

The imbrication of concentric circles in some spandrels and niche backs is a seemingly anomalous motif, but D. Thompson points out that at Chal Tarkhan-Eshqabad concentric spirals symbolize water through which fish are represented as swimming,<sup>46</sup> and the overlapping concentric circles resemble water symbols on Sāsānid and later metalware.<sup>47</sup> Perhaps water symbolism is intended in `Ammān's non-figural imbrication.

A comparison drawn from the Qubbat al-Ṣakhrah or al-Aqṣá's panels cannot be applied to the content of every niche at `Ammān, although there are sufficient correspondences to demonstrate the influence of both; the model for niches' distinctive structure, on the other hand, may be attributed to the Qubbat al-Ṣakhrah, amongst whose real and decorative arcades are two composed of discrete, blind niches: one is internal, found on the inner face of the octagonal arcade and the outer face of the circular arcade (Figure 132).<sup>48</sup> The arches are raised on independent, bulbous colonnettes with square capitals and bases; these star-filled niches are surrounded by pearl bands whose vertical members appear to support the elaborate interstitial vegetal forms.

The second example was found on the parapet during the repairs of 1873-74,<sup>49</sup> when the

exterior tiles applied in 1552, in Sulaymān's reign, were being replaced.<sup>50</sup> In this arcade, now concealed again, "each arch has its own pair of independent columns",<sup>51</sup> and is flush with the wall plane, while the niche back, behind later infills of stones, formed "a sort of apsidal niche, 0<sup>m</sup>.25 deep".<sup>52</sup> These niches had modest capitals and bases, and there was no mention of serrated arch faces.

Figure 133<sup>53</sup> shows a section of parapet with the blind arcade, including one of four open niches which Creswell suggested were used when making repairs.<sup>54</sup> Remains of glass mosaics were found inside two uncovered niches and from these traces a pattern of interlace about rosettes was reconstructed (Figure 134).<sup>55</sup> Clermont-Ganneau thought that if the mosaic remains were not original to the building, they were likely made after the same pattern;<sup>56</sup> Creswell stated the mosaics could not possibly date from `Abd al-Malik's time, and were probably of the thirteenth century.<sup>57</sup> It is suggested that these two arcades were the inspirational source for the distinctive frames seen at `Ammān and elsewhere, a resemblance noted by C. Conder, "In general arrangement, and especially in the detail of this upper order of dwarf pillars, the outer wall of the Dome of the Rock thus reproduces almost exactly features found in the Sassanian or early Arab building already described at Amman".<sup>58</sup> Serration will be considered later.

Brought down from the parapet, the arcade metamorphosed. The niches' carefully thought out placement in the Reception Hall is an exercise in *trompe-l'œil*. Their arrangement leads one to believe the designer sought to reproduce in some degree the sensory experience achieved at the Qubbat al-Şakrah. Physically, the Reception Hall is windowless, yet it evokes the interior of some lofty pavilion, through whose colonnade and upper windows one may look out on the gardens of paradise, for they are the only "views" afforded.

To achieve this illusory world the Reception Hall's designer tapped a number of sources. Using otherwise functional structural elements - the niches - to articulate the wall surfaces was common in late Greek, and Roman architecture. In another hypaethral space, the courtyard of the Temple of Bacchus, Baalbek, Lebanon, there are two registers of arched and gabled aediculae



separated by Corinthian half-columns on the side walls.<sup>59</sup> The "wall" of the Coptic chest in Figure 114 with its registers of arched and gabled niches is similarly arranged. O. Reuther pointed out that the "half column" used in Sāsānid façade designs was of Greek derivation, but its degenerated form without capitals and bases, as seen at `Ammān for instance, was typical of Sāsānid architecture.<sup>60</sup> In the Umayyad period, half-columns in Sāsānid dress exist contemporaneously with those more classically-garbed.

Contributing to the illusion of the niches as windows on another world is the pronounced moulding which may have been borrowed from sixth century North Syrian churches where similarly elaborate exterior mouldings are a feature.<sup>61</sup> They are to be seen above and around doors, and swagged about or placed beneath windows; the Hall's arrangement can be compared with windows rising above a prominent, continuous moulding at the North Church, Ruwêhā, (Figure 135)<sup>62</sup> and the East Church, Me'ez, (Figure 136).<sup>63</sup> The moulding is reminiscent also of wall paintings, which often start from a well-defined band marking the upper extent of the dado.

Illusion of various kinds is explicit in Roman wall painting from its earliest style. For example, a real colonnade and lattice balustrade on one wall is reproduced in stucco about three otherwise blank walls to convey the notion of receding space;<sup>64</sup> trees and shrubs might be painted behind a real garden to enlarge the view;<sup>65</sup> figures look out from a paint and stucco mansion,<sup>66</sup> or one looks through a panel framed by a vine wreathed column, a pillar and an architrave at "... birds at a fountain and garden architecture, all of which might have been seen through the room's window" (Figure 137).<sup>67</sup> These examples are not remote from `Ammān's decorative programme; saving the figural elements, illusion is manifest in the Qubbat al-Şakrah, and the Damascus mosaics, the latter a vibrant example of the Second Style of Roman wall painting, where the framing device is the paradisiacal grove of great trees.

Northedge points out the Reception Hall was a public building, its decoration the finest at the site, and stresses how much seems to have been done for "purely visual effect".<sup>68</sup> According to

Almagro Gorbea the Vestibule's (Reception Hall) design and decoration was "given maximum pre-eminence" to impress visitors with the inhabitants' wealth and position.<sup>69</sup>

As principal gate, and possible *majlis al-`amm*, for the administrative complex of the area,<sup>70</sup> the Reception Hall was a point of encounter between local ruler and ruled, suggesting the imagery was disposed there to some purpose, which the niches on the exterior façade likely heralded.<sup>71</sup> The richness of the display was surely meant to confirm that the Reception Hall had a special status.

Similar niches appeared also on the outside of the northern building,<sup>72</sup> external access to which, Almagro Gorbea points out, was restricted to the "single path" through the Vestibule (Reception Hall);<sup>73</sup> however, both he and Northedge point to the Vestibule (Reception Hall) as the most finely-decorated area of the complex, and this suggests that the Hall was an objective in its own right, not merely the first stage in some extended walk.

Almagro Gorbea dates Qal'at `Ammān between the beginning of the eighth century and before 744 CE,<sup>74</sup> and Northedge from the beginning to just after the reign of Hishām b. `Abd al-Malik (724-743).<sup>75</sup> In connection with these suggested dates and the Reception Hall's position in relation to the rest of the site, it may be noted that Hishām had two palaces built outside the walls of Sergiopolis-Ruṣāfah, Syria, whose northern gate was enclosed by an extra-mural, hypaethral room. Externally, this rectangular room was flanked by towers, and the walls seem to have been plain; entry was by way of a single gate.<sup>76</sup> Inside, the room's east and west walls were articulated with capitalled pilasters whose architraves joined that above the arches of the blind arcade framing the southern wall's triple entrance to the city. Of these two extra-mural rooms, the North Gate was a truly defended and defensible structure as the Reception Hall *cum* gate was not; their shapes and ornament were not alike, but in their modest entries upon hypaethral, richly adorned interiors, they are conceptually alike.

The next site, Qaṣṭal,<sup>77</sup> is 25 km. south of `Ammān, where the eastern edge of the Balqa' farmland meets the desert.<sup>78</sup> It is described as well-watered, and a *ḥajj* stopping place on the route Darb al-Shām from Damascus to Madīnah and Mecca, via `Ammān, Ma`ān and Tabūk.<sup>79</sup> Qaṣṭal was

an aristocratic residence laid out within a castrum-like, crenellated exterior wall (Figure 138),<sup>80</sup> whose merlons may have been stepped.<sup>81</sup> It is a completed structure, built largely of ashlar, richly decorated with floor and glass mosaics, and much carving worked from the same stone as the structure itself.<sup>82</sup> There was a single entrance through a tower whose jambs were ornamented with tiers of carved, paired pilasters (Figure 139).<sup>83</sup> Beyond the door, which also had decorated jambs, was a vestibule of two domed bays leading to the central courtyard and the rest of the *qaṣr*, and, flanking the bays, stairs to the western end of an Audience Hall on the second floor immediately above the gate.<sup>84</sup>

As reconstructed in a maquette (Figure 140)<sup>85</sup> prepared by the archaeological team's architect, F. Morin, this second floor area was organized in the form of three apses about a central square covered by a dome whose drum was pierced by eight windows framed with engaged colonnettes<sup>86</sup> similar to those in Figures 104 and 105. The north and south apses were semi-domed, while that on the east was otherwise vaulted and may have lead to a suite of small rooms above the gate for the *qaṣr*'s owner.<sup>87</sup> Figure 141<sup>88</sup> shows a dome voussoir (*claveau*) recovered from the north stairs. Figure 140 indicates an extrados and very wide intrados sheathed in ornament, a reconstruction rather like that attributed to Kish.<sup>89</sup> Figures 142 and 143, *claveaux* for the head of a vault and a vault, respectively,<sup>90</sup> evince the building's diverse motifs.

In Morin's reconstruction, the north and south apses have a plain dado, a band of ornament, then an arcade of niches.<sup>91</sup> Two niches from the site have been published (Figure 144, 145)<sup>92</sup> and, as at 'Ammān, they are discrete.<sup>93</sup> The grapes in the larger niche are on a vine whose angularity reflects the tendencies to stylization remarked by M. Avi-Yonah of J. Lassus' researches into the fifth-sixth century CE remains north-east of Hama, Syria. Vines in the similarly-confining spaces of lintels and jambs had stems which moved stiffly from one border to another, with leaves and fruit adjusted to fit.<sup>94</sup>

The smaller niche (Figure 145)<sup>95</sup> has the rich surrounding detail shown in Morin's reconstruction, and shows an affinity also with both the lowest register of niches on the Coptic chest

(Figure 114) and the Qubbah's arcade in Figure 132. Like those on the chest, the arch has an outer pearl band and an inner serrated one and, assuming a symmetrical composition, an arcade of these niches with their interstitial vegetation would have been similar to the Qubbah's arcade in Figure 132 and to the niches with interstitial grape rinceaux on the chest.

As for the inner fern-like motif, or branch, this does resemble those at `Ammān, but a rather more notable comparandum is seen in the mould for a jar neck unearthed at Ramlah,<sup>96</sup> which was founded on virgin soil about 708 CE,<sup>97</sup> during Sulaymān b. `Abd al-Malik's (715-17) governorate. Figure 146 of the mould and a modern cast, shows the neck has a collar of rosettes beneath which are vertical panels of the fern-like motif. Both niche and jar mould illustrate the practice of deeply cutting the interior of motifs and leaving a raised border in order to emphasize the contrast of light and shadow. An example Avi-Yonah draws on in his discussion of this technique is the plant on the chancel post in Figure 147,<sup>98</sup> the doubled outline of the mould's leaves give similar emphasis.

Among Qasṭal's ornament P. Carlier lists such motifs as acanthus, grape bunches, vines, rosettes, cornucopiae, saw teeth, chevrons, blind horseshoe arches, and recognizes their indisputable relationship to Greco-roman, Persian and Sāsānid art, "dans une conception du décor qui a perdu sa rationalité antique",<sup>99</sup> and later says of the decoration "... des antécédents très proches à la Coupole du Rocher et à la Mosquée al-Aqṣā à Jérusalem";<sup>100</sup> what aspects of the latter monument are not expanded upon.

The niches are strikingly like those at `Ammān, and have been so remarked by P. Carlier,<sup>101</sup> however, beyond mentioning the site briefly for other comparanda, Northedge conspicuously ignores these similarities. Qasṭal's decorative motifs come from diverse sources, and its architecture is not "Sāsānid", yet, as at `Ammān, the niches were placed to dominate an area identified as an Audience Hall. Because their carving is still so crisp, the deeply-recessed backs convey even more clearly than at `Ammān the impression of views through windows to a garden beyond, as does their placement in Morin's reconstruction. It is not possible to say how the attributed glass mosaics<sup>102</sup> may have

complemented them, but together they suggest an impressive display. Here too, it is suggested, that the splendidly-decorated audience hall was the objective of this part of the *qaṣr* and that the small suite of rooms over the gate were auxiliary to it.

H. Gaube published a very worn niche with a serrated horseshoe arch, the recessed back of which is filled with concentric imbrication<sup>103</sup> like that seen in at 'Ammān. He considers this niche to have been part of the façade decoration, as may be seen above the portal at *Qaṣr Kharānah* and *Qaṣr al-Hayr al-Sharqī*.<sup>104</sup> It may be noted here also that from the remains of *Qaṣṭal's* contemporary mosque<sup>105</sup> Gaube recovered a carved stone rosette, a medallion with a central "shrub", and a fragment showing a shrub between registers of egg and dart,<sup>106</sup> suggesting that this early Umayyad mosque may have been ornamented with some sort of paradisiacal imagery.

As the *qaṣr* at *Qaṣṭal* was a princely residence, where al-'Abbās. b. al-Walīd I and al-Walīd II may have stayed,<sup>107</sup> the niches cannot have been an exclusive attribute of the gate to an administrative complex. The excavators have conjectured the *qaṣr* may date to 'Abd al-Malik's reign (685-705).<sup>108</sup>

K. Otto-Dorn found the distinctive blind niches at *Sergiopolis-Ruṣāfah*, Syria, during the 1952,<sup>109</sup> and 1954<sup>110</sup> excavations of an area identified as that in which Hishām b. 'Abd al-Malik (724-743) built his two palaces.<sup>111</sup> Limited exploration concentrated principally on one building (Figure 148),<sup>112</sup> where rich finds of decorative stucco and wall paintings were made.

The first campaign established that the site had a castrum-like exterior wall, and was entered through a single gate. Room 1's extent was noted, as were parts of room 5, and the south-west corner's tower.<sup>113</sup> Stucco finds in the gate area were particularly rewarding,<sup>114</sup> and during the first campaign included moulded pieces decorated with a pomegranate (Figure 149),<sup>115</sup> and naturalistic grapes and leaves (Figure 150).<sup>116</sup> When first published, the pomegranate was said to be part of a frieze, but in the 1957 article, where it is shown with the flat border fillet uppermost, it had become a "Stuckfragment", and may have been considered part of the "Nischenfüllungen" for blind arches.<sup>117</sup>

Found in the gate debris were palmettes, rosettes, and a number of different blind arch

fragments decorated with braided bands and wreaths of leaves, and "conspicuous" amongst the arch fragments was a piece with double serrated bands (Figure 151).<sup>118</sup> There were also plain, half-columnar fragments with serrated ornament on the edge fillets (Figure 152).<sup>119</sup> Moulded fragments had a fine gypsum coating, thought to be for weather protection, and there were remains of paint on the stucco, in red, black and yellow.<sup>120</sup> Traces of red paint had been found inside 'Ammān's Reception Hall by the Italian team that originally excavated the site, although Northedge thought these could just as easily have occurred after the Umayyad period,<sup>121</sup> and it seems that the columns at the entrance to the northern building's *īwān* were gilded.<sup>122</sup>

Over both campaigns significant finds of decorative stucco and wall paintings were made in Room 1 amongst other north-eastern parts of the site, and in both courtyards.<sup>123</sup> Along with vine leaf and grape motifs, there were borders of overlapping hearts, palmettes, spiral leaves, and fragments of serrated arches and half colonnettes. Stucco elements of blind arcades were found in the vicinity of the main courtyard's passageways,<sup>124</sup> and the eastern part of the courtyard,<sup>125</sup> leading Otto-Dorn to conclude that both the gate front and the courtyard walls had been ornamented with the niches.<sup>126</sup>

Among the finds made in room 1:<sup>127</sup> moulded stucco painted black, red and yellow was discovered during the first campaign and, on the north wall above the socle, on a well-finished stucco layer, were painted a number of columns in black and red, between which were lozenge shapes (Figure 153).<sup>128</sup> In an early report there were said to have been four larger fields and two smaller side fields between the columns,<sup>129</sup> whereas the reconstruction drawing in a later article shows only one smaller field on the left and five larger. Otto-Dorn thought the columns were likely part of a blind arcade, but the arches were not found. A layout of narrower fields flanking wider ones must call to mind the marquetry panels' (Figures 109-111), and even the one narrow end field in Figure 153 is suggestive of them. On the east wall there was a grid of double lozenges and a circle together, between what seems to have been a continuation of the painted columns,<sup>130</sup> and near it more stucco fragments, and many small pieces of wall painting. From an analysis of patterns, and colours which

included red and white, red on a black ground, and clear tones of red, blue, yellow and green, as well as stucco pieces, it was concluded that the north and east walls had, above the socle, an arcade motif, three zones of painting, and an upper zone of decorative stucco.<sup>131</sup>

During the second campaign an elegantly-drawn tree outlined in black on a white ground (Figure 154)<sup>132</sup> was found in the rectangular<sup>133</sup> niche in room 1's south wall. Otto-Dorn compared it with the similar wide-branching mosaic trees at Damascus, and with that in the bath at Khirbat al-Mafjar. Another rectangular niche was found in the south-west corner of room 5, but there is no mention of any painting therein; both niches are shown on the plan in Figure 148. Had niches been found also in the south-east corners of these rooms one might say they were of an ornamental nature, but, and here it is speculated, one niche in a south wall could be a *mīhrāb*.

At Qasr al-Ḥayr al-Sharqī the remains of a *mīhrāb* niche were found in the south wall of the Small Enclosure's entrance room, oriented in the "correct direction".<sup>134</sup> The *mīhrāb*, which is shown on the excavators' plan 6D, is west of an entrance to room 28 immediately south. In a private dwelling at Ramlah, a single arch was discovered, inserted into the mosaic floor. This is considered to be a *mīhrāb*, for it has the end of Surah 7:205, "... and be thou not neglectful" inserted in the arch hood, and is said to be "properly oriented to the south, towards Mecca".<sup>135</sup> The second example, particularly, speaks of the same flexibility in the placement and form of a *mīhrāb* as suggested for that in room 1 at Ruṣāfah.

Another group of ruins about 1 km. from the first was surveyed during the second campaign. Included in it are two large buildings, and a number of mounds of debris. Around the walls of a high tower of the largest building was found a great deal more decorative stucco, including blind niches and niche fillings like those found at the first palace. Figure 155 is an arch with vegetal motifs in the spandrels and laurel leaves on the arch face,<sup>136</sup> and Figure 156 is a niche filling described as a candelabra motif with entwining vine tendrils;<sup>137</sup> of these later discoveries the excavator said all the elements of the blind arcade ornament in the first palace were found in the second.<sup>138</sup>

Because the Ruṣāfah excavations are incomplete there's no clear idea of the appearance of the palaces and their auxiliary buildings, but the excavator observed both sites were lavishly, and similarly decorated. The ornamentation of the exterior of Palace One's single entrance included blind niches with vegetal motifs in the niche backs, and serrated and otherwise ornamented arch faces, and friezes of grapes and vines,<sup>139</sup> while arcades of similar blind niches were found on the east and north of the principal courtyard.

Using the excavators of `Ammān and Qaṣṭal as guides, if, as Otto-Dorn says, the central courtyard of Palace One was lined with paradisiacal arcades, then it too could have been a place of audience, on a scale befitting a caliphal palace. Room 1's singularity is emphasized by its position immediately opposite the entrance, its size and ornament which could be described as reflecting the arcades of the courtyard and, should the conjecture of a *mihṛāb* be substantiated, then private or semi-private devotions could have been held there. Also, room 1 appears to be connected only to room 2 and the unnumbered room to the west; an ensemble of principal hall and two waiting rooms that seems to be auxiliary to the audience area.

K. Otto-Dorn wrote initially that Ruṣāfah's serrated arches were unknown at another Umayyad site,<sup>140</sup> and later of her surprise at finding them, in carved stone, in the entrance building at `Ammān,<sup>141</sup> (Figure 157).<sup>142</sup> In the *Ars Orientalis* article, which is almost the only one of hers on Ruṣāfah that's ever mentioned, she repeated her statement that Ruṣāfah's characteristic serrated arch ("charakteristischen Zackenbögen") was abundant in `Ammān's entrance building;<sup>143</sup> unfortunately, her words were not accompanied by the important illustration of the serrated arch face. She stated also that the correspondence between Ruṣāfah's and `Ammān's toothed arches and smooth half-columns was obvious,<sup>144</sup> and likely would have said the same of Qaṣṭal's niches had they then been discovered. The other blind arcade comparanda she gives are Qaṣr al-Ḥayr al-Gharbī, Qaṣr al-Ḥayr al-Sharqī, the "Kiosk" in the courtyard at Khirbat al-Mafjar and, amongst portable art, the "characteristic example" in the decoration of the "Marwān" ewer.<sup>145</sup> Neither Northedge nor Carlier mention Ruṣāfah's



characteristic serrated arches.

Recent excavations at Ruṣāfah have uncovered the remains of a garden, an elaborately-decorated pavilion, and irrigation system south-west of the Otto-Dorn palaces' sites,<sup>146</sup> providing substance for Theophanes' oft-quoted statements that Hishām b. `Abd al-Malik not only built palaces in every city and town, he had crops sown, and gardens and fountains created.<sup>147</sup>

At Qaṣr al-Ḥayr al-Sharqī, Syria, about 60 km. south of Ruṣāfah, there is an arcade of discrete blind niches around and between the towers flanking the single entrance to the Small Enclosure (Figure 158).<sup>148</sup> Al-Sharqī is almost equally-distant from Palmyra, the Euphrates and the eastern extent of farmed land,<sup>149</sup> at a point where the mountains north of it can be crossed north to south.<sup>150</sup> Rainwater drains into the area from three *widyān*, and there can be substantial spring vegetation.<sup>151</sup>

As has been mentioned, the niches here are of moulded stucco. Each arch shares an impost with the niche flanking, but has its own pair of engaged colonnettes with a palm trunk design and modest Corinthian capitals. There are acanthus in the spandrels and windswept acanthus on the arch faces whose narrow, plain margins copy similar margins found on carved stone.<sup>152</sup> Gabriel's drawing of a niche's ornament and profile (Figure 159)<sup>153</sup> shows one motif in the recessed back and another in the niche hood, a practice observed at `Ammān and in some of al-Aqṣá's panels. The only serration is in the form of a row of angle-laid bricks immediately above the arcades, nevertheless, the writer believes the niches are related to those at sites mentioned previously. Some exterior niches are proposed for `Ammān and Palace One, Ruṣāfah, although not on this scale. Here, the niches may affect signage, on the one hand indicating that this of the site's two enclosures is the one where "audience" takes place. (No niches are recorded for the multiple entrances to the Large Enclosure.) On the other, the Small Enclosure's courtyard activity may have made it an inappropriate audience area which instead would be found on the upper floor. Again, it is evident that the niches are not an attribute of the building's cultural origin or type.

This enclosure is thought to have been a caravanserai rather than a permanent residence, with storage space on the ground floor, and sleeping quarters likely on the second, in function, allied most closely with Qaṣr Kharānah.<sup>154</sup> The excavator modified this attribution somewhat on the grounds that there was a lack of historical information about area trade routes, and that the Small Enclosure had rather superior construction and decoration for a caravanserai; it was possible the Small Enclosure had been built for some unique purpose.<sup>155</sup>

It has been proposed that the Small Enclosure, like many other Umayyad structures, might have served a number of purposes, among which would be agriculture and trade and as a point where the Umayyads might maintain close contact with important tribal allies.<sup>156</sup> This last factor might have influenced its construction c. 700, as part of a strategy to deal with tribal antagonisms resulting from the day of Marj Rāhiṭ, (684).<sup>157</sup> According to an inscription found in the Large Enclosure, the construction was done in 728-729 CE, during Hishām's reign, by people from Homs; the inscribed stone, now lost, was thought to have been re-used, and not in its original position.<sup>158</sup> The excavators believe the inscription refers only to the building of part of the Large Enclosure,<sup>159</sup> some work of which was 'Abbāsīd.<sup>160</sup>

Qaṣr Kharānah, Jordan, about 60 km. south east of 'Ammān, has above its single entrance five panels of half-palmette trees rising from flanking "clover leaf" motifs, each panel being separated by pairs of engaged colonnettes,<sup>161</sup> (Figure 160).<sup>162</sup> It may be that originally these colonnettes supported arches, possibly serrated, to form a small arcade of discrete niches through which might be seen the paradise gardens. S. Urice is among the most recent to examine this site in detail,<sup>163</sup> and his results are summarized briefly.

In contra-distinction to Qal'at 'Ammān, 's construction and many structural features are closely linked to Iraqi buildings, while its internal organization is typical of Syrian ones.<sup>164</sup> In common with many other Umayyad buildings, its apparently defensive exterior is a sham, and the "arrow slits" in its walls provide ventilation and light.<sup>165</sup> The qaṣr's building is divided into three stages: the ground

floor and rooms 47-53 (north of western stairs), first; then the southern, and eastern wing to room 39, with the northern rooms 40-46 remaining uncompleted,<sup>166</sup> (see layout in Figure 161).<sup>167</sup> North-western room 48 was purposely hypaethral, with ventilators, a drain, and a floor hole communicating with the room beneath, and this room is thought to have been used for cooking and eating; uncompleted room 40 in the north-eastern corner may have been in all respects similar to room 48.<sup>168</sup>

Qaṣr Kharānah's decoration is as follows: rooms 49-53 comprise a coherently-decorated (the writer's interpretation) *bayt*, or suite of rooms, with adjoining cooking and eating facilities. Room 51 has semi-domes at the western and eastern ends and, along the northern and southern walls, large blind arcades between transverse arches. These arches appear to be supported by groups of three engaged colonnettes, without bases or capitals, resting on continuous stylobates. The colonnettes are described also as "articulated piers", and "piers" only because the flanking walls have been pulled back, the supports speaking of "aesthetic choice" not structural necessity,<sup>169</sup> (Figure 162).<sup>170</sup> In room 51 there is serration at the base of the squinches and arches, and the arches have a rounded moulding.<sup>171</sup> High on the walls of the five rooms, and originally at the apices of the semi-domes, are separately-moulded roundels (Figure 163)<sup>172</sup> with a very stylized vegetal motif of a kind familiar from the Qubbat al-Ṣakhrāh.

Blind arcades, with engaged colonnettes appearing to support transverse arches, are repeated in rooms 59, 26, 29, 37 and 44, the arches being slightly taller and slimmer in the second building phase. Room 59 has a southern semi-dome and twelve rosettes impressed into the stucco above cornice height,<sup>173</sup> (Figure 164).<sup>174</sup> Room 26, immediately above the single entrance, has the only square bay in the *qaṣr*, and is thought to have been domed originally.<sup>175</sup> It is also the only single room,<sup>176</sup> connected to, but not part of the *buyūt* based on rooms 59 and 29, and it is on room 26's exterior wall that the paradisiacal imagery is found.

Perhaps connected to the exterior display, high on the northern walls of rooms 59 and 29 are two arcades of open, discrete niches whose serrated arches are supported by semi-engaged colonnettes

without capitals or bases (Figure 165);<sup>177</sup> the arcades' mundane purpose is to enhance the ventilation.<sup>178</sup>

Urice compared these open arcades with the blind ones of al-Sharqī's Small Enclosure and of `Ammān, noting that in each case they seemed to mark the boundary between public and private space and, in `Ammān's case, possibly indicating space of a ceremonial kind.<sup>179</sup> Rooms 59 and 29 participate in this boundary marking as they connect with the principal room 26 via rooms 61 and 28 respectively.<sup>180</sup>

It is of interest that although the arches and semi-engaged colonnettes of the ventilation arcades are described as and look similar to the large arches and engaged colonnettes of the articulated piers in rooms 51, 59, 26, 29, and 37, these similarities are not commented on by Urice. The writer suggests that in rooms 51, 59, 26, 29, and 37 the non-functional colonnettes "support" both transverse and wall arches - the cover drawing (of room 59) of Urice's book makes just this point (Figure 166).<sup>181</sup> Thus, rooms 51, 59, 29, and 37, the principal ones of their respective *buyūt*, are actually decorated with large, image-free paradisiacal arcades, as is the single principal room 26; the western and eastern bayt's are meeting areas subsidiary to the southern pair which are linked to room 26. In such a reassessment, the ventilation arcades contribute to the charged space, but theirs is a subsidiary role. Motifs similar to that in both of Qaṣr Kharānah's roundels are to be found in the Qubbat al-Ṣakhrāh. The modest quality of the *qaṣr*'s ornament, including the use of unornamented blind niches, may be attributed to the site's non-residential status and occasional use, but this in no way diminishes the significance of the paradisiacal imagery's occurrence.<sup>182</sup>

Up to Urice's publication, the *terminus ante quem* for the first building phase was an Arabic inscription in Room 51 dated 92 AH/710 CE.<sup>183</sup> Since then more inscriptions and graffiti have been discovered and published, the most significant for this paper being four graffiti in Room 51 signed by `Umar b. al-Walīd b. `Abd al-Malik, who was governor of the Jund al-Urdunn (Jordan) during his father's caliphate (705-715),<sup>184</sup> giving a potentially earlier termination date for the first building phase. Urice interpreted the building as not for permanent residence, but purposely built during the Sufyānid

period, that is up to 684, to serve as an occasional meeting place for the rulers' and tribal representatives.<sup>185</sup> The *qasr* is not on a major travel route, but if that from the Wādī al-Sirhān to Azraq oasis was taken, Qasr Kharānah would be one of a number of stations roughly 20 km. apart between Azraq and `Ammān.<sup>186</sup> Its original white stuccoed exterior, would have made it a very visible destination; its solitary position in open country would have ensured meetings a degree of privacy,<sup>187</sup> and the stucco panel above the entrance has been characterized as creating a "public statement".<sup>188</sup> Urice postulates that construction resumed (the second building phase) during the reign of Marwānid, Yazīd II (720-724) who, with his family, had commercial and agricultural interests in the general area.<sup>189</sup>

Their excavators' having attributed similar purposes to Qasr al-Ḥayr al-Sharqī's Small Enclosure and Qasr Kharānah, and in view of the paradisiacal imagery above their gates, the latter's *terminus a quo* might be re-examined. Following the Second Civil War, it is possible the Marwānids saw the need to meet with tribal allies, and otherwise, at somewhere like al-Sharqī and Qasr Kharānah. Qasr Kharānah's first building phase, consisting of the ground floor with stabling and general accommodation,<sup>190</sup> plus a self-contained suite of rooms with an adjoining cooking and eating area, could have been completed for use while the southern and eastern wings were being constructed, whereupon rooms 49-53, as those about room 37 seem to have been, became a lesser meeting area once the southern rooms were completed.

That room 51 is now known to contain sixteen instances of inscriptions and graffiti is hardly an argument for desuetude.<sup>191</sup> A caliph's son accounted for four of those items, and even principal room 26 has two, dated eighth-ninth/tenth century on epigraphical grounds,<sup>192</sup> potentially put there just after the second building phase had been completed. As is widely-known, the fact that its cars were covered with graffiti did not prevent the New York subway from running! Graffiti can be as easily attributable to the *qasr*'s not being constantly occupied and to the diminished importance of room 51, as to a lengthy hiatus between building phases.

Jabal Says (also known as Seis, Usays),<sup>193</sup> Syria, about 105 km. south-east of Damascus, lies on a travel route "circumventing the worst of the *ḥarrā'*, or fields of basalt, on the way north to Damascus and the Syrian desert."<sup>194</sup> Found in the debris of its single, towered entrance were fragments of a blind arcade, whose shallow niches were faced with alternately plain and serrated horseshoe arches resting on clusters of three plain, engaged colonnettes, (Figure 167); the arcade is thought to have crowned the wall.<sup>195</sup> It is unknown whether these niches contained ornament. Inside, similar open niches (Figure 168)<sup>196</sup> were placed like a balustrade between the columns of the upper storey (Figure 169),<sup>197</sup> indicating where the place of audience is likely to have been.

This is another example of the imagery's adaptability; it might be as spare or elaborate as occasion demanded, but was not of itself sacrosanct, so long as some manifestation of it was present to indicate the place of audience. Al-Walīd I lived at Jabal Says for a time prior to his becoming caliph and, on the basis of the site's mosque with its recessed *mīhrāb*, Brisch suggested a date of 88-90 AH/707-709 CE.<sup>198</sup> Dated graffiti in the area points to Umayyad occupation from 93 AH/712 CE to 119 AH/737 CE.<sup>199</sup>

A more distant site to be considered is the Main Palace at Chal Tarkhan-Eshqabad, near Rayy, Irān, the probable date of whose stucco ornament is the Umayyad period, seventh-eighth century CE.<sup>200</sup> The Main Palace's original principal entrance was on the north side, but "habitual entry" into the main hall was through four entrances on the east side, opposite which, seen between three pairs of pattern-sheathed pillars,<sup>201</sup> were four wall niches, the remains of two of which are shown in Figures 170 and 171.<sup>202</sup> At the back of each niche, between higher borders, are two "further recessed panels with floral ornament and thus simulates a view into a garden or greenery",<sup>203</sup> an observation appreciated by the writer, who, quite independently, had reacted in the same way to `Ammān's niches.

At the panel bases in Figure 171 are pearl-banded semi-circles reminiscent of those at `Ammān. That on the left has a bar between it and the vegetation above, that on the right, a leaf below it; however, in both cases the semi-circles are within the inner panels and perhaps meant to

imply the ground from which the plant springs. Little remains of the other foliate motif in the right-hand panel of this niche,<sup>204</sup> but Thompson likened the left panel's plant within a pearl and heart border to a similar panel at Khirbat al-Mafjar,<sup>205</sup> found *in situ* on the south wall of the palace entrance (Figure 172),<sup>206</sup> and to an "actual instance of a structural and decorative panel" found in the blind niches filled with foliage on the entrance tower of Qaṣr al-Ḥayr al-Sharqī's Lesser Enclosure.<sup>207</sup>

There are grapes in both panels of Figure 170,<sup>208</sup> quite naturalistic here, with fruit and a leaf in each vine loop. Of the two niches not illustrated, the panels of one probably contained vines, and those of the other showed "two variations of a candelabra tree with down-curving leaves".<sup>209</sup> Other garden allusions were made in connection with the main hall. Pillars 3 and 4 were sheathed in the concentric spirals, through which fish "swam", and other fillers were various leaf motifs and overlapping heart florets all of which "must represent the fruitfulness and pleasures of vegetation which originate from water", and the columns themselves "may thus be regarded as symbolic of all the pleasant aspects of a Persian garden".<sup>210</sup>

In the Main Hall neither engaged colonnettes nor serrated arch faces are mentioned. Nor were the panels the Hall's only ornament; there were plaques of a boar hunt, and the story of Bahrām Gūr and Azadah, and large-scale human and animal reliefs. Nevertheless, it does not seem to be mere coincidence that the recessed panels are referred to as providing a "view into a garden". The Main Palace's lateral entrances and niches are called "original" features when compared with known Sāsānid structures, and their arrangement is said to be "unique".<sup>211</sup> A source considered for the entrances and niches was the palace at Sarvistān and, for "ornamental niches", R. Ghirshman's reconstructions of the Great Hall and its niches at Bīshāpūr.<sup>212</sup> Bīshāpūr's insufficient remains have been mentioned and, since D. Thompson's study, Sarvistān's Sāsānid attribution has been rejected in favour of an early Islāmic date, between 750 and 950 CE;<sup>213</sup> however, knowledge of `Ammān, Qaṣṭal and Ruṣāfah provides another framework for understanding the relationship of the panels to the Main Hall's adjusted entrance.

Blocking off the Hall's original principal entrance between piers 9 and 10 during the Umayyad period<sup>214</sup> meant that visitors coming through the new lateral entrances were confronted with the niches and their garden-view panels on the wall opposite. Adjusting the principal entrance to force such a circumstance is most significant; it confirms that the placement of the second architectural motif, with or without paradisiacal imagery, at sites previously mentioned was purposeful. Had the original entrance remained, the garden imagery at one side could have appeared incidental. Confrontation enhanced the imagery's status, while its association with Sāsānid figural themes suggests a compromise to suit different geographical and cultural circumstances. It was a Marwānid solution to the problem of installing the iconography in the least unsuitable part of an existing, unsympathetic architectural setting. The presence of the garden imagery suggests that the Main Hall was used for public audience in this complex of buildings. Its auxiliary area may have been reached by turning left through door 7 ("d7" on Figure 173), behind which the expedition's architect suggested there was a "half-domed throne room".<sup>215</sup>

*A propos* `Ammān's Reception Hall, had its "architectural detail and decoration" been entirely within the Sāsānid tradition,<sup>216</sup> then surely engaged colonnettes and serrated arch faces could have been incorporated into the decorative programme of Chal Tarkhan-Eshqabad's Main Hall. Yet Thompson makes no mention of such features, leading to the speculation that the frame used in Greater Syria would have no significance here, even though Thompson described Chal Tarkhan-Eshqabad's Umayyad decoration as done in a manner "more Sasanian" than what the Sāsānids would have produced.<sup>217</sup> On the other hand, Thompson's explication of the Persian garden symbolism of pillars 3 and 4 provides a conceptual framework for the Umayyad garden panels, in what must have been as striking an evocation of paradisiacal imagery as that of `Ammān and Qaṣṭal, and as purposeful.



## Notes

1. Northedge, Studies, p. 71.

2. *Ibid.*, fig. 36.

3. Northedge, Studies, p. 99; Antonio Almagro Gorbea, El Palacio Omeva de Amman, vol. 1 "La Arquitectura," Madrid: Instituto Hispano-Arabe de Cultura, 1983; in the English summary, p. 205.

4. Northedge, Studies, p. 82.

5. *Ibid.*, p. 101.

6. *Ibid.*, p. 102.

7. *Ibid.*, p. 81.

8. Cf. Roman Ghirshman, Iran: Parthians and Sassanians. Translated by Stuart Gilbert and James Emmons, London: Thames and Hudson, 1962, figs. 177 and 179 showing models of the reconstructed Great Hall and one of the niches. The reconstructions show the niches resting on a continuous ledge.

9. Northedge, Studies, p. 82, states Bīshāpūr's ground plan only (his fig. 58) is reliable, as the walls are preserved to a height of about 2 m., and it is not known whether the building was still standing in Umayyad times to provide a model for `Ammān.

10. Edward J. Keall, "Bīshāpūr," Encyclopædia Iranica vol. IV, p. 288, referring to Building B.

11. Only a portion of one stepped merlon was found, with "a half-palmette scroll on both sides", but Northedge comments merlons are among the first elements to disappear, citing the Great Mosque, Siraf, where only two were recovered from a building used for a much longer period than those at `Ammān, Northedge, Studies, p. 80, and n. 77.

12. *Ibid.*, fig. 41.

13. Almagro Gorbea, "La Arquitectura," p. 201; Northedge, Studies, pp. 80-81.

14. Northedge, Studies, pp. 80-81.

15. Oleg Grabar, Renata Holod, James Knustad, William Trousdale, City in the Desert, Qasr al-Hayr East. Harvard Middle Eastern Monographs XXIII/XXIV. Cambridge, Mass.: Harvard University Press, 1978, vol. 1, p. 20.

16. Urice, Qasr Kharana, p. 74.

17. Northedge, Studies, p. 81.

18. Almagro Gorbea, "La Arquitectura," p. 201, and fig. 9.

19. Northedge, Studies, fig. 40.

20. *Ibid.*, p. 77.

21. *Ibid.*, p. 89.
22. Almagro Gorbea, "La Arquitectura," p. 74.
23. Northedge, *Studies*, p. 77, and figs. 45-46, 55; there are two rows of serration on the interior arches and one row on the exterior arches.
24. *Ibid.*, p. 97.
25. Northedge, *Studies*, p. 102; Almagro Gorbea, "La Arquitectura," at pp. 204-205, considers Qal'at `Ammān to be a symbiosis of the organization, construction techniques and decoration of the Sāsānid and Byzantine-Classical worlds.
26. Jens Kröger, *Sasanidischer Stuckdekor*, Baghdader Forschungen Band 5, Mainz am Rhein: Philipp von Zabern, 1982, taf. 88.2 "Fragment des 3. Rundpfeilerpaares"; see also taf. 88.1.
27. Kröger, *Sasanidischer*, abb. 40 "Rekonstruktionsversuch des Ostiwans"; see taf. 15.3, 17.1-2 for the fragments on which this reconstruction was based; also the reconstruction for Ma'ārid I, abb. 43, taf. 25.2-3.
28. Northedge, *Studies*, pp. 77 and 89.
29. *Ibid.*, fig. 49.10.
30. *Ibid.*, fig. 52.2.
31. M. Gautier van Berchem, "Mosaics," figs. 337, outer face of octagonal arcade; 338, octagonal arcade; 339, octagonal arcade, and 340, circular arcade.
32. *Ibid.*, pl. 54.b.
33. M. Avi-Yonah, "Oriental Elements in Palestinian Art," reprinted in M. Avi-Yonah, *Art in Ancient Palestine*, Selected Studies, edited by Hannah Katzenstein & Yoram Tsafrir. Jerusalem: The Magnes Press, 1981, p. 97 ff; fig. 12 on p. 98 is a sarcophagus from the Haram, Jerusalem, and the coffin in pl. 18.7 is from Kufeir.
34. Northedge, *Studies*, p. 92.
35. *Ibid.*, figs. 49.5 and 49.6.
36. *Ibid.*, fig. 53.1.
37. Almagro Gorbea, "La Arquitectura," fig. 41.
38. M. Gautier van-Berchem, "Mosaics," figs. 153-156, shown in pls. 12c and 24b, 14a, 11a, 15a, Figure 130 herein; also fig. 160 and pl. 24f.
39. Creswell, *EMA*, vol. 1, part 1, pl. 29c.
40. *Ibid.*, pls. 27.c., 27.e, 28.d.

41. Deborah Thompson, Stucco from Chal Tarkhan-Eshqabad near Ravy, Warminster: Aris & Phillips Ltd., 1976, Figure X.4-5 and p. 56 ff.
42. Northedge, Studies, fig. 48.7 and 49.11. Contra Northedge's statement on their apparent absence in the art of Byzantine Greater Syria, trefoils can be seen between the arms of crosses, on a chancel screen from a church near Massu'ot Itzhak, Israel, c. 6th century, Bernard Goldman, The Sacred Portal, Detroit: Wayne State University Press, 1966, p. 49, n. 53, photo. 15; and at Ğerġanaz, Syria, 4-6th century, Lassus, Inventaire, tome II, pl.IV.3.
43. Hamilton, Structural, pl. LV.7W.
44. Northedge, Studies, 49.14.
45. Hamilton, Structural, pl. LXIV.17E.
46. Thompson, Chal Tarkhan, p. 67; on her pl. XI.3, 2 1/2 spirals up and 2 1/4 spirals from the left, the head of such a fish can be seen in one interstice and its tail in the interstice immediately right. These spiral fields occur on pillars 3 and 4 in the main hall of the Main Palace.
47. Thompson, Chal Tarkhan, p. 86, and Northedge, Studies, p. 94, and n. 245.
48. The illustration here is from Ettinghausen and Grabar, Art and Architecture, fig. 9, "Jerusalem, Dome of the Rock, completed 691, mosaics".
49. Charles Clermont-Ganneau, Archaeological Researches in Palestine During the Years 1873-1874, vol. 1, with numerous illustrations from drawings made on the spot by A. Lecomte du Noüy, Architect. Trans. by Aubrey Stewart. "Raritas" Reprint, Jerusalem, 1971, p. 179 ff.
50. Creswell, EMA, vol. 1, part 1, p. 78 ff.
51. Clermont-Ganneau, Archaeological, p. 182.
52. *Ibid.*, p. 187, and the illustrations on p. 185.
53. Creswell, EMA, vol. 1, part 1, fig. 24, "The Dome of the Rock. West and south-west façades when partly stripped in 1873-74. (From Clermont-Ganneau, *Archaeological Researches*.)". Creswell's fig. 32, "The Dome of the Rock in 1483. (From Breydenbach, *Peregrinationes in Terram Sanctam*)" shows the parapet's arcades.
54. Creswell, EMA, vol. 1, part 1, pp. 89-90, was able to look behind the parapet, as Clermont-Ganneau was not, and in the whole perimeter found only four opened niches, all the rest were blind; see his pl. 2b.
55. Clermont-Ganneau, Archaeological, illustration on p. 189.
56. *Ibid.*, pp. 191-192.
57. Creswell, EMA, vol. 1, part 1, p. 80 note 1.
58. C.R. Conder, Syrian Stone Lore, pp. 360-361.
59. Lyttelton, Baroque, fig. 126, p. 24; the Temple is dated to the 2nd century CE.

60. Oscar Reuther, "Sāsānian Architecture. A History," vol. 1: 519, in Survey of Persian Art, edited by Arthur Upham Pope. vol. 1. London and New York: Oxford University Press, 1938.

61. Howard Crosby Butler, Architecture and Other Arts. Part II of the publications of an American Archæological Expedition to Syria 1899-1900. New York: The Century Co., London: William Heinemann, 1904; pp. 181-82; among churches of the period noted for their exterior moulding are the apse at `Arshîn, p. 199; Bānķūsā, p. 194, and the North Basilica of the Church of S. Simeon Stylites, p. 190, in addition to the two examples given by the writer in the main text.

62. Butler, Architecture, p. 227, upper photograph.

63. J. Lassus, Sanctuaire, pl. XXI.1, dated 6th century.

64. Ling, Roman Painting, pp. 21-22, fig. 18, "Stucco lattice-work balustrade. Herculaneum V1-2 (Samnite House), *atrium*. Late 2nd or early 1st century B.C."

65. *Ibid.*, p. 152 .

66. Michael Grant, Cities of Vesuvius: Pompeii and Herculaneum. Harmondsworth: Penguin Books, 1976, pp. 168-169, from an unspecified house at Pompeii.

67. Maxwell L. Anderson, "Pompeian Frescoes," reprinted from The Metropolitan Museum of Art Bulletin, Winter 1987/88, p. 18, said of fig. 24. In the reconstructed room of which it is a part, the garden is but one independent view divided from its fellows by painted columns - writer's photograph.

68. Northedge, Studies, p. 100.

69. Almagro Gorbea, "La Arquitectura," p. 205.

70. In the Umayyad period `Ammān was the administrative centre of a sub-governorate of Damascus, Northedge, Studies, p. 48.

71. *Ibid.*, p. 79 states there are "more fragments than would be appropriate" for the two niches in Almagro Gorbea's reconstructions; he has restored twenty.

72. Northedge, Studies, figs. 67-68; Emilio Olávarri-Goicoechea, El Palacio Omeya de Amman, vol. II "La Arqueología," figs. 39-42.

73. Almagro Gorbea, "La Arquitectura," p. 204.

74. *Ibid.*, pp. 206-07.

75. Northedge, Studies, p. 88.

76. Walter Karnapp, "Die Nordtoranlage der Stadtmauer von Resafa in Syrien," Archäologischer Anzeiger, (1970): 98-123, abb. 18 shows the reconstruction of the North Gate's interior; *idem.*, "Die Stadtmauer von Resafe in Syrien," Archäologischer Anzeiger, (1968): 307-343, abb. 2. shows a plan of the site's walls, towers, gates, etc.

77. Patricia Carlier, avec une contribution de Frédéric Morin, "Recherches Archéologiques au Chateau de Qastal (Jordanie)," Annual of the Department of Antiquities of Jordan (1984) 28: 343-383, plus plates; Patricia Carlier, "Qastal un chateau du desert en Jordanie," Archéologia (1985) 206: 46-57;

*idem.*, "Qaṣṭal al-Balqa`"; Patricia Carlier et Frédéric Morin, "Qaṣṭal," Archiv für Orientforschung (1986) 33: 187-206; Patricia Carlier and Frédéric Morin, "Archaeological researches at Qaṣṭal, second mission, 1985," Annual of the Department of Antiquities of Jordan (1987) 31: 221-246.

78. Geoffrey R. D. King, 1987 "The Umayyad qusur and related settlements in Jordan," The Fourth International Conference on the History of Bilād al-Shām during the Umayyad Period. Proceedings of the Third Symposium. (1987) vol. II, English Section: 77.

79. Geoffrey R.D. King, "The distribution of sites and routes in the Jordanian and Syrian deserts in the early Islamic period," Seminar for Arabian Studies (1987) 17: 97 ff.

80. Carlier et Morin, "Archaeological," fig. 9.

81. Carlier et Morin, "Recherches," p. 347, they were listed among a number of features called "perse et sassanide", but not otherwise described.

82. Carlier, "Qaṣṭal al-Balqa`," p. 108.

83. Carlier et Morin, "Recherches," figs. 16a, 16b, and 17 "Pilastre à colonnettes pour montant nord de l'Entrée"; Carlier, "Qaṣṭal al-Balqa`," illus. 3.

84. Carlier et Morin, "Recherches," p. 344.

85. *Ibid.*, pl. LXVI.2 "Qaṣṭal, Maquette de Restitution, par Frédéric Morin, Salle d'audience au dessus du vestibule, Coupole centrale, absides est et sud vues de l'abside nord".

86. *Ibid.*, p. 349, figs. 20 "Colonnnette engagée avec base et chapiteau tresse", 21 "Colonnnette engagée avec chapiteau floral".

87. Carlier, "Qaṣṭal al-Balqa`," p. 108.

88. Carlier et Morin, "Recherches," fig. 30 "Claveau pour coupole à svastika".

89. Kröger, Sasanidischer, abb. 120, "Kīś, Gebäude I. Bogenrekonstruktion (nach Watelin, Kish, Abb. 171B)".

90. Carlier et Morin, "Recherches," fig. 24, "Claveau pour tête de voute", and fig. 26, "Claveau a rosace pour voute".

91. Carlier et Morin, "Recherches," p. 349; Carlier, "Qaṣṭal al-Balqa`," p. 108.

92. Carlier, "Chateau du Desert," both on page 52.

93. Carlier et Morin, "Recherches," figs. 33, 34.

94. Avi-Yonah, "Oriental Elements," pp. 80-83, esp. p. 81 and n. 9, figs. 52, 54; Lassus, Inventaire, tome 1, figs. 8, 50, 74-75, and especially the almost geometrical grapes and leaves in fig. 138, Ruweyda, and on the capitals at Hawa, tome 2, pl. XVI.

95. Unfortunately, the smaller niche was either "given away or sold" to the Kuwait National Museum, who sent it off to "Les Tresors de l'Islam" exhibition in Geneva, under acquisition number LNS65S. Comparing the excavator's photograph and drawing with the catalogue photograph, it can be seen that,

as a Kuwaiti possession, the serration beneath the niche has been trimmed away, Carlier and Morin, "Archaeological Researches," p. 223 and n. 4. In entry no. 353 of the exhibition's English language catalogue, (Tony Falk et al, Treasures of Islam, Secaucus, New Jersey: Wellfleet Press, 1985), it is said to be from "Greater Syria, 1st half of 8th century" and "closely related" to the *in situ* niches at 'Ammān. As well, Qastal's residence and adjacent mosque received very severe damage from the modern owner of the site, with the result that parts of those structures are now irretrievably lost and known only through photographs and site records, Carlier and Morin, "Archaeological Researches," p. 221.

96. Myriam Rosen-Ayalon and Avraham Eitan, Ramla Excavations: finds from the VIIIth century C.E., catalogue no. 66, Jerusalem: Jerusalem Post Press, 1969, illustrated on the unnumbered nineteenth page, "Mould for neck of a jar, with a modern cast".

97. Michael L. Bates, "The Coinage of Syria under the Umayyads, 692-750 A.D.," The Fourth International Conference On The History of Bilād al-Shām During The Umayyad Period. Proceedings of the Third Symposium, 1987, vol. II, English Section: p. 226.

98. Avi-Yonah, "Oriental Elements," pp. 87-88 and pl. 17.7 of a chancel post from a church at Jundi.

99. Carlier et Morin, "Recherches," p. 347.

100. *Ibid.*, p. 352.

101. Carlier, "Qastal al-Balqa'," p. 108.

102. *Ibid.*, p. 108.

103. Gaube, "'Ammān," taf. 7, H no. 10, and p. 59.

104. *Ibid.*, p. 69.

105. Carlier and Morin, "Archaeological researches, second mission," pp. 236-239 and figs. 15, 16.

106. Gaube, "'Ammān," p. 72, and taf. 9, A, B no. 2, C no. 3.

107. Carlier et Morin, "Recherches," p. 350, nn. 26-28.

108. Carlier, "Qastal al-Balqa'," pp. 120-121.

109. Katharina Otto-Dorn, "Bericht über die grabung im Islamischen Rusafa," Archäologischer Anzeiger des Deutschen Archäologischen Instituts, (1954) 69: 138-159; *idem.*, "Bericht über die grabung im Islamischen Rusafa," Les Annales Archéologiques de Syrie, (1954-55) 4-5 jointly: 45-58. Despite their similar titles, the articles' content and illustrations are not quite the same.

110. Otto-Dorn, "Grabung," pp. 119-133; this article deals with both campaigns, but does not, for example, reproduce all the earlier illustrations - a significant point.

111. *Ibid.*, p. 119.

112. *Ibid.*, text abb. A.

113. In Otto-Dorn's "Bericht," 1954-55 initial site plan, (abb. 1, "Rusafa, Omayyaden Schloss"), "A" is Room 1; "B" is the north-west-corner of "Nordost-Nebenhof"; "C" is the north-east corner of the principal courtyard, and "D" is just within the south-west tower area.
114. Otto-Dorn, "Grabung," p. 123.
115. Otto-Dorn, "Bericht," 1954, abb. 2.
116. *Ibid.*, abb. 3.
117. Otto-Dorn, "Grabung," taf. 1, abb. 3, and p. 123.
118. Otto-Dorn, "Bericht," 1954, abb. 4, "Stuckfriesfragment mit doppeltem Zackenbogen", and column 145.
119. Otto-Dorn, "Bericht," 1954, column 145; *idem.*, "Grabung," p. 123, and text abb. 4, "Halbsäulchenfragment vom Tor".
120. Otto-Dorn, "Bericht," 1954, column 146; *idem.*, "Grabung," p. 123.
121. Northedge, *Studies*, p. 80 and n. 78.
122. According to the English captions of Almagro Gorbea, "La Arquitectura," pl. 55b "Detail of the semi-columns with gilded stucco from the entrance arch to the *īwān*", and pl. 56b "Eastern side of the courtyard 3 with the gilded semi-column of the façade and the foundation of the first column".
123. Otto-Dorn, "Bericht," 1954, column 145; *idem.*, "Grabung," p. 122.
124. Otto-Dorn, "Grabung," p. 123.
125. *Ibid.*, p. 125.
126. *Ibid.*, p. 125.
127. There's some ambiguity in the words used for what the writer believes are references to this room, for example, "Mittelsaal" in 1954 and 1957, and "Hauptthall" in 1957.
128. Otto-Dorn, "Grabung," taf. 2 abb. 7, "Sockelmalerei (ergänzt) aus Saal 1".
129. Otto-Dorn, "Bericht," 1954, column 146 "... Zwischen ihnen satsen vier grottere Mittelfelder und zwei schmalere Seitenfelder".
130. Otto-Dorn, "Bericht," 1954, columns 146, 148.
131. Otto-Dorn, "Bericht," 1954, columns 146, 148; *idem.*, "Grabung," pp. 125-126. A stucco fragment with a braided frieze had a piece of wall painting attached below, see "Bericht," 1954, column 148, and in abb. 8. of the "Bericht," 1954-55 article there's a none too clear photograph of painted fragments referred to as coming from this room.
132. Otto-Dorn, "Grabung," p. 126, taf. 3. abb. 9, "Nischenmalerei aus Saal 1".

133. Otto-Dorn, "Grabung," p. 122, "Rechtecknische", but called "square" in Creswell and Allan, A Short Account, p. 146.
134. Grabar et al, City in the Desert, vol. 1, p. 16, vol. 2, photograph 12, drawing 7D.
135. Myriam Rosen-Ayalon, "The First Mosaic Discovered in Ramla," Israel Exploration Journal (1976) 24: p. 119, pl. 23.C.
136. Otto-Dorn, "Grabung," taf. 4 abb. 10, "Anlage II, Bogenaufsatz aus Stuck".
137. *Ibid.*, taf. 4 abb. 11, "Anlage II, Blindnischen-Füllung aus Stuck".
138. *Ibid.*, p. 130.
139. *Ibid.*, text abb. C, "Stuckfragment vom Tor", and p. 123.
140. Otto-Dorn, "Bericht," 1954, column 145.
141. *Ibid.*, 1954, column 152.
142. This illustration appears in all three of her articles: abb. 10 in "Bericht," 1954-55; abb. 8 in "Bericht," 1954; taf. 4 abb. 12 in "Grabung".
143. Otto-Dorn, "Grabung," p. 129.
144. Otto-Dorn, "Bericht," 1954, column 153.
145. Otto-Dorn, "Grabung," p. 129 and n. 31.
146. Thilo Ulbert, "Ein umayyadischer Pavillon in Resafa-Ruṣāfat Hišām," Damascener Mitteilungen (1993) 7: 213-231.
147. Harry Turtledove, The Chronicle of Theophanes: an English translation of *anni mundi* 6095-6305 (A.D. 602-813), with an introduction and notes. Philadelphia: University of Philadelphia Press, 1982, p. 95.
148. Creswell and Allan, A Short Account, fig. 88, "Qasr al-Hair ash-Sharqi: entrance to the Lesser Enclosure".
149. Grabar et al, City in the Desert, vol. 1, pp. 3-4.
150. *Ibid.*, p. 3.
151. *Ibid.*, p. 4.
152. See chapter 1, the margins on the arches of Figures 2 and 3, and those referred to at Lepcis Magna and in the blind arcading at the North Gate of Sergiopolis/Ruṣāfah, Syria, Figure 20.
153. Albert Gabriel, "Qasr el Heir," Syria (1927) 8: 302-329, fig. 11, "Petit château: restitution de la frise".
154. Grabar et al, City in the Desert, vol. 1, pp. 31-32.



155. *Ibid.*, p. 32.

156. *Ibid.*, pp. 156-157.

157. *Ibid.*, pp. 156-157.

158. *Ibid.*, p. 12.

159. *Ibid.*, p. 156.

160. *Ibid.*, pp. 149-150.

161. Urice, Qasr Kharana, p. 74.

162. *Ibid.*, "South facade, stucco panel".

163. *Ibid.*, provides a discussion of the literature, pp. 6-23, and a comprehensive bibliography, p. 91 ff.

164. *Ibid.*, pp. 82-83.

165. *Ibid.*, pp. 61-63.

166. *Ibid.*, p. 30.

167. *Ibid.*, fig. 120, "Upper floor, plan", with additions by the writer.

168. *Ibid.*, p. 29; the hole in room 48's floor is said to communicate with room 18, below, however, on the plan, Figure 161 herein, a communicating hole shows in room 47, and per the photograph of it and caption in fig. 93, this communicates with room 17, below.

169. *Ibid.*, p. 72.

170. *Ibid.*, fig. 27, "Room 51, general view towards southwest corner".

171. *Ibid.*, p. 72.

172. *Ibid.*, fig. 136, "Rosette, rooms 49-53".

173. *Ibid.*, pp. 72-73.

174. *Ibid.*, fig. 140, "Rosette, room 59".

175. *Ibid.*, p. 33.

176. Robert Hillenbrand, "Qasr Kharana Re-examined," a review of Qasr Kharana in the Transjordan by Stephen K. Urice, in Oriental Art (1991) NS 37.2: 113.

177. Urice, Qasr Kharana, fig. 141, "Room 59, north wall, elevation".

178. *Ibid.*, pp. 72-73.

179. *Ibid.*, pp. 75-76; other comparanda were the arcades at Ukhaydir, Atshan and Ma'aridh.

180.*Ibid.*, p. 76.

181.*Ibid.*, cover drawing signed "J. Sagasti".

182.Cf. Hillenbrand, "Qasr Kharana Re-examined," p. 112, that Qasr Kharānah's design was ignored by later architects and was a "dead end", and at p. 113, said of exterior arcade, that "little attempt is made to indulge in external display". Its design may have been ignored, but, as is reiterated herein, a building's design or origin is secondary to the inclusion of some manifestation of the paradisiacal imagery.

183.Urice, Qasr Kharana, pp. 6-8, with other Arabic and Greek inscriptions and graffiti noted.

184.Frédéric Impert, "Inscriptions et espaces d'écriture au Palais d'al-Kharrāna en Jordanie," Studies in the History and Archaeology of Jordan (1995) 5: 409-411, graffiti numbers. 8-11 inc.; of these, numbers 8-10 were published previously by Ghazi Bisheh.

185.Urice, Qasr Kharana, pp. 86-88.

186.Urice, Qasr Kharana, p. 84; Ghazi Bisheh, "Qasr Mshash and Qasr `Ayn al-Sil: two Umayyad sites in Jordan," The Fourth International Conference on the History of Bilād al-Shām during the Umayyad Period. Proceedings of the Third Symposium, vol. II, English Section: p. 88.

187.Urice, Qasr Kharana, p. 86.

188.*Ibid.*, p. 79.

189.*Ibid.*, pp. 86-88.

190.*Ibid.*, pp. 26-27.

191.Imbert, "Inscriptions et espaces," p. 416, "... vers 90 h. l'intérieur du palais aurait commencé à être dégradé progressivement".

192.*Ibid.*, pp. 412-413, numbers 15 and 16; room 29 has four items, and room 37 has eight - see the table on page 415.

193.Klaus Brisch, "Le chateau omeyyade de Djebel Seis," Les Annales Archéologique de Syrie (1963) 13: 135-158; *idem.*, "Das omayyadische schloss in Usais," Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo (1963) 19: 141-187; *idem.*, "Das omayyadische schloss in Usais (II)," Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo (1965) 20: 138-177.

194.King, "The distribution of sites," pp. 92-93, and map 2, "Desert routes in eastern Jordan and northern Arabia".

195.Brisch, "Das omayyadische, (II)," 1965, p. 143, and part of abb. 4, "Fragmente und Rekonstruktion der Blendarkade vom Torturm des Schlosses (P. Grunauer)". It's not clear just where the niches would have been placed, but the curved piece of wall to which they are attached suggests some part of the tower. In "Das omayyadische," 1963, Brisch refers briefly to Otto-Dorn's article in Ars Orientalis about serrated arches and blind arcades having been found at Ruṣāfah, `Ammān and Qasr Kharānah.

196.Brisch, "Das omayyadische," 1963, taf. XXXVII.b, "Bögen der Stuckbalustrade".

197. *Ibid.*, abb. 13, "Rekonstruktion der Hoffassade (P. Grunauer)".
198. Brisch, "Le chateau," p. 157.
199. Creswell and Allan, A Short Account, p. 121.
200. Thompson, Chal Tarkhan, pp. 61, 71, 104 n. 51.
201. *Ibid.*, p. 3.
202. *Ibid.*, p. 3, and pls. XIII.1 and .6, niche' excavation numbers C.295 and C.296 respectively, "Decorative niche and flat facings from the Main Palace".
203. *Ibid.*, p. 72.
204. *Ibid.*, p. 73.
205. *Ibid.*, p. 73.
206. R. W. Hamilton, Khirbat al Mafjar, An Arabian Mansion in the Jordan Valley, Oxford: Clarendon Press, 1959, pls. VI.2-3, XXXIV.1.
207. Thompson, Chal Tarkhan, p. 73; there was no mention of the al-Mafjar example having been found in place.
208. *Ibid.*, pl. XIII.1, excavation number C.295.
209. *Ibid.*, p. 73, excavation numbers C.297 and C298, respectively.
210. *Ibid.*, p. 67.
211. *Ibid.*, p. 4.
212. *Ibid.*, p. 4 and n. 9.
213. Lionel Bier, Sarvistan, A Study in Early Iranian Architecture, University Park and London: The Pennsylvania State University Press, 1986, p. 48 ff, and p. 53 specifically.
214. Thompson, Chal Tarkhan, p. 3.
215. *Ibid.*, p. 4; the architect offered no corroborating evidence for the suggestion.
216. Northedge, Studies, p. 102.
217. Thompson, Chal Tarkhan, p. 54.

## Chapter Four, Part 2: Origins and Uses

In part I of this chapter the paradisiacal arcades' origin was considered, as was their installation at various sites, one of which, `Ammān's Reception Hall, was discussed at some length concerning the influences other than Sāsānid that may have contributed to its design and decorative programme. A characteristic feature of the arcades is their serrated arches and part II opens with comments on their likely origin and use.

K. Otto-Dorn drew attention repeatedly to Ruṣāfah's characteristic serrated arches and the similar ones at `Ammān. H. Gaube compared serrated arches at `Ammān, Qaṣṭal and Qaṣr Kharānah; P. Carlier noted the similarity between Qaṣṭal's and `Ammān's niches which have this feature and, in his examination of pendant and horizontal serration at Qaṣr Kharānah, S. Urice, quoting L. Bier's work at Sarvistān, drew attention to Sāsānid uses of the motif.<sup>1</sup> On the basis of three, third century CE palaces at Fīrūzābād and Bīshāpūr, Bier suggested that serration "must have been a common feature of Sāsānid architecture, at least in Fārs, where it served the same function as the dentil freeze in classical buildings in the West".<sup>2</sup> Attention is drawn now to other examples of its application. The wide view is taken that serration is an easily-manipulated geometrical motif that may be carried out in a variety of techniques on different media.

M. Avi-Yonah points to the evidence of serration on votive altars from Gezer c. 625-600 BCE,<sup>3</sup> and to its use on Jewish ossuaries from about the period of the Second Temple.<sup>4</sup> In his setting out of "three appearances of chip-carving" (serration, or *kerbschnitt*) in Palestine, L. Rahmani says the first was in the Second Temple period and "exclusively" on Jewish ossuaries.<sup>5</sup> Such an ossuary, found at Ramat Rahel, Israel, has serration about its sides and outlining rosettes.<sup>6</sup> At Dura-Europos the serrated arch above the Atargatis graffito is thought to reproduce the shrine in which the goddess stood (Figure 174).<sup>7</sup> There is a graffito in a tomb of Jerusalem's Northern Necropolis that shows two

registers of serration on an arch (Figure 175).<sup>8</sup>

The serration found in Byzantine churches in the Negeb from about the mid-fifth century through the seventh is at the beginning of Rahmani's second appearance of the motif.<sup>9</sup>

C.L. Woolley noted the use of serration at Abda, Negeb, as the lowest register in a string course,<sup>10</sup> and on the capital of what seem to have been a pair of engaged colonnettes, from the side door of the North Church at Esbeita (Figure 176).<sup>11</sup> According to A. Segal, this capital "disappeared decades ago and except for the drawing in Woolley and Lawrence's book there is nothing else on it".<sup>12</sup>

Segal lists nineteen instances of the common motif "dog's teeth", or serration, on arches, lintels and pilasters at Shivta<sup>13</sup> (also known as Sobota, Sebeita, S'beita, Esbeita), Negeb, including painted serration on the arch of an apse, and carved serration on the arch of a niche (Figure 177), both in the South Church,<sup>14</sup> and on a pillar cornice (Figure 178).<sup>15</sup>

H. Colt observed that at Nessana, Negeb, "dog's tooth" was part of the chip carving repertoire of simple designs that could be marked out with a compass and ruler,<sup>16</sup> contra R. Ghirshman's statement that saw-tooth and zigzag patterns are all motifs deriving from brick buildings.<sup>17</sup> In the local tradition the work was done on "intermediate quality limestone" that was comparatively soft when freshly quarried and hardened after exposure to the weather. The motif was found on bases and caps of door jambs and arch voussoirs, and used frequently to decorate large pilaster caps from which arches sprang.<sup>18</sup>

D. Rice found fragments of serrated arches carved from stucco at Hīrah, near Kūfah. Some that were recovered from in a trench between mounds I and II, are thought to have been thrown out when building I in mound I was restored; the two pieces he illustrates have one and two rows of serration, respectively (Figure 179).<sup>19</sup> Three construction, or restoration, phases were observed in building I; the first was considered to be Sāsānid, and the second and third Islāmic, ending late in the eighth century or early ninth.<sup>20</sup> There is some ambiguity in the period to which Rice assigns the serrated pieces. In 1932 he said that some elaborate carved stucco *in situ* belonged to the third period,

and among examples cited says that some doors were topped by arches, and "fragments of *similar* [writer's italics] arches were found on other mounds"; a fragment cited is part of a serrated arch.<sup>21</sup> In 1934 he describes the fragments of which the serrated arch pieces are part, as amongst the material thrown out when building I was restored, and may be late Sāsānid, or belong to the seventh century at the latest.<sup>22</sup>

On an early seventh century CE glass chalice, possibly Syrian, a cross is seen beyond a serrated arch at a building's entrance and there is a band of serration about the rim (Figure 180).<sup>23</sup> A church lintel from Deir Abu Deî shows a serrated arch supported by paired, plain columns between crosses (Figure 181).<sup>24</sup>

A remarkable comparandum for discrete niches and serration is the carved arcade on the lid of an object in the collection of the *Palestine Exploration Fund*, published as a Jewish ossuary by C. Clermont-Ganneau, (Figure 182),<sup>25</sup> and as a Christian sepulchral chest by G. Chester.<sup>26</sup> As can be seen, these niches share capitals and bases, but have individual colonnettes. The arches are serrated, as is the ledge beneath the arcade. This latter feature is much like that found originally with the smaller niche from Qaṣṭal (see Figure 145), while the rosettes within each niche call to mind the stars in Qubbat al-Ṣakhrāh's interior arcade (see Figure 132). Neither publisher mentions a date, but M. Avi-Yonah refers to the ossuary as "late", and within the dating parameters of his research on Palestinian art, one may understand that as late Byzantine.<sup>27</sup>

Tangentially to the ossuary, on the remnant of a pilaster from the tower gateway at Sebaita, Negeb, is another instance of independent niches, whose arches are formed of an architrave resting on the columns (Figure 183).<sup>28</sup> The ossuary, this lintel and that from Deir Abu Deî suggest there may have been some wider taste for the discrete form of arcade prior to its Marwānid use. This pilaster is illustrated by A. Segal,<sup>29</sup> and by M. Avi-Yonah,<sup>30</sup> but seems to have been photographed originally by C.F. Tyrwhitt Drake<sup>31</sup> as one of a pair of pilasters similarly ornamented. In Tyrwhitt Drake's illustration, the pilasters support a lintel which is divided into three metopes, the outer two being filled

with rosettes within double circles; the stone above the lintel has an urn with a palm tree growing in it; a concentration of motifs with relevance for Qubbat al-Ṣakhrah's ornamentation.

As pointed out in part I of this chapter, the arches on the Coptic chest's lowest register and the smaller Qaṣṭal niche have an outer pearl band and an inner serrated one. A similar arrangement appears on an arch c. fourth century CE thought to have come from a church at Khirmet Kermel, about 13 km. south of Hebron (Figure 184),<sup>32</sup> and on the arches of the "Marwān" ewer, found at Abū Sīr al-Malaq, in the Fayyūm, near the reputed tomb of Marwān II (Figure 185).<sup>33</sup> This is one of the comparanda proposed by K. Otto-Dorn for Ruṣāfah's blind arcades.

The ewer's niches have individual colonnettes with Corinthian-type capitals, and shared imposts. Above the arches a luxuriant vine frieze spills out of two vases placed to either side of the vessel's spout.<sup>34</sup> Vases set above columns call to mind similarly-placed vases and vegetation in the Qubbat al-Ṣakhrah, while the rosettes in the arcade follow the usage in Figures 133 and Figure 182. Novel are the birds and animals of an earthly paradisiacal garden.

A similar ewer, exhibited at Munich in 1910, has less well executed arcade ornament. From a rather unclear illustration there is serration on the outer edge of arches which rest on single columns, with animal, birds and vegetation seen through the arcade.<sup>35</sup> On another ewer, in the Keir Collection, just one side of the body has an arcade whose columns support plain arches, beneath which are gazelles and vegetation. In the spandrels are "Sasanian" split palmettes.<sup>36</sup> The "Marwān" could have been the archetype for a group of metal ewers whose decoration, which included bird spouts and ornate fill holes and handles, reflects paradisiacal imagery. One of the group, in the Metropolitan Museum of Art, New York, has no body ornament but the metal appliqué applied to its handle (Figure 186)<sup>37</sup> gives the effect of vines entwining a column as they do those of the kiosk in the western *riwāq* (Figure 187).<sup>38</sup> The leafy turret about its fill hole, a feature which is similar on all the ewers, reprises the theme of a paradisiacal grove seen through arcades (Figure 188).<sup>39</sup> What seems to be a popular interpretation of the turret appears on the body of a polychrome ceramic jug found at Sūsah (Figure

189), dated eighth century CE and described as "... des palmiers, entre lesquels on aperçoit un arbuste(?)".<sup>40</sup>

Imagery comparable to that on the "Marwān" ewer was found on a lintel at Khirbat al-Bayḍā' (also known as Qaṣr al-Abyād), Syria, c. 100 km. south east of Damascus (Figure 190).<sup>41</sup> This depiction has the ewer's spirally-grooved columns, and Qubbat al-Ṣakrah's interstitial ornament and scalloped niche hoods, with a serrated architrave forming the arches. Because Khirbat al-Bayḍā's interior plan differs from that of acknowledged Umayyad structures, its excavator, H. Gaube, thinks it may be a marginal- or early Umayyad building, or, perhaps of Ghassānid construction.<sup>42</sup> The lintel could indicate the site's Umayyad re-use, as it was found in the debris of the eastern enclosure wall in the vicinity of the single entrance.<sup>43</sup> Al-Bayḍā' was occupied seasonally, as climate and water supplies limit its use to the months of March to May, when the ground is covered with grass and flowers; at other times of the year the country is desolate.<sup>44</sup> One of the site's uses is thought to have been as a point of contact with Ghassān's tribal allies.<sup>45</sup>

An arcade, with serrated arches from which hang lamps, appears on the dome-shaped portion of a steatite lamp (Figure 191) found in an Umayyad residence at al-Fadayn/Mafraq, northern Jordan, an ancient site re-used in the Umayyad period as a *ḥajj* station. A piece of ivory from the same site shows a single arch with a serrated face. Umayyad usage is attributed to the period of al-Walīd II (743-744).<sup>46</sup>

L. Rahmani's second period of "chip-carving" in Palestine finished with the end of Umayyad rule.<sup>47</sup> He remarked on its use on stone and clay Palestinian incense burners of the sixth-eighth centuries CE, and on Umayyad pottery;<sup>48</sup> an instance of the latter appears in Figure 192.<sup>49</sup>

The above examples show that rather than a Sāsānid motif of limited and temporally-distant use, serration was a contemporary, commonly-used Byzantine motif of which the Muslims availed themselves. Over the centuries it had been employed by Jews, Christians and others and, although ostensibly non-denominational, it may not have always been neutral.<sup>50</sup> Serration was a traditional



motif in the Negeb, and in Palestine. Colt observed that Nessana, along with other Negeb cities, had prospered in the late sixth and seventh centuries CE with the revival of a caravan route between Aylah and the Mediterranean, and that the Muslim conquest seemed to have produced few changes there.<sup>51</sup> Thus, Negeb workers might have applied their traditional, ongoing expertise to carving the stone serration at 'Ammān and Qaṣṭal and, perhaps, the stucco at Ruṣāfah. It seems possible also that, while many of Qaṣr Kharānah's structural features reflect Iraqi influence, the use of serration reflects contemporary regional taste.

Serration was used extensively by the Umayyads, and the wider Byzantine taste for combining it with bands of pearls or roundels seems to have flowed naturally into Umayyad art. Whether serration had some charged meaning for Muslims is not known, but in Marwānid hands the motif acquired a new dynamism. Arcades of serrated arches not only provided striking architectural settings, they are the distinguishing feature of a number of moulded, unglazed clay lamps.

At Ramlah, along with the moulded jar neck, were found a number of unglazed clay lamps having the general characteristics of that illustrated by F. Day in her plate XII.2 (Figure 193): a tongue handle, a channel around the fill hole that continues to the wick hole, a pointed base the same shape as the lamp with a ridge from the base to beneath the wick hole.<sup>52</sup> Such a lamp is J. Magness' Form 5, a "channel-nozzle oil lamp", whose suggested date is eighth to tenth century.<sup>53</sup> Lamps of this sort may or may not have a decorated base, as shown in Magness' illustration.

One of the Ramlah lamps has an arcade with tiny triangles above the arches, and vine loops filled with grapes above (Figure 194).<sup>54</sup> A lamp in the Warschaw Collection, provenance unknown, shows a similar arcade with tiny spikes above the arches; a tree and a leaf can be seen beneath, and above the arcade is a vine frieze with a tree and assorted leaves, or flowers, in the loops. On the other side of the lamp are grape bunches and assorted leaves (Figure 195).<sup>55</sup> The Royal Ontario Museum, (hereafter "ROM") has a lamp, provenance unknown (Figure 196),<sup>56</sup> that could have come from the same mould as the Warschaw.

Two lamps with serrated arches were published from excavations at the Hill of Ophel, Jerusalem; trees, birds and a date palm are seen through the arcades of one (Figure 197),<sup>57</sup> and birds only on the second (Figure 198), which has a more detailed drawing of the arcades.<sup>58</sup> The ROM has a complete lamp with equally-detailed arcades, through whose arches may be seen birds, trees and flowers (Figure 199).<sup>59</sup> Birds and, perhaps, a star, are seen through the arcades of another lamp in the Warsaw Collection (Figure 200).<sup>60</sup>

An arcaded lamp fragment with birds was found by A. Tushingham, in the Armenian Garden, Jerusalem (Figure 201),<sup>61</sup> and a tree is seen in the single complete niche on another lamp fragment, found at Ramat Rahel (Figure 202)<sup>62</sup>

In a sepulchral cave in the "Wad Yasūl", near Jerusalem C. Clermont-Ganneau found a lamp through whose serrated niches "palm leaves" are seen (Figure 203). On the evidence of this lamp and another found with it bearing a Greek inscription (not then deciphered), Clermont-Ganneau decided the site was an important Christian burial place.<sup>63</sup> Trees appear under what seem to be serrated arches on lamp fragment found at "Ain Karim", in a none too clear illustration.<sup>64</sup>

From direct observation and what can be deduced from illustrations and descriptions these particular arcades are found only on lamps of the kind seen in Figure 193.

The lamp arcades mimic those that frame the paradisiacal imagery at 'Ammān, Qasṭāl and elsewhere, and the creatures and vegetation seen through the arcades are popular versions of the paradisiacal imagery. Although the decoration is executed with varying degrees of competence, allowing for the small scale and the need to draw each arcade and its motifs individually rather than impress the moulds with a die, the lamps unmistakably reflect their architectural models. The plain, individual colonnettes and serrated arches are particularly well delineated in Figures 198 and 199. Placing various motifs in each vine loop or within each niche follows the model set in the Qubbat al-Ṣakrah, and the similar combining of anomalous motifs seen at 'Ammān. The vine scroll above the arcades links the decorative programme of the Ramlah and associated lamps with the "Marwān" ewer's

arrangement, as well as that suggested in the reconstruction of the audience hall at Qaṣṭal, while the inclusion of the birds, (some of which might be beasts!) allies the lamps with the ewers and Khirbat al-Baydā's lintel and their terrestrial version of the arcades and garden imagery.

Another lamp from the Warschaw Collection shows serrated arches flanking the handle and less-well executed serration above the flanking the nozzle (Figure 204).<sup>65</sup> A lamp similar to that in Figure 205,<sup>66</sup> may have been found by S. Saller at Bethany. His illustration of it is poor, but the description, including mention of the "arch with tiny lines along its exterior",<sup>67</sup> appears to describe the Warschaw lamp. (It is not suggested that the few lamp examples herein are all there are.)

There is a particular importance to the Ramlah lamp. On the assumption that it, like the jar mould, copied something, the lamp indicates the existence of at least one building with the arcade imagery prior to Ramlah's founding c. 708 CE. As the notable resemblances between Qaṣṭal's smaller niche and the Coptic chest suggest an early period, a date within `Abd al-Malik's reign (685-705), as Carlier and Morin hypothesize,<sup>68</sup> post-construction of the Qubbat al-Ṣakhrāh, seems possible. What then do the distinctive arcades attest?

However decorative in appearance, they were not mere decoration. Nor were they a sign of residence, although they were found at residences. They seem not to have been applied universally; for instance, apparently not on the bath at Quṣayr `Amrah, Jordan, nor over the multiple entrances of the Large Enclosure at Qaṣr al-Ḥayr al-Sharqī. They appear at sites on travel routes. Their appearance is independent of a structure's cultural origin or type. They might be more or less elaborate according to circumstance, yet maintain a remarkably constant and recognizable appearance. Their most elaborate form has been found at a caliphal palace, an administrative complex and a princely residence. They are found in areas identified as being for "reception", "audience", and "meeting", that may be on the ground floor, or the upper storey, roofed or unroofed. Ruṣāfah, Qaṣṭal, and, possibly Chal Tarkhan-Eshqabad, have, immediately adjacent to the location of the garden imagery, exclusive space that seems to have been auxiliary to it. The arcades appear to have been

subjectively-related to a structure's entrance.

Concerning the sites at which the arcades were found, G. King has pointed out that Umayyad *quṣūr* show a pattern of considered placement along the boundaries between arable land and grazing territories<sup>69</sup> of the Ḥawrān and the Balqa',<sup>70</sup> (Figure 206).<sup>71</sup> Far from being merely a succession of isolated aristocratic estates, they were often part of a complex of settled villages and towns based on agriculture,<sup>72</sup> and likely served many purposes. Qaṣṭal, for instance, was an agricultural estate with substantial nearby water catchment facilities.<sup>73</sup> It was positioned on the edge of arable land bordering the grazing range of nomadic herders allied to the Umayyads,<sup>74</sup> and is thought to have been a stopping place for *hajj* caravans on the Darb al-Shām route between `Ammān and Madīnah.<sup>75</sup>

Qaṣr Kharānah's handiness to the Darb al-Shām and Wādī al-Sirhān routes has been pointed to by both Urice and King,<sup>76</sup> and the most recently-discovered inscriptions found at that Qaṣr lead Gh. Bisheh to suggest it and the Wādī al-Sirhān route may have been used "primarily by government officials rather than by merchants and pilgrims" in the Umayyad period.<sup>77</sup>

One might continue north from the Wādī al-Sirhān route via al-Baydā' and Jabal Says to Damascus, or to the eastern desert via Qaṣr al-Ḥayr al-Gharbī and Qaṣr al-Ḥayr al-Sharqī; again, these sites are on travel routes bordering the lands of nomadic herders allied to the Umayyads.<sup>78</sup>

King's hypothesis that *quṣūr* distribution suggests "coherent" state planning,<sup>79</sup> is echoed by Bisheh, writing of Qaṣr Mshash, about 21 km. north-west of Qaṣr al-Kharānah.<sup>80</sup> Mshash had a small *qaṣr*, a bath and substantial water collection and storage facilities,<sup>81</sup> but the area is thought to have been generally non-residential. More likely it served a pastoral community and was a halting place for caravans<sup>82</sup> and, possibly, was used by the postal service (*al-barīd*) and government officials travelling between `Ammān and the Ḥijāz.<sup>83</sup> "Coherent" planning might describe `Abd al-Malik's administrative centralization, including reform of the currency and the introduction of Arabic as the language of bureaucracy.<sup>84</sup> Qubbat al-Ṣakhrah was another of his initiatives and the paradisiacal arcades derive from it.

Qastal and Jabal Says had been lived in by Marwānid princes, so the arcades there could be a dynastic signature. Not so Qaṣr Kharānah, whose substantiated Marwānid connection is that it was visited by the governor of Jund al-Urdunn, `Umar b. al-Walīd b. `Abd al-Malik. That the arcades appear at such disparate locations as Ruṣāfah, `Ammān and Qaṣr Kharānah may indicate no fixed ceremonial was associated with them; however, their appearance at Ruṣāfah and `Ammān suggests that the arcades might have been associated with a function that would be carried out by the caliph, or by someone to whom the caliph had delegated a power, such as his provincial governor.<sup>85</sup> Modifying Urice's hypothesis that Qaṣr Kharānah was purposely built for meetings with Umayyad tribal allies, (events that might have been held as conveniently at regular, well-watered way stations), the paradisiacal arcades could have indicated places where the meetings or audiences included the administration of civil justice.

Writing on the organization of the caliphate, E. Tyan states that in the Umayyad period it was an essentially personal sovereignty,<sup>86</sup> concurrently political and religious.<sup>87</sup> Caliphs acted as judges,<sup>88</sup> and some, including `Abd al-Malik, `Umar II, Yazīd II and Hishām, personally acted as a *qādī*.<sup>89</sup> One manifestation of the caliph's absolute power was the judicial exercise called *mazālim*,<sup>90</sup> a superior justice wielded only by the caliph or his representative; an attribute of supreme authority, most evident in the ascendance of royal power, absent in its decline.<sup>91</sup> Tyan describes it as extra-ordinary law,<sup>92</sup> a sort of revolt against the *shar'*,<sup>93</sup> not integrated into or accepted as a part of the *fiqh* system.<sup>94</sup>

Traditionally, *mazālim* was founded on Qur'anic texts and the Prophet's Sunnah,<sup>95</sup> or, had its origins in pre-Islāmic dispute settling mechanisms amongst clans and tribes without a central authority.<sup>96</sup> R. Levy citing al-Māwardī says *mazālim* courts for the review of wrongs were instituted by the "later Umayyads, who sat in person to receive petitions from all comers".<sup>97</sup> J. Nielsen says al-Mārwadī's suggestion that `Abd al-Malik "was the first to arrange for the regular hearing of *mazālim* petitions seems to be premature".<sup>98</sup> Tyan citing al-Maqrīzi says `Abd al-Malik was the first to set aside a special day for *mazālim* audiences, and put his *qādī*, Abū-Idrīs al-Azdī, in charge of them.<sup>99</sup>

*Mazālim* denoted the caliph's "fundamental competence to deal with all litigations and to right all wrongs".<sup>100</sup> The wrongs he might right included: oppression of his subjects by his officials; unjust taxes; reduced official stipends; restoration of wrongfully-seized property; suppression of evil-doing, and general hearing and settling of disputes.<sup>101</sup> The caliph could act personally, or delegate the power to his representative, such as a minister of state, provincial governor or administrator.<sup>102</sup>

*Mazālim* audiences were grand public occasions,<sup>103</sup> whose essential goal was to allow persons to bring their complaints to the caliph.<sup>104</sup> `Abbāsīd caliphs from al-Mahdī to al-Muhtadī are said to have followed the Umayyad example of *mazālim* justice.<sup>105</sup> Al-Mahdī (775-785) is said to have been the first `Abbāsīd caliph to administer *mazālim* justice personally,<sup>106</sup> and Manşūr (754-774) had its exercise recommended to him as a corrective of abuses of power by state functionaries.<sup>107</sup> Mūsā al-Hādī (785-786) exercised *mazālim* in the Dār al-Mazālim, or Dār al-`Āmma, in Baghdad.<sup>108</sup> Orders would be given for curtains veiling the caliph to be drawn aside, the doors would be opened, and the people allowed to enter.<sup>109</sup> Al-Muhtadī bi-Allāh (869-870) built a *qubbah* with four entrances and called it "Qubbat al-Mazālim" where all classes of his subjects received justice.<sup>110</sup> The providing of special buildings, or parts thereof, for *mazālim* audiences was followed by the Fāṭimids, Zangids and Mamlūks,<sup>111</sup> and in Umayyad Spain Amīr `Abd Allāh b. Muḥammad had a gate opened in the wall of his palace compound where his subject might come to make their complaints; the gate was called Bāb al-`Adl.<sup>112</sup>

Such detail is not given for the Umayyads, but Tyan's general comments are of interest. Initially, there were no rules to determine where or when *mazālim* courts would be held, other than that a mosque was never considered a place of habitual audience, because *mazālim* justice was of a secular nature.<sup>113</sup> "En principe, le juge des mazālim peut tenir son conseil où il lui plait; en fait, tant qu'un local ne sera pas affecté spécialement à cet objet, il tiendra conseil dans le lieu où il exerce ses fonctions. Pour le souverain, ce sera son palais, pour les ministres, gouverneurs, titulaires distinctes des mazālim, leur résidence officielle ou privée."<sup>114</sup>

Continuing to speculate: Hishām might have sat in room 1 of Palace One, Ruṣāfah, dispensing justice to his subjects assembled in the courtyard; as might the sub-governor in the Reception Hall at `Ammān, with the ceremony befitting his rank. At Qaṣṭal's earlier, princely residence something like Ruṣāfah's ceremony might have had the dispenser of justice seated in the suite of rooms over the gate and his petitioners assembled in the arcaded audience hall. These three sites' decoration, evident and reconstructed, suggests an ambience conducive to a grand show.

In the fractious times post the second civil war, the wide-ranging powers of *mazālim* justice would be called for, and the exercising of it at *quṣūr* located strategically on travel routes might have been a practical measure. Qaṣr Kharānah's decoration is modest, but the arrangement of the southern rooms, with the *buyūt* centred on rooms 59 and 29 feeding into room 26, indicates a certain formality could attend the proceedings. Perhaps the sub-governor at `Ammān rode out there for the purpose at set times of the year corresponding to seasonal pastoral migrations, or the passing of the *hajj* caravan, as a *mazālim* judge may have gone out from Damascus in Jund Dimashq to Jabal Says and al-Sharqī's Small Enclosure on similar occasions.

`Umar b. al-Walīd b. `Abd al-Malik, who could have administered *mazālim* justice, would surely have been out of his jurisdiction [?] at Qaṣr Kharānah during his governorate of Jund al-Urdunn, but maybe his visits occurred during the year he commanded the *hajj* caravan.<sup>115</sup> Imbert, citing Bisheh, suggests that `Umar b. al-Walīd b. `Abd al-Malik may have lived for a time at the Qaṣr.<sup>116</sup>

As for Chal Tarkhan-Eshqabad, to which a particular date or origin has not been ascribed; it, like Rayy, was within the administrative area of al-`Irāq,<sup>117</sup> where `Abd al-Malik had appointed al-Ḥajjāj b. Yūsuf governor, "excluding Khurāsān and Sijistān" in 75 AH.<sup>118</sup> Al-Ḥajjāj, or one whom he deputed, might have dispensed justice there.

Why paradisiacal arcades should have been so used is again speculative. The writer thinks it most likely they originated with `Abd al-Malik, who may have known that, anciently, gardens were an

expression of a ruler's wealth and power,<sup>119</sup> and his garden, the Qubbat al-Ṣakhrāh, was that. He may have known that ancient monarchs held audiences in their gardens, as is inferred of Cyrus the Great (559-530 BCE),<sup>120</sup> whose garden is considered a link in the chain of royal eastern gardens, a tradition that was absorbed into the Islāmic world and, post the Umayyads, expressed at the Balkuwārā Palace, of `Abbāsīd Sāmarrā'.<sup>121</sup>

If Qasṭal dates to the period of `Abd al-Malik himself, one might say the arcades were installed there because they were of his creation, Qubbat al-Ṣakhrāh, of which he must have been justifiably proud. The Qubbah was a manifestation of his, and by extension, Marwānid power and, of course, a Muslim triumph. If the arcades' installation coincided with the exercise of *māzālim* justice at Qasṭal, a precedent could have been set and followed elsewhere for dispensing it in an area so ornamented. Certainly, the idea of the caliph displaying his absolute authority in the presence of imagery that celebrated absolute Muslim power would not have been beyond the imagination of the man who conceived of the Qubbat al-Ṣakhrāh.

As for the concurrence of the single entrance or route with the paradisiacal imagery, this could have focussed the ceremonial aspects of a *māzālim* audience; then again, an existing Umayyad taste for single entrances may have been an opportunity of which to take advantage.

There are two further examples of the arcades to be considered. At Khirbat al-Mafjar, about 1.5 miles north of "modern Jericho in the Jordan valley",<sup>122</sup> groups of three little painted niches "recessed in the wall faces" were set between each pair of the bath's clerestory windows (Figures 207, 208 and 209).<sup>123</sup> Figure 210 shows the bath's restored clerestory,<sup>124</sup> and Figure 211, an isometric reconstruction of the bath building.<sup>125</sup> Those niches with serrated arches over plain colonnettes without capitals or bases are as spare as those found on the lamps; others with acanthus on arches over individual colonnettes with paired Corinthian capitals, are finely-detailed, and reminiscent of the arcades above the entrance to al-Sharqī's Small Enclosure (see Figure 159). Both types have been given scalloped hoods and painted marble recesses.



D. Thompson drew attention to the similarity of a Chal Tarkhan-Eshqabad panel motif to one in al-Mafjar's palace waiting room (see Figure 172). There it was just a panel behind a bench armrest, a minor feature in a profusion of vines and other ornament (Figure 212).<sup>126</sup> A deliberate act, it seems, because separating the paradisiacal imagery from its distinctive frame, then elevating the frame high above the bath, an area for sybaritical audience, can only have been to provoke. The mischievousness intensifies when one considers P. Soucek's recent analysis of the bath porch's imagery as an interpretation of the legend of Solomon's flying throne, and that monarch's equally legendary "wisdom to adjudicate disputes".<sup>127</sup> In fact, the many instances of discrete niches at al-Mafjar, as niches or lavishly decorated balustrades (Figures 213, and 214),<sup>128</sup> suggest the imagery had become the butt of an extended joke.

Another joke seems implied in the arcades on the façade of Qaṣr al-Ḥayr al-Gharbī, Syria, about 60 km. west-south-west of Palmyra.<sup>129</sup> As at al-Sharqī, the occupiers of this *qaṣr* were positioned to observe the movement of tribes and their animals in the seasonal rhythm of desert life,<sup>130</sup> as had previous occupiers of the site since at least Roman times, because al-Qaṣr al-Ḥayr al-Gharbī was not only on a direct route from Damascus to Palmyra, but on an alternate route to Damascus via Qaratayn.<sup>131</sup>

A recurrent aspect of paradisiacal imagery and its installation is the appreciation of illusion. Roman wall painting's influence is evident in this; as interpreted in the Damascus mosaics, it mixes realistically portrayed buildings and landscapes with the mansions and pavilions of dreamscapes.

E. B. Smith has said of al-Gharbī's façade that its designer would not have gone to so much trouble had he been unaware of the "royal significance" of imperial gate imagery.<sup>132</sup> O. Grabar points to the Roman tradition of symbolism associated with entrances as the likely origin of al-Gharbī's elaborate façade.<sup>133</sup> Another explanation may be suggested.

As reconstructed (Figure 215),<sup>134</sup> the familiar discrete niches have been dispensed with, in favour of an arcade more common in pre-Islāmic times, but a tree with entwining grape vine (Figure

216)<sup>135</sup> that has been restored to the first tower bay to the right of the entrance suggests this is a variant, more elaborate, version of the paradisiacal imagery seen previously at `Ammān and Qastal, where the viewer is outside the garden looking in. Here, it is speculated, the view is from inside. Someone has attempted a fantastical "illustration" on the *qaṣr's* outer wall.

In the foreground of this illustration, above a postulated socle or dado on the towers, are three formal garden beds, or carpets, filled with rosettes and flower buds.<sup>136</sup> These are edged with acanthus leaves at the bottom and rosettes at the top. Above them, the geometric register might be an *opus sectile* path between the garden beds and a cloistered enclosure wall; or, it might be a panelled wall (coated in vegetation) beneath the windowed gallery of a garden pavilion. Along the margin of the enclosure wall, or pavilion, there may have been a line of trees, of which the one remaining is reminiscent of the creeper entwined trees in the paradisiacal garden of San`ā' Figure 3, and similar arrangements in `Ammān's niches and al-Aqṣá's panels. Topping either structure is a line of medallions, then stepped merlons.

Acknowledging this arguable interpretation of al-Gharbī's façade, the writer points out it is not the only such instance. An example of what seem to be "plantings" of trees and vines along a cloistered enclosure wall topped with stepped merlons is shown in Figures 217,<sup>137</sup> and 218,<sup>138</sup> on a ewer said to be Sāsānid. Were all its bays filled with stucco trees, *Qaṣr al-Ḥayr al-Gharbī's* towers, from the level of the arcades to the merlons, would look very like the ewer's ornament.

There is a pavilion (Figure 219)<sup>139</sup> in the centre of the well-known large bronze dish (Figure 220), in the Staatliche Museen, Berlin, described as from Irān of the seventh century.<sup>140</sup> It is domed and has verandahs on at least two sides. The façade shows stylized palmettes (?) or lotus (?) and palms about the lower walls, then a windowed gallery, a register of discs or medallions, and stepped merlons. A. Pope states the vegetals are only "wall decorations not a projection of the garden" because one of the motifs is repeated on the central dome;<sup>141</sup> however, there is some justification for a contrary view because of the dish's outer ornament, which could be interpreted as a screen of lush

foliage "planted" against a garden's cloistered enclosure wall. In Figure 215 al-Gharbī's "real" medallions and merlons are, concurrently, part of the "illustration".

Found at Sūsah, Irān, were parts of unglazed, moulded, four-sided objects whose walls were covered with vines (Figure 221)<sup>142</sup> or other vegetal motifs (Figure 222),<sup>143</sup> and topped with stepped merlons (Figure 223).<sup>144</sup> On each side was an entrance topped with a five-lobed arches, sometimes serrated (see Figure 221), and sometimes pearl-edged (Figure 224).<sup>145</sup> Figures 221, 222, 224 and, possibly, Figure 223, come from level 3 at the beginning of the site's Islāmic period, dated c. mid-seventh century to the second part of the eighth.<sup>146</sup> Because there is a depression in the top of the objects they are referred to as supports,<sup>147</sup> that happen to look like pavilions crowned with stepped merlons. These pavilions' walls may be decorated with vegetal motifs; alternatively, these pavilions may be interpreted as rising through a screen of vegetation "growing" around them.

In chapter 2 it was suggested that because of its external mosaics the Qubbat al-Şakhrāh might have been interpreted as the "likeness of a heavenly pavilion rising out of a paradisiacal garden".

The above examples seem to be linked, in ways not immediately clear but related phenomenologically to the art, discussed throughout this thesis, that invites one to actively explore imagined worlds.

Schlumberger observed that the first Islāmic art used concurrently, juxtaposed in the same constructions, architectural forms, technical procedures and decorative motifs of diverse origins, all of which were visible at al-Gharbī, and the explanation of this eclecticism was known, i.e., "c'est la pratique de la liturgie, de la corvée d'état".<sup>148</sup> It is speculated that duty has been turned about here, and Qaşr al-Ḥayr al-Gharbī may be meant to parody the Qubbat al-Şakhrāh. Presiding over this garden is a bust of the goddess Atargatis (Figure 225),<sup>149</sup> which has been restored to a spandrel between the middle gable and arch on the right-hand tower of Figure 215, and a reclining couple (Figure 226), who have been placed beside the merlons of the right-hand tower.<sup>150</sup> Like other statuary at this site, the couple are modelled on the funerary sculpture of nearby Palmyra,<sup>151</sup> and like their

models they too may be banqueting,<sup>152</sup> at a feast for the dead (Figure 227).<sup>153</sup>

**Qasr al-Hayr al-Gharbī's façade is a wry tribute to the existence of the garden view.**

## Notes

1. Urice, Qasr Kharana, pp. 70-77, quoting Lionel Bier, "The 'Sasanian Palace' Near Sarvistan," Ph.D dissertation, New York University, 1979, pp. 101-106.
2. Lionel Bier, Sarvistan: a study in early Iranian architecture. University Park and London: The Pennsylvania State University Press, 1986, p. 44.
3. Avi-Yonah, "Oriental Elements," p. 52, figs. 2-3.
4. *Ibid.*, p. 36, and illustrates one in fig. 9, p. 96.
5. L.Y. Rahmani, "The three appearances of Chip-carving in Palestine," Israel Exploration Journal (1988) 38: 61, for the last decades of 1st century BCE to 70 CE.
6. Moshe Kochavi, "The burial caves of Ramat Rahel, 1962 season," p. 73 and pl. 10.1, in Yohannan Aharoni, Excavations at Ramat Rahel: seasons 1961 and 1962. Rome: Centro di Studi Semitici, 1964.
7. M. Rostovtzeff, "Graffiti," in P.V.C. Bauer, M.I. Rostovtzeff, Alfred R. Bellringer The Excavations at Dura-Europos. Preliminary Report of Fourth Season of Work October 1930-March 1931. New Haven: Yale University Press, 1933, pp. 210-211, pl. XIX.3, "La Deesse aux Colombes". At Khirbat Tannur, above Petra, Jordan, the goddess with her crowning eagle is placed in a tympanum with a radiating frieze of teeth (or rays?), Nelson Glueck, Deities and Dolphins: the story of the Nabataeans. New York: Straus and Giroux, 1965, ill. 15.
8. R. A. Stewart Macalister, "Report 3," Palestine Exploration Quarterly Statement for 1904, p. 256, fig. 6.
9. Rahmani, "The three appearances," pp. 62-64; *idem.*, "Finds from a sixth to seventh centuries site near Gaza: II. pottery and stone objects," Israel Exploration Journal (1983) 33: 223-224. .
10. C. Leonard Woolley and T.E. Lawrence, "The Wilderness of Zin," Palestine Exploration Fund Annual (1914-1915) 3: 101, fig. 32, in what seemed to have been a church apse.
11. Woolley and Lawrence, Wilderness, p. 79, fig. 13, "Esbeita: North Church, capital of side door".
12. Arthur Segal, Architectural Decoration in Byzantine Shivta, Negev Desert, Israel. BAR International Series 420. Oxford: B.A.R., 1988, p. 141.
13. Segal, Architectural Decoration, p. 151.
14. *Ibid.*, the painted serration is illustrated on p. 112 no. V-3, "Half-dome facade", and the carved on p. 114 no. V-5, "Arched niche facade". The painted serration does not copy well enough for inclusion here.
15. *Ibid.*, p. 103, no. IV-8, "Wall-attached pillar cornice".
16. H. Dunscombe Colt, ed., Excavations at Nessana (Auja Hafir, Palestine) 3 vols. London: British School of Archaeology in Jerusalem, 1962, vol. 1, p. 48.
17. Ghirshman, Iran, p. 293.

18. Colt, Excavations at Nessana, vol. 1, p. 48, and pls. XVI.3, XVII.7, IX.1.
19. D. Talbot Rice, "The Oxford Excavations at Hira." Ars Islamica (1934) 1: 61, and fig. 8.
20. D. Talbot Rice, "The Oxford Excavations at Hira, 1931." Antiquity (1932) 6: 284.
21. Rice, "The Oxford Excavations," 1932, pp. 286, 288, fig. 8f.
22. Rice, "The Oxford Excavations," 1934, p. 61.
23. Handbook of the Byzantine Collection. Washington, D.C.: Dumbarton Oaks, 1967, p. 93 and cat. no. 319.
24. Avi-Yonah, "Oriental Elements," p. 36 and n. 10, where the lintel is said to be from Deir Dughiya, but, according to Conder and Kitchener, was taken from Deir Abu Deî; C.R. Conder and H.H. Kitchener, The Survey of Western Palestine. Vol. I, "Galilee," ed. with additions by E.H. Palmer and Walter Besant. London: The Committee of the Palestine Exploration Fund, 1881, pp. 114-115.
25. Charles Clermont-Ganneau, "Nouveau ossuaires Juifs, avec inscriptions Grecques et Hébraïques," Revue Archéologique (1873) N.S. 25: 398-414, illus. on p. 401.
26. Greville J. Chester, "Notes on miscellaneous objects found in the excavations," pp. 384-388. In The Recovery of Jerusalem, by Captains Wilson and Warren. New York: D. Appleton & Company, 1871.
27. Avi-Yonah, "Oriental Elements," p. 4 refers to the article's research within the "Roman and Byzantine period", and p. 36 to the ossuary's "late" date.
28. Renate Rosenthal-Heginbottom, Die kirchen von Sobota und die dreiapsidenkirchen des Nahen Ostens. Göttinger Orientforschungen II Reihe. Band 7. Wiesbaden: Otto Harrassowitz, 1982, taf. 46.c, "Kapitell".
29. Segal, Architectural Decoration, p. 75, no. II-22.
30. Avi-Yonah, "Oriental Elements," p. 42, fig. 13.
31. E.H. Palmer The Desert of the Exodus. With maps and numerous illustrations from photographs and drawings taken on the spot by the Sinai Survey Expedition, and C.F. Tyrwhitt Drake. Cambridge: Deighton, Bell and Co., London: Bell and Daldy, 1871, vol. II, p. 377, "Gateway of tower at Sebaita". Tyrwhitt Drake's illustration does not copy well enough for inclusion.
32. Avi-Yonah, "Oriental Elements," p. 36 and n. 8; F.M. Abel and A. Barrois, "Chronique," Revue Biblique (1929) 38: p. 583, fig. 2, "Yatta. Arceau provenant du Kh. Kermel".
33. Friedrich Sarre, "Die Bronzekanne des Kalifen Marwān II im Arabischen Museum in Kairo," Ars Islamica, (1934) I, Kraus Reprint Corporation 1968: p. 10, and fig. 5, "Zeichnung der Gravierungen der Bronzekanne des Kalifen Marwān II". This ewer was published also by G.R.D. King, "The architectural motif as ornament in Islamic art: the 'Marwān II' ewer and three wooden panels in the Museum of Islamic Art in Cairo," Islamic Archaeological Studies vol. 2. Cairo: General Organization for Government Printing Offices, 1982, pp. 23-57.
34. Arrows indicate these on Figure 188, and they can be seen in Sarre, "Die Bronzekanne," figs. 2, 3.

35. Sarre and Martin, Die Ausstellung, Band 2, taf. 131, kat. no. 2993; see also J. Orbeli et C. Trever, Orfèvrerie sasanide. Moscow-Leningrad: Academia, 1935, cat. 76.
36. Géza Fehérvári. Islamic Metalwork of the eighth to the fifteenth century in the Keir Collection. Foreword by Ralph Pinder-Wilson. London: Faber and Faber Limited, 1976, pp. 27-28, colour pl. 2.
37. Handle of ewer in Metropolitan Museum of Art, New York; writer's photograph.
38. Ettinghausen and Grabar, Islamic Art, fig. 15, "Damascus, Great Mosque, 706, mosaics from the western portico".
39. Turret of ewer in Metropolitan Museum of Art, New York; writer's photograph. E. Baer, Metalwork in Medieval Islamic Art. Albany: State University of New York Press, 1983, suggests at p. 86 that the "Marwān" and Metropolitan Museum's ewers derive from a Roman-Byzantine rather than an Irānian tradition, while the Keir might be part of a group of Persian ewers of later date.
40. Raymond Koechlin, Les Céramiques musulmanes de Suse au Musée de Louvre. Mémoires de la Mission Archéologique de Perse, vol. XIX. Paris: Ernest Leroux, 1928, cat. 107 and pl. XIII.107.
41. Heinz Gaube, Ein Arabischer Palast in Südsyrien Hirbet el-Baiḍa. Beirut: In Kommission bei Franz Steiner Verlag, Wiesbaden, 1974, taf. XI.2, F.-N. 28. For a drawing of this lintel fragment and others from al-Bayḍā', see de Vogüé, Syrie centrale, pl. 24.
42. Gaube, Ein Arabischer Palast, p. 131 ff.
43. *Ibid.*, p. 102.
44. *Ibid.*, pp. 126-127.
45. *Ibid.*, pp. 135-136.
46. A. Desreumaux u. J.B. Humbert, "De Fund von al-Fedain/Mafraq," p. 347, in Pierre Amiet, ed., Der Königsweg. 9000 Jahre Kunst und Kultur in Jordanien and Palästina. Mainz am Rhein: Philip von Zabern, 1987; there's a drawing of the ivory in abb. 355, and a photograph of the lamp in abb. 357.
47. Rahmani, "The three appearances," p. 65.
48. L.Y. Rahmani, "Palestinian incense burners of the sixth to eighth centuries C.E.," Israel Exploration Journal (1980) 30: 116-122, *passim*.
49. Gerald M. Fitzgerald, Beth-Shan Excavations 1921-1923: the Arab and Byzantine levels. Publications of the Palestine Section of the Museum of the University of Pennsylvania, vol. III. Philadelphia: University Press for the University of Pennsylvania Museum, 1931, pl. XXVI.3, "Incised Arab bowl from terrace".
50. Cf. its use on the Atargatis and Christian shrines.
51. Colt, Excavations at Nessana, vol. 1, p. 22.
52. Florence E. Day, "Early Islamic and Christian Lamps," Berytus (1942) 7: p. 72, pl. XII.2, 'From Mersina Excavations, Cilicia'.

53. Jodi Magness, Jerusalem Ceramic Chronology circa 200-800 CE. JSOT/ASOR Monograph Series No. 9. Sheffield: Sheffield Academic Press, 1993, "Form 5 ('Channel-Nozzle Oil Lamps')", p. 258.
54. Rosen-Ayalon and Eitan, Ramla, twenty-fourth page, lamp in the middle row on the left; only the one side of the lamp is shown.
55. Yael Israeli and Uri Avida, Oil Lamps from Eretz Israel. The Louis and Carmen Warschaw Collection at the Israel Museum, Jerusalem. Jerusalem: The Israel Museum, 1988, cat. no. 464, acc. no. 76.6.1444. It should be noted that although at p. 155 the authors state Warschaw lamps like the F. Day one described have *pointed oval* [the writer's italics] bases, in its catalogue listing on p. 193, lamp 464 is said to have a *ring* base.
56. Acc. no. 910.114.202, one of a number bought "in 3 lots from Beisan, Taibeh, etc.", from Vester & Co., Jerusalem, December 1907.
57. R.A.S. Macalister and J. Garrow Duncan, "Excavations on the Hill of Ophel, Jerusalem 1923-1925," Palestine Exploration Fund Annual (1923-25) 4: pl. XXI.21; at pp. 193-194, this is one of a number of lamps arranged in a tentative "chronological series" of the Roman and Byzantine periods. Of the twenty-two lamps on the plate, those from #10 on "do not call for any special word of description, the drawings speak for themselves, p. 196.
58. Macalister and Duncan, "Ophel," p. 196, fig. 211, as this is one of two lamps described as the "overflow" from pl. XXI, the dismissive comments of the previous note applies to it also.
59. Acc. 910.114.185, one of a number bought "in 3 lots from Beisan, Taibeh, etc.", from Vester & Co., Jerusalem, December 1907.
60. Israeli and Avida, Warschaw, cat. no. 465, acc. no. 76.6.1436, no provenance.
61. A.D. Tushingham, Excavations in Jerusalem 1961-1967 vol. 1. With contributions by John W. Hayes, R.B.Y. Scott and Emmett Willard Hamrick. Toronto: Royal Ontario Museum, 1985, p. 97 and fig. 32.33. It was with "Byzantine phase IIIB pottery", with which there may have been intrusive sherds; parallels cited include those of Macalister and Duncan, above.
62. Aharoni, Excavations, fig. 26.10, and p. 41 where it's said to be from the later Byzantine period "(stratum IIA), i.e. from the 7th century"; that the fragment's fill hole structure differs from that of the lamps in the figure can be seen in the drawing.
63. Clermont-Ganneau, Archaeological Researches, pp. 420-422, illustration on p. 422, "Terra-cotta Lamp".
64. P. Bellarmino Bagatti, Il Santuario Della Visitazione at `Ain Karim (Montana Judaeae). Pubblicazioni Dello Studium Biblicum Franciscanum No. 5. Jerusalem: Tipografia dei PB. Francescani, 1948, p. 81 and tav. 25.9.
65. Israeli and Avida, Warschaw Collection, cat. no. 468, acq. no. 76.6.1441, no provenance.
66. *Ibid.*, cat. 467, acq. no. 76.6.1442, no provenance.
67. Sylvester J. Saller, Excavations at Bethany (1949-1953). Publications of the Studium Biblicum Franciscanum No. 12. Jerusalem: Franciscan Press, 1957, p. 186, item 6. no. 7012. At p. 184, the



lamp is said to be in the category of "Late Byzantine and Early Arabic Lamps" with channel-nozzles and heart-shaped bases. At p. 186, the lamp shape was said to have been "in use through the early Arabic period, that is from about the seventh to the eleventh century.

68. Carlier, "Qastal al-Balqa'," pp. 120-121.

69. King, "Settlement patterns," p. 369.

70. King, "The Umayyad *quṣūr*," p. 72.

71. King, "The distribution," map 2.

72. King, "The Umayyad *quṣūr*," *passim*, and p. 73.

73. King, "Settlement patterns," p. 370.

74. *Ibid.*, pp. 370-371.

75. King, "The distribution," pp. 98-99; the Darb al-Shām went via Ma'an and Tabūk.

76. *Ibid.*, p. 96.

77. Bisheh, "Qaṣr Mshash," p. 90 and n. 27.

78. King, "The distribution," p. 93; Grabar, City, pp. 156-157.

79. King, "The distribution," p. 100.

80. Bisheh, "Qaṣr Mshash," pp. 89-90.

81. *Ibid.*, p. 82.

82. *Ibid.*, p. 88.

83. *Ibid.*, pp. 89-90.

84. G.R. Hawting, The First Dynasty of Islam: the Umayyad Caliphate AD 661-750. Carbondale and Edwardsville: Southern Illinois University Press, 1987, p. 63 ff.; Hugh Kennedy, The Prophet and the Age of the Caliphates: the Islamic Near East from the sixth to the eleventh century. London and New York: Longman, 1986, p. 98 ff.

85. See Emile Tyan, Histoire de l'organisation judiciaire en pays d'Islam. Deuxième édition revue et corrigée. Leiden: E. J. Brill, 1960, p. 11 on the power of delegation.

86. Emile Tyan, Institutions du droit public musulman. Tome 1, "Le Califat". Beirut: 1954, p. 385.

87. Tyan, "Le Califat," p. 386.

88. Patricia Crone and Martin Hinds, God's Caliph. Cambridge, New York, Melbourne: Cambridge University Press, 1986, p. 44.

89. Crone and Hinds, God's Caliph, pp. 44-45, citing Tyan, Histoire 1938 ed. vol. 1, p. 134.

90. Tyan, Histoire, p. 441.
91. *Ibid.*, pp. 440-441.
92. *Ibid.*, pp. 445-446.
93. *Ibid.*, p. 441.
94. *Ibid.*, p. 446.
95. *Ibid.*, p. 512.
96. *Ibid.*, p. 515.
97. Reuben Levy, The Social Structure of Islam. 2nd edition of The Sociology of Islam. Cambridge: Cambridge University Press, 1957, p. 348 and n. 2.
98. J.S. Nielsen, "Mazālim," Encyclopaedia of Islam, p. 933.
99. Tyan, Histoire, p. 514.
100. Emile Tyan, "Judicial Organization," p. 263, in Majid Khadduri and Herbert J. Liebesny, eds., Law in the Middle East, vol. 1, "Origin and development of Islamic law." Washington, D.C.: the Middle East Institute, 1955.
101. Levy, The Social Structure, pp. 348-349.
102. Tyan, Histoire, pp. 483-484; *idem.*, "Le califat," pp. 387, 389.
103. Tyan, Histoire, p. 475.
104. *Ibid.*, pp. 507-508.
105. Levy, The Social Structure, p. 348.
106. Tyan, Histoire, pp. 476-477.
107. *Ibid.*, p. 457.
108. *Ibid.*, citing al-Tabarī, p. 511 and nn. 2, 3.
109. Al-Tabarī, Abū Ja'far Muḥammad b. Jarīr, The History of al-Tabarī Vol. XXX, "The 'Abbāsīd Caliphate in Equilibrium," AD 785-809/AH 169-193, translated and annotated by C.E. Bosworth. Albany: State University of New York Press, 1989, p. 61 [582]; this happened in the year 170 AH, July 3, 786-June 21, 787 CE.
110. Tyan, Histoire, p. 511 and n. 4; Maçoudi [Mas'ūdi] Les prairies d'or. Texte et traduction par C. Barbier de Meynard. Paris: L'Imprimerie Nationale, 1874, tome 8, p. 2.
111. Tyan, Histoire, pp. 510-511.
112. *Ibid.*, pp. 509-510.

113.*Ibid.*, p. 510.

114.*Ibid.*, p. 510.

115.Aī-Ṭabarī, The History, vol. XXIII, "The Zenith of the Marwānid House," AD 700-715/AH 81-96, translated and annotated by Martin Hinds. Albany: State University of New York Press, 1990, p. 145 [1197]; this happened in the year 88 AH, December 12, 706-November 30, 707 CE.

116.Imbert, "Inscriptions," p. 409 and n. 18.

117.George C. Miles, The Numismatic History of Rayy. Numismatic Studies No. 2. New York: The American Numismatic Society, 1938, p. 8 and n. 1.

118.Aī-Ṭabarī, The History, vol. XXII, "The Marwānid Restoration," AD 693-701/AH 74-81, translated and annotated by Everett K. Rowson. Albany: State University of New York Press, 1989, p. 12 [863], May 2, 694-April 20, 695 CE.

119.D. Stronach, "The Royal Garden at Pasargadae: evolution and legacy," in Archaeologia Iranica et Orientalis: Miscellanea in Honorem Louis Vanden Berghe. 2 vols. Ghent: Peeters Press, 1989, p. 480, said of the garden attributed to Nebuchadrezzar II (604-562 BCE).

120.Stronach, "The Royal Garden," p. 482.

121.*Ibid.*, p. 483 ff.

122.Hamilton, Khirbat al Mafjar, p. vii.

123.*Ibid.*, p. 71 and pl. XIII.3, .6, and .7 respectively.

124.*Ibid.*, fig. 33; this restored sketch of the clerestory of the Bath Hall's intermediate aisle bay shows sets of three serrated arches between each window.

125.Robert Hamilton, Walid and his friends: an Umayyad tragedy. Oxford Studies in Islamic Art VI. Oxford: Oxford University Press, 1988, fig. 2.

126.Hamilton, Walid, fig. 22; in the reconstruction drawing of the palace waiting room, see the vertical panel behind the art rest at right.

127.Priscilla P. Soucek, "Solomon's throne/Solomon's bath: model or metaphor?," Ars Orientalis (1993) 20: 109-134, and p. 109 and n. 5 for the quotation.

128.Hamilton, Khirbat al Mafjar, pls. XXII.1a, "Marble screen fragments", and LXVI.1, "A forecourt balustrade panel". See also the arcades over the upper claustrum in Figure 35 herein.

129.Schlumberger et al, Qasr el-Heir, p. 1.

130.*Ibid.*, p. 24.

131.*Ibid.*, p. 24.

- 132.E. Baldwin Smith, Architectural Symbolism of Imperial Rome and the Middle Ages. Princeton Monographs in Art and Archaeology XXX. Princeton, New Jersey: Princeton University Press, 1956, p. 184.
- 133.O. Grabar, "Ceremonial and Art," p. 134 ff., and p. 135.
- 134.Creswell and Allen, A Short Account, fig. 81.
- 135.Harvey Weiss, ed. Ebla to Damascus: art and archaeology of ancient Syria. Washington, D.C.: Smithsonian Institution, 1985, cat. no. 252, "Plaster relief of a nut tree".
- 136.Grabar, "Ceremonial and Art," p. 132.
- 137.Orbeli and Trever, Orfèvrerie, fig. 77.
- 138.Lars-Ivar Ringbom, Paradisus Terrestris. Helsinki: 1958, fig. 85.
- 139.Klaus Brisch, Jens Kröger, Friedrich Spulher, Johanna Zick-Nissen. Islamische Kunst in Berlin. Katalog. Museum für Islamische Kunst, Staatliche Museen. Berlin: Bruno Hessling Verlag, 1971, kat. 119.
- 140.Brisch et al, Islamische Kunst, kat. 119, abb. 27.
- 141.Arthur Upham Pope, "A Sasanian Garden Palace," The Art Bulletin (1933.) 15: 79.
- 142.Myriam Rosen-Ayalon, La Poterie islamique. Mission de Susiane, tome 1. Paris: Librairie Orientaliste Paul Geuthner, 1974, fig. 194, p. 90.
- 143.Rosen-Ayalon, La Poterie, fig. 192, p. 89, and in n 1 mentions portion of a similar support having been found in Bactria (J.-C. Gardin, Céramiques de Bactres. Paris: Librairie C. Klincksieck, 1957, pl. XIV.5a, b).
- 144.Rosen-Ayalon, La Poterie, fig. 193, p. 90.
- 145.*Ibid.*, fig. 195, p. 91.
- 146.*Ibid.*, p. 12, as are other fragments in figs. 96 and 97.
- 147.*Ibid.*, p. 89.
- 148.Schlumberger et al, Qasr el-Heir, p. 24.
- 149.Schlumberger et al, Qasr el-Heir, pl. 64.c, "Buste de femme coiffée d'un calathos"; probably Atargatis with a dove, p. 21; Weiss, Ebla to Damascus, cat. no. 251; cf. "Greek Choré", Grabar, "Ceremonial and Art," pp. 192-193..
- 150.Schlumberger et al, Qasr el-Heir, pl. 64b, "Groupe adossé à la tour Nord".
- 151.Schlumberger et al, Qasr el-Heir, p. 21; O. Grabar, "Ceremonial and Art," pp. 229-230.
- 152.Grabar, "Ceremonial and Art," p. 230.

153. Malcolm A.R. Colledge, The Art of Palmyra. Boulder, Colorado: Westview Press, Inc., 1976, pl. 100, "Funerary banquet relief from the underground tomb of Malkû, c. AD 200".

## Conclusion

The aim of this thesis has been to show the relationship between the San`ā' illustrations, the Qubbat al-Şakrah and the two iconographic motifs: the hypostyle mosque and column of Figure 3, and the serrated arch. One conclusion reached is that the Qubbat al-Şakrah was a regional response, couched in a regional artistic vocabulary, to what was perceived to be a serious regional problem. It was recognized that the effectiveness of the response, for conqueror and conquered alike, depended on the visualization of Paradise as a garden being interpreted in a widely-understood, contemporary artistic idiom, something that everyone would "get" in the broadest sense, even if not in all the details. And in the building's shape; the imaginative adaptation of the "inhabited scroll" to display Paradise's infinite bounty; the arrangement of ornament, and the use of Qur'ānic texts to explain himself, the Qubbat al-Şakrah's patron showed himself alert to the religious and cultural environment.

A second conclusion is that the Marwānids were aware of the importance of their architectural achievements and memorialized them in the San`ā' Figures, whose value as recorders of the early Islāmic period, and as works of art, can hardly be overestimated. Figure 1, the "star diagram" of the Qubbat al-Şakrah, displays the imaginative resources at the Umayyad's disposal. Figure 2, identified as the first Umayyad al-Aqsá, known hitherto only from brief texts, is a realistic portrait of a building whose construction and ornament, like the Qubbat al-Şakrah's, draws heavily on regional sources, including the baroque features of Roman imperial architecture. It was pointed out that the Jerusalem mosque's *qiblah* wall, like that of the Prophet's Mosque at Madīnah, and the courtyard of the Great Mosque at Damascus, bore a version of the Qubbah's heavenly garden. Figure 3 records the existence of a previously-unrecognized Marwānid iconographic programme, the need for which suggests, on the one hand, the threat perceived from other religious iconographies continued beyond the erection of the Qubbat al-Şakrah and, on the other, that Islām was still attempting to define itself.

A conclusion yet to be reached is why a *qubbaḥ* was built for the Rock and what it was about the Rock that made paradisiacal imagery so appropriate an ornament. Many of the reasons advanced have strong Jewish and Christian overtones, and early Islām was not impervious to the influence of these faiths; however, a response as powerful as the Qubbat al-Ṣakhrah could only have been suitable in its patron's eyes if the Rock, its housing and ornament were deemed to be wholly Muslim. J. van Ess' argument that a contemporary Syro-Palestinian *hadīth* associated the Rock with God's presence and the world to come is most interesting.

For whom the San`ā' Qur'ān was made, or what occasion it might have celebrated, it can only be pointed out that Figures 1 and 2 refer to Jerusalem, and Figure 3 to an iconography whose remains, so far as is known, are from Egypt where it had some success, as the Cairo Qur'ān, and the marquetry panels in particular, evince. Reasons militating against its continuation might have been that it became otiose, or was of a too regional a taste to be useful elsewhere.

Regional taste is certainly evident in the serrated arch motif of Palestine, Jordan and Syria, *viz.* its absence at Chal Tarkhan Eshqabad. One is conscious that, in the consistency of its appearance and architectural placement, this motif was used purposefully. The administrative function which has been speculatively associated with it may not, of course, have been the application of *māzālim* justice, but the motif was not merely decorative. `Ammān's use of it attests that a real attempt was made to recapture the illusive quality of the Qubbaḥ's imagery, and the modest application of serration and blind arcade at Qaṣr Kharānah dignifies the architectural layout; but, at Khirbat al-Mafjar the imagery was trivialized, and at Qaṣr al-Ḥayr al-Gharbī it appears to have been parodied, although done so imaginatively!

As interesting as any other feature of Marwānid paradisiacal imagery is its "scenic" quality. Whether it is a vista at the Qubbat al-Ṣakhrah, a landscape at Damascus, a vine glimpsed through `Ammān's "windows", or a bird seen through the arches of a clay lamp, the literal and spiritual eye is constantly directed to the farther view. That these views are frequently ambiguous and very stylized

does not diminish their attraction, they invite exploration. Qasr al-Ḥayr al-Gharbī's façade is one such ambiguity; it is either a much decorated frontage, or a plain crenellated one masked as a pavilion seen through a paradisiacal garden, a three-dimensional illustration combining vertical perspective with the fantasy of Roman wall painting. The Qubbat al-Ṣakrah is the beginning and al-Gharbī appears to be the end of the Marwānid iconographical adventure, if Mshatta's celebrated façade is overlooked. It can be observed that the basis for its layout is serration, or a zigzag with dots (Figure 228).

The Marwānid art referred to in this thesis is notable for its deliberateness; its informed choice of regional motifs, and an awareness of its importance. Al-Mafjar and al-Gharbī's use of the paradisiacal arcades have been pointed to as small indicators of the declining strength of the Marwānid caliphate, to which might be appended G. King's observation that the degree "to which *qusūr* tended to meet specifically Umayyad needs and interests may be measured by the absolute neglect of so many sites by the Abbasids."<sup>1</sup>



**Notes**

1.King, "Settlement patterns," p. 369.

## Select Bibliography

- Abel, F.-M.; Barrois, A.  
1929 "Chronique." Revue Biblique 38: 580-592.
- Aharoni, Yohannan.  
1956 "Excavations at Ramath[sic] Rahel 1954, Preliminary Report," Israel Exploration Journal 6: 102-111.  
1964 Excavations at Ramat Rahel: seasons 1961 and 1962. Rome: Centro di Studi Semitici.
- Almagro Gorbea, Antonio.  
1983 El Palacio Omeya de Amman. Vol. 1, "La Arquitectura". Madrid: Instituto Hispano-Arabe de Cultura.
- Anderson, Maxwell L.  
1987/88 "Pompeian Frescoes," reprinted from The Metropolitan Museum of Art Bulletin. Winter.
- Avi-Yonah, M.  
1960 "The Mosaic Pavement." In The Ancient Synagogue of Ma'on (Nirim). Reprinted from Bulletin III of Louis M. Rabinowitz Fund for the Exploration of Ancient Synagogues.  
1981 "Oriental Elements in Palestinian Art." Reprinted in M. Avi-Yonah, Art in Ancient Palestine: selected studies, edited by Hannah Katzenstein & Yoram Tsafrir. Jerusalem: The Magnes Press.
- Baer, E.  
1983 Metalwork in Medieval Islamic Art. Albany: State University of New York Press.
- Bagatti, P. Bellarmino.  
1948 Il Santuario Della Visitazione at 'Ain Karim (Montana Judaeae). Pubblicazioni Dello Studium Biblicum Franciscanum No. 5. Jerusalem: Tipografia dei PB. Francescani.
- Bates, Michael L.  
1987 "The Coinage of Syria under the Umayyads, 692-750 A.D.," The Fourth International Conference On The History of Bilād al-Shām During The Umayyad Period. Proceedings of the Third Symposium, vol. II, English Section: 195-228.
- Bauer, P. V. C.  
1938 "Glassware." In Gerasa City of the Decapolis, edited by Carl H. Kraeling. New Haven, Connecticut: American Schools of Oriental Research.
- Ben-Dov, Meir.  
1985 In the Shadow of the Temple. Translated from Hebrew by Ina Friedman. Originally published 1982. Jerusalem: Keter Publishing House.
- Biebel, F. M.  
1938 "Mosaics." In Gerasa City of the Decapolis, edited by Carl H. Kraeling. New Haven, Connecticut: American Schools of Oriental Research.

Bier, Lionel.

- 1986 Sarvistan: a study in early Iranian architecture. University Park and London: The Pennsylvania State University Press.

Bisheh, Ghazi Izzeddin.

- 1979 "The Mosque of the Prophet at Madīnah Throughout the First-Century A.H. with Special Emphasis on the Umayyad Mosque." Ph.D. diss., University of Michigan.
- 1987 "Qasr Mshash and Qasr 'Ayn al-Sil: two Umayyad sites in Jordan," The Fourth International Conference On The History of Bilād al-Shām During The Umayyad Period. Proceedings of the Third Symposium, vol. II, English Section: 81-103.

Blair, Sheila S.

- 1992 "What is the Date of the Dome of the Rock." In Bayt al-Maqdis. 'Abd al-Malik's Jerusalem, Part One, edited by Julian Raby and Jeremy Johns. Oxford Studies in Islamic Art IX. Oxford: Oxford University Press.

Bothmer, Hans-Caspar Graf von.

- 1986 "Frühislamische Koran-Illuminationen," Kunst & Antiquitäten 1: 22-33.
- 1987 "Architekturbilder im Koran," Pantheon 45: 4-20.
- 1987 "Meisterwerke islamischer Buchkunst: koranische Kalligraphie und Illumination im Handschriftenfund aus der Grossen Moschee in Sanaa," Jemen: 3000 Jahre Kunst und Kultur des glücklichen Arabien, Werner Davis, ed. Innsbruck: Pinguin.

Brett, Gerald; Macaulay, W. J.; Stevenson, Robert B. K.

- 1947 The Great Palace of the Byzantine Emperors. Being a first report on the excavations carried out in Istanbul on behalf of the Walker Trust (The University of St. Andrews), 1935-38. London: Geoffrey Cumberlege.

Brisch, Klaus.

- 1963 "Le chateau omeyyade de Djebel Seis," Les Annales Archéologique de Syrie 13: 135-158.
- 1963 "Das omayyadische schloss in Usais," Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo 19: 141-187.
- 1965 "Das omayyadische schloss in Usais (II)," Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo 20: 138-177.

Brisch, Klaus; Kröger, Jens; Spulher, Friedrich; Zick-Nissen, Johanna.

- 1971 Islamische Kunst in Berlin. Katalog. Museum für Islamische Kunst, Staatliche Museen. Berlin: Bruno Hessling Verlag.

Burgoyne, Michael Hamilton.

- 1992 "The Gates of the Haram al-Sharīf." In Bayt al-Maqdis. 'Abd al-Malik's Jerusalem, Part One, edited by Julian Raby and Jeremy Johns. Oxford Studies in Islamic Art IX. Oxford: Oxford University Press.

Butler, Howard Crosby.

- 1904 Architecture and Other Arts. Part II of the publications of an American Archæological Expedition to Syria 1899-1900. New York: The Century Co., London: William Heinemann.
- 1969 Early Churches in Syria, Fourth to Seventh Centuries, edited and completed by E.

Baldwin Smith. Amsterdam: Adolf M. Hakkert

Carlier, Patricia.

- 1985 "Qastal un chateau du desert en Jordanie," Archéologia 206: 46-57.  
 1987 "Qastal al-Balqa': An Umayyad Site in Jordan," The Fourth International Conference On The History of Bilād al-Shām During The Umayyad Period. Proceedings of the Third Symposium, vol. II, English Section: 104-139.

Carlier, Patricia et Morin, Frédéric.

- 1984 "Recherches Archéologiques au Chateau de Qastal (Jordanie)," Annual of the Department of Antiquities of Jordan 28: 343-493.  
 1986 "Qastal," Archiv für Orientforschung 33: 187-206.  
 1987 "Archaeological researches at Qastal, second mission, 1985," Annual of the Department of Antiquities of Jordan 31: 221-246.

Cecchelli, Carlo; Furlani, Guisepe, and Salmi, Mario, eds.

- 1959 The Rabbula Gospels. Facsimile Edition of the Miniatures of the Syriac Manuscript Pluteus I, 56, in the Medicean-Laurentian Library, Florence. Olten and Lausanne: Urs Graf-Verlag.

Chester, Greville J. Chester.

- 1871 "Notes on miscellaneous objects found in the excavations." In The Recovery of Jerusalem, by C. E. Wilson and C. Warren. New York: D. Appleton & Company.

Choricus.

- 1986 *Laudatio Marciani I*. In The Art of the Byzantine Empire 312-1453. Medieval Academy Reprints for Teaching, translated by Cyril Mango. Toronto, Buffalo, London: University of Toronto Press.

Clermont-Ganneau, Charles.

- 1873 "Nouveau ossuaires Juifs, avec inscriptions Grecques et Hébraïques," Revue Archéologique N.S. 25: 398-414.  
 1971 Archaeological Researches in Palestine During the Years 1873-1874. Vol. 1, with numerous illustrations from drawings made on the spot by A. Lecomte du Noüy, Architect. Translated by Aubrey Stewart. Jerusalem: "Raritas" Reprint.

Colledge, Malcolm A. R.

- 1976 The Art of Palmyra. Boulder, Colorado: Westview Press, Inc.

Colt, H. Dunscombe, ed.

- 1962 Excavations at Nessana (Auja Hafir, Palestine). 3 vols. London: British School of Archaeology in Jerusalem.

Conder, Claude Reignier.

- 1886 Syrian Stone Lore. London: Richard Bentley and Son.

Conder, C. R. and Kitchener, H. H.

- 1881 The Survey of Western Palestine. Vol. I, "Galilee," edited with additions by E.H. Palmer and Walter Besant. London: The Committee of the Palestine Exploration Fund.

Creswell, K.A.C.

- 1937 "Islam's Newly Revealed Artistic Inheritance from Byzantium: Hellenistic Panels in the El Aksa Mosque," Illustrated London News. (January 16) 95: 94-95.  
 1969 Early Muslim Architecture. 2 vols. 2nd edition. Oxford: Clarendon Press.  
 1989 A Short Account of Early Muslim Architecture. Revised and supplemented by James W. Allan, Aldershot: Scolar Press.

Crone, Patricia and Hinds, Martin.

- 1986 God's Caliph. Cambridge, New York, Melbourne: Cambridge University Press.

Crowfoot, Grace M. and Harden, D. B.

- 1931 "Early Byzantine and Later Glass Lamps," The Journal of Egyptian Archaeology 17: 196-208.

Crowfoot, J. W.

- 1938 "Christian Churches." In Gerasa City of the Decapolis, edited by Carl H. Kraeling. New Haven, Connecticut: American Schools of Oriental Research.  
 1941 Early Churches in Palestine. London: British Academy.

Day, Florence E.

- 1942 "Early Islamic and Christian Lamps," Berytus 7: 63-79.

Dehérain, Henri.

- 1938 Orientalistes et antiquaires, Silvestre de Sacy, Ses contemporains et ses disciples. BAH, t.XXVII. Paris: Librairie Orientaliste, Paul Geuthner.

Deichmann, Friedrich Wilhelm.

- 1969 Ravenna: geschichte und monumente. 3 vols. Wiesbaden: Franz Steiner Verlag GmbH.

Déroche, François.

- 1983 Catalogue des manuscrits arabes. Deuxième partie, Manuscrits musulmans. Tome I, 1. Les Manuscrits du Coran. Paris: Bibliothèque Nationale.

Desreumaux, A. u. Humbert, J. B.

- 1987 "De Fund von al-Fedain/Mafraq," p. 347, in Pierre Amiet, ed., Der Königsweg. 9000 Jahre Kunst und Kultur in Jordanien and Palästina. Mainz am Rhein: Philip von Zabern.

Dimand, M. S.

- 1938 "An Egypto-Arabic Panel with Mosaic Decoration," Bulletin of The Metropolitan Museum of Art 33: 78-79.  
 1958 A Handbook of Muhammadan Art. 3rd edition, New York: The Metropolitan Museum of Art.

Dodd, Erica Cruikshank and Khairallah, Shereen.

- 1981 The Image of the Word. A Study of Quranic Verses in Islamic Architecture. 2 vols. Beirut: The American University of Beirut.

Dreibholz, Ursula.

- 1995 "Treatment of Early Islamic Manuscript Fragments on Parchment, a Case History: the find of San'a, Yemen," The Conservation and Presevation of Islamic Manuscripts:

proceedings of the third conference of Islamic monuments: 131-145.

Écochard, Michel.

1977 Filiation de Monuments grecs, byzantins et islamiques: une question de géométrie. Paris: Librairie Orientaliste Paul Geuthner.

Elad, Amikan.

1992 "Why did `Abd al-Malik build the Dome of the Rock? A re-examination of the Muslim sources." In Bayt al-Maqdis. `Abd al-Malik's Jerusalem, Part One, edited by Julian Raby and Jeremy Johns. Oxford Studies in Islamic Art IX. Oxford: Oxford University Press.

1995 Mediaeval Jerusalem and Islamic Worship. Leiden, New York, Cologne: E.J. Brill.

Erdmann, Kurt.

1969 Die Kunst Irans zu Zeit der Sasaniden. Mainz, Florian Kupferberg Verlag.

Ess, Josef van.

1992 "'Abd al-Malik and the Dome of the Rock. An analysis of some texts." In Bayt al-Maqdis. `Abd al-Malik's Jerusalem, Part One, edited by Julian Raby and Jeremy Johns. Oxford Studies in Islamic Art IX. Oxford: Oxford University Press.

Ettinghausen, Richard.

1962 Arab Painting. "Treasures of Asia" series no. 4. Lausanne: Editions d'Art Albert Skira.

Ettinghausen, Richard and Grabar, Oleg.

1987 The Art and Architecture of Islam: 650-1250. Pelican History of Art. London: Penguin Group.

Eusebius.

1986 *Vita Constantini III, 34, 35.* In The Art of the Byzantine Empire 312-1453. Medieval Academy Reprints for Teaching, translated by Cyril Mango. Toronto, Buffalo, London: University of Toronto Press.

Falke, Otto von.

1936 Decorative Silks. 3rd ed. London: A. Zwemmer.

Fantar, M. H., gen. ed.

1982 De Carthage à Kairouan. 2000 ans d'art et d'histoire en Tunisie. Catalogue of an exhibition held in Paris 20 October 1982-27 February 1983. Paris: Association Française d'Action Artistique

Fehévāri, Géza.

1976 Islamic Metalwork of the eighth to the fifteenth century in the Keir Collection. Foreword by Ralph Pinder-Wilson. London: Faber and Faber Limited.

Fitzgerald, Gerald M.

1931 Beth-Shan Excavations 1921-1923: the Arab and Byzantine levels. Publications of the Palestine Section of the Museum of the University of Pennsylvania, vol. III. Philadelphia: University Press for the University of Pennsylvania Museum.

Flanagan, J. F.

- 1956 "The Figured Silks." In The Relics of Saint Cuthbert, edited by C.F. Battiscombe. Oxford: Oxford University Press.
- Flood, F. B.  
1991/92 "The Tree of Life as a decorative device in Islamic window-fillings: the mobility of a leitmotif," Oriental Art NS 37, #4: 209-220.
- Fourdrin, Jean-Pascal.  
1992 "Église E.5 d'el Bāra," Syria 69: 171-210.
- Gabriel, Albert.  
1927 "Kasr el Heir," Syria 8: 302-329.
- Gardet, L.  
"Djanna," Encyclopaedia of Islam. 2nd edition.
- Gardin, J.-C.  
1957 Céramiques de Bactres. Paris: Librairie C. Klincksieck.
- Gaube, Heinz.  
1974 Ein Arabischer Palast in Südsyrien Hirbet el-Baiḍa, Beirut: In Kommission bei Franz Steiner Verlag, Wiesbaden.  
1977 "'Ammān, Ḥarāne und Qastal," Zeitschrift des Deutschen Palästina-Vereins 93: 52-86.  
1979 "Die syrischen Wüstenschlösser: Einige wirtschaftliche und politische Gesichtspunkte zu ihrer Entstehung," Zeitschrift des Deutschen Palästina-Vereins 95: 182-209.
- Gauckler, Paul.  
1906 "Mosaïques tombales d'une chapelle de martyrs à Thabraca," Fondation Eugène Piot, Monuments et Memoirs 13: 175-227.
- Gautier-van Berchem, Marguerite.  
1969 "The Mosaics of the Dome of the Rock in Jerusalem and of the Great Mosque in Damascus." In Early Muslim Architecture, by K. A. C. Creswell. 2 vols. 2nd edition. Oxford: Clarendon Press.
- Ghirshman, Roman.  
1962 Iran: Parthians and Sassanians Translated by Stuart Gilbert and James Emmons. London: Thames and Hudson.
- Gil, Moshe.  
1992 A History of Palestine, 634-1099. Translated from Hebrew by Ethel Broido; revised edition of Palestine During the First Muslim Period (634-1099), originally published in Hebrew by Tel Aviv University, 1983; Cambridge: Cambridge University Press.
- Glueck, Nelson.  
1965 Deities and Dolphins: the Story of the Nabataeans. New York: Straus and Giroux.
- Goitein, Shelomo Dov.  
1950 "The Historical Background of the Erection of the Dome of the Rock," Journal of the American Oriental Society 70 #2: 104-108.

Goldman, Bernard.

1966 The Sacred Portal. Detroit: Wayne State University Press.

Grabar, André.

1954 "Les mosaïques de Germigny-des-Prés," reprinted in vol. 2 of L'Art de la fin de l'antiquité et du moyen âge. 3 vols. Paris: Collège de France, 1968.

1968 Christian Iconography: a study of its origins. The A. W. Mellon Lectures in the Fine Arts, 1961. Princeton: Princeton University Press.

Grabar, Oleg.

1955 "Ceremonial and Art at the Umayyad Court," Ph.D thesis, Princeton University.

1959 "The Umayyad Dome of the Rock in Jerusalem," Ars Orientalis 3: 33-62.

1973 The Formation of Islamic Art. New Haven and London: Yale University Press.

1992 The Mediation of Ornament. The A.W. Mellon Lectures in the Fine Arts, 1989. Bollingen Series XXXV.38. Princeton, New Jersey: Princeton University Press.

1996 The Shape of the Holy: Early Islamic Jerusalem. With contributions by Mohammad al-Asad, Abeer Audeh, Saïd Nuseibeh. Princeton: Princeton University Press.

Grabar, Oleg; Holod, Renata; Knustad, James; Trousdale, William.

1978 City in the Desert, Qasr al-Hayr East. Harvard Middle Eastern Monographs XXIII/XXIV. Cambridge, Mass.: Harvard University Press.

Grant, Michael.

1976 Cities of Vesuvius: Pompeii and Herculaneum. Harmondsworth: Penguin Books.

Grohmann, A.

1929 "The Early Islamic Period from the Seventh to the Twelfth Century," in The Islamic Book, by Thomas W. Arnold and Adolph Grohmann. Germany (?what city): The Pegasus Press.

1958 "The problem of dating early Qur'ān's," Der Islam 33: 213-231.

Hamilton, R. W.

1949 The Structural History of the Aqsa Mosque. London: Geoffrey Cumberlege, Oxford University Press.

1959 Khirbat al Mafjar: an Arabian mansion in the Jordan Valley. Oxford: Clarendon Press.

1988 Walid and His Friends: an Umayyad tragedy. Oxford Studies in Islamic Art VI. Oxford: Oxford University Press.

1967 Handbook of the Byzantine Collection. Washington, D.C.: Dumbarton Oaks.

Harrison, Martin. [aka R. M.]

1986 Excavations at Sarāḥane in Istanbul. 2 vols. Princeton: Princeton University Press and Dumbarton Oaks Research Library and Collection.

1989 A Temple for Byzantium. The Discovery and Excavation of Anicia Juliana's Palace-Church in Istanbul, foreword by Steven Runciman, Austin, Texas: University of Texas Press.

Hasan, Zaki Muhammad.

1981 Works of Dr. Zaki Muhammad Hassan. v. 2 "Al-Fann al-Islāmī fī Miṣr," v. 3, "Funūn al-Islām". Beirut: Raed al-Arabī, 1401H/1981M.



- Hawting, G. R.  
1987 The First Dynasty of Islam: the Umayyad Caliphate AD 661-750. Carbondale and Edwardsville: Southern Illinois University Press.
- Hillenbrand, Robert.  
1991 "Qasr Kharana Re-examined," a review of Qasr Kharana in the Transjordan, by Stephen K. Urice. Oriental Art NS 37.2: 109-113.
- Hoag, John W.  
1977 Islamic Architecture. New York: Electa/Rizzoli.
- Homer.  
1950 The Illiad. Translated by E. V. Rieu. Harmondsworth: Penguin Books.  
1964 The Odyssey. Translated by E. V. Rieu. Harmondsworth: Penguin Books.
- Impert, Frédéric.  
1995 "Inscriptions et espaces d'écriture au Palais d'al-Kharrāna en Jordanie," Studies in the History and Archaeology of Jordan 5: 403-416.
- Israeli, Yael and Avida, Uri.  
1988 Oil Lamps from Eretz Israel: the Louis and Carmen Warschaw Collection at the Israel Museum, Jerusalem. Jerusalem: The Israel Museum.
- Jakeman, Jane.  
1994 Review of The Mediation of Ornament by Oleg Grabar. Ars Orientalis 24: 151-152.
- Jenkins, Marilyn.  
1985 "A Vocabulary of Umayyad Ornament," Masāhif San`ā'. Kuwait: Dar al-Athar al-Islamiyyah: 19-23.  
1985 "Islamic Art in The Metropolitan Museum of Art," Arts and the Islamic World Issue 11 vol. 3. no. 3: 51-56.
- Jones, Barri and Ling, Roger.  
1993 "6. The Great Nymphaeum." In J.B. Ward-Perkins The Severan Buildings of Lepcis Magna: an architectural survey, by J. B. Ward-Perkins, edited by Philip Kenrick. Society for Libyan Studies Monograph No. 2. London: The Society for Libyan Studies.
- Karnapp, Walter.  
1968 "Die Stadtmauer von Resafe in Syrien," Archäologischer Anzeiger: 307-343  
1970 "Die Nordtoranlage der Stadtmauer von Resafa in Syrien," Archäologischer Anzeiger: 98-123.
- Keall, Edward J.  
"Bīšāpūr," Encyclopædia Iranica vol. IV.
- Kennedy, Hugh.  
1986 The Prophet and the Age of the Caliphates: the Islamic Near East from the sixth to the eleventh century. London and New York: Longman.
- Kessler, Christel.

- 1970 "Abd al-Malik's Inscription in the Dome of the Rock: a reconsideration," Journal of the Royal Asiatic Society N.S. 1: 2-14.
- King, Geoffrey R. D.**
- 1982 "The architectural motif as ornament in Islamic art: the 'Marwān II' ewer and three wooden panels in the Museum of Islamic Art in Cairo," Islamic Archaeological Studies 2: 23-57.
- 1987 "The distribution of sites and routes in the Jordanian and Syrian deserts in the early Islamic period," Seminar for Arabian Studies 17: 91-105.
- 1987 "The Umayyad qusur and related settlements in Jordan," The Fourth International Conference on the History of Bilād al-Shām during the Umayyad Period. Proceedings of the Third Symposium, vol. II, English Section: 71-80.
- 1992 "Settlement patterns in Islamic Jordan: the Umayyads and their use of the land," Studies in the History and Archaeology of Jordan 4: 369-375.
- Kitzinger, Ernst.**
- 1951 "Studies on Late Antique and Early Byzantine Floor Mosaics: I, mosaics at Nikopolis," Dumbarton Oaks Papers No. 6: 83-122.
- 1976 "Mosaic Pavements in the Greek East and the Question of a 'Renaissance' under Justinian." Reprinted in The Art of Byzantium and the Medieval West: selected studies, edited by W. Eugene Kleinbauer. Bloomington: Indiana University Press.
- Klengel, Horst.**
- 1972 The Art of Ancient Syria. English Language edition. South Brunswick and New York: A.S. Barnes and Company.
- Kochavi, Moshe.**
- 1964 "The burial caves of Ramat Rahel, 1962 season." In Excavations at Ramat Rahel: seasons 1961 and 1962 by Yohannan Aharoni, . Rome: Centro di Studi Semitici.
- Koechlin, Raymond.**
- 1928 Les Céramiques musulmanes de Suse au Musée de Louvre. Mémoires de la Mission Archéologique de Perse, vol. XIX. Paris: Ernest Leroux.
- Krautheimer, Richard.**
- 1965 Early Christian and Byzantine Architecture. The Pelican History of Art, edited by Nikolaus Pevsner. Harmondsworth: Penguin Books Ltd.
- 1969 "Introduction to an 'Iconography of Medieval Architecture'." Reprinted in Studies in Early Christian, Medieval, and Renaissance Art, by Richard Krautheimer. New York: New York University Press
- Kröger, Jens.**
- 1982 Sasanidischer Stuckdekor. Baghdader Forschungen Band 5. Mainz am Rhein: Philipp von Zabern.
- Kühnel, Ernst.**
- 1910 "Ausstellung von Meisterwerken mohammedanischer Kunst in München (Mai bis Oktober 1910)." Der Islam (1910) 1: I.Teil: 183-194, II.Teil: 369-384.
- Lampl, Paul.**

- 1960-61 "Schemes of Architectural Representation in Early Medieval Art," Marsyas 9: 6-17.
- Lassus, Jean.  
 1935(?) Inventaire archéologique de la région au nord-est de Hama. Tomes I et II. Documents d'Études orientales de l'Institut français de Damas IV. Beirut: Imprimerie Catholique.
- 1947 Sanctuaires Chrétiens de Syrie: Essai sur la genèse la forme et l'usage liturgique des édifices du culte chrétien, in Syrie, du III<sup>e</sup> siècle à la conquête musulmane. Bibliothèque Archéologique et Historique, tome XLII. Paris: Librairie Orientaliste Paul Geuthner.
- Le Strange, Guy.  
 1965 Palestine Under the Moslems. A description of Syria and the Holy Land from A.D.650 to 1500. Translated from the works of The Mediæval Arab Geographers. Original edition 1890. Published with new introduction by Walid Khalidy. Beirut: Khayats.
- Levi, Doro.  
 1947 Antioch Mosaic Pavements. 2 vols. Princeton, N.J.: Princeton University Press.
- Levy, Reuben.  
 1957 The Social Structure of Islam. 2nd edition of The Sociology of Islam. Cambridge: Cambridge University Press.
- Ling, Roger.  
 1991 Roman Painting. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press.
- Lloyd, Seton.  
 1961 The Art of the Ancient Near East, Praeger Paperbacks 1961, London: Thames and Hudson.
- Lyttelton, Margaret.  
 1974 Baroque Architecture in Classical Antiquity. London: Thames and Hudson.
- Macalister, R. A. Stewart.  
 1904 Report No. 3 "An Unpublished Inscription in the Northern Necropolis of Jerusalem." Palestine Exploration Fund. Quarterly Statement for 1904: 246-257.
- Macalister, R. A. S. and Duncan, J. Garrow.  
 1923-25 "Excavations on the Hill of Ophel, Jerusalem 1923-1925," Palestine Exploration Fund. Annual. 4.
- MacCormack, Sabine G.  
 1981 Art and Ceremony in Late Antiquity. Berkeley, Los Angeles, London: University of California Press.
- Magness, Jodi.  
 1993 Jerusalem Ceramic Chronology, circa 200-800 CE. JSOT/ASOR Monograph Series No. 9. Sheffield: Sheffield Academic Press.
- Maguire, Henry.  
 1987 Earth and Ocean: the terrestrial world in early Byzantine art. University Park and

London: The Pennsylvania State University Press.

Mango, Cyril.

1966 "Byzantium." In Treasures of Turkey. Geneva: Editions d'Art Albert Skira.

1986 Byzantine Architecture. Originally published in Italian, Milan: Electa Editrice, 1974. English paperback edition London: Faber and Faber Limited.

Mas'ūdī, Abu al-Hasan `Alī b. al-Husayn.

1874 Les prairies d'or [Murūj al-dhahab], par Maçoudi. Texte et traduction par C. Barbier de Meynard. Paris: L'Imprimerie Nationale.

Mazar, Benjamin, asst. by Cornfeld, Gaalyah and Freedman, D. N.

1975 The Mountain of the Lord. Garden City, New York: Doubleday & Company, Inc.

1978 "Herodian Jerusalem in the Light of the Excavations South and South-West of the Temple Mount," Israel Exploration Journal 28: 230-237.

McKenzie, Judith.

1990 The Architecture of Petra. Oxford: Oxford University Press.

Miles, George C.

1938 The Numismatic History of Ravy. Numismatic Studies No. 2. New York: The American Numismatic Society.

1952 "Mihrāb and 'Anazah: a study in early Islamic Iconography." In Archaeologica Orientalia in Memoriam Ernst Herzfeld, edited by George C. Miles. Locust Valley, New York: J.J. Augustin Publisher.

Moritz, B.

1908 "Arabia Petræa," Mélanges de la Faculté Oriental, Université Saint-Joseph 3: 387-436.

Moritz, B., ed.

1905 Arabic Palaeography. Publications of the Khedivial Library, No. 16. Cairo.

al-Muqaddasī, Shams al-Dīn Abū `Abd Allāh Muḥammad.

1967 Ahsan al-taqāsīm fī ma`rifat al-aqālīm, 2nd ed., Leiden.

Nielsen, J. S.

"Mazālim," Encyclopaedia of Islam, 2nd edition.

Nordenfalk, Carl.

1938 Die Spätantiken Kanontafeln, 2 vols. Göteborg: Oscar Isacson's Boktryckeri A.-B.

Northedge, Alastair.

1992 Studies on Roman and Islamic `Ammān. Vol. 1, with contributions by Julian Bowsher, Ulrich Hübner, Henry Innes MacAdam, Jason Wood. British Academy Monographs in Archaeology no. 3, Oxford: Oxford University Press.

Orbeli, J. et Trever, C.

1935 Orféverie sasanide. Moscow-Leningrad: Academia.

Otto-Dorn, Katharina.

- 1954 "Bericht über die grabung im Islamischen Rusafa," Archäologischer Anzeiger des Deutschen Archäologischen Instituts 69: columns 138-159, printed with the Jarbuch des Deutschen Archäologischen Instituts, (1954) band 69. [The two publications were printed together for the years 1889-1961].
- 1954/55 "Bericht über die grabung im Islamischen Rusafa," Les Annales Archéologiques de Syrie 4-5 jointly: 45-58.
- 1957 "Grabung im umayyadischen Ruṣāfah," Ars Orientalis 2: 119-133.
- Ovadia, Ruth and Asher.  
1987 Hellenistic, Roman and Early Byzantine Mosaic Pavements in Israel, Rome: "L'Erma" di Bretschneider.
- Palmer, E. H.  
1871 The Desert of the Exodus. With maps and numerous illustrations from photographs and drawings taken on the spot by the Sinai Survey Expedition, and C.F. Tyrwhitt Drake. Cambridge: Deighton, Bell and Co., London: Bell and Daldy.
- Paret, Rudi.  
1971 Der Koran, Kommentar und Konkordanz. Stuttgart, Berlin, Cologne, Mainz: Verlag W. Kohlhammer.
- Paulus Silentarius.  
1986 Descr. S. Sophiae. In The Art of the Byzantine Empire 312-1453. Medieval Academy Reprints for Teaching, translated by Cyril Mango. Toronto, Buffalo, London: University of Toronto Press.
- Piccirillo, Michele.  
1993 The Mosaics of Jordan. Amman: American Centre of Oriental Research.
- Piccirillo, Michele and `Amr, `Abd al-Jalil.  
1988 "A Chapel at Khirbet el-Kursi-Amman," Liber Annuus 38: 361-382.
- Pinder-Wilson, Ralph.  
"Ivory," The Dictionary of Art, v. 16, p. 523.
- Pope, Arthur Upham.  
1933 "A Sasanian Garden Palace," The Art Bulletin 15: 75-85.
- Rabbat, Nasser.  
1989 "The Meaning of the Umayyad Dome of the Rock," Muqarnas 6: 12-21.  
1993 "The Dome of the Rock Revisited: Some Remarks on al-Wasiti's Accounts," Muqarnas 10: 67-75.
- Rahmani, L. Y.  
1980 "Palestinian incense burners of the sixth to eighth centuries C.E.," Israel Exploration Journal 30: 116-122.  
1983 "Finds from a sixth to seventh centuries site near Gaza: II. pottery and stone objects," Israel Exploration Journal 33: 219-230.  
1988 "The three appearances of Chip-carving in Palestine," Israel Exploration Journal 38: 59-75.

Reuther, Oscar.

- 1938 "Sāsānian Architecture. A History." In A Survey of Persian Art, edited by Arthur Upham Pope. vol. 1. London and New York: Oxford University Press.

Rice, D. Talbot.

- 1932 "The Oxford Excavations at Hira, 1931." Antiquity 6: 276-291.  
1934 "The Oxford Excavations at Hīra." Ars Islamica 1: 51-73.

Rice, D. Talbot, ed.

- 1958 The Great Palace of the Byzantine Emperors. 2nd report. London: Geoffrey Cumberlege.

Ringbom, Lars-Ivar.

- 1958 Paradisus Terrestris. Helsinki: Oy Tilgmann AB.

Robertson, D. S.

- 1929 A Handbook of Greek & Roman Architecture. Cambridge: University Press.

Rosen-Ayalon, Myriam.

- 1974 La Poterie islamique. Mission de Susiane, tome 1. Paris: Librairie Orientaliste Paul Geuthner.  
1976 "The First Mosaic Discovered in Ramla," Israel Exploration Journal 24:  
1989 The Early Islamic Monuments on the Haram al-Sharīf: an iconographic study. Qedem 28. Jerusalem: The Hebrew University of Jerusalem.

Rosen-Ayalon, Myriam and Eitan, Avraham.

- 1969 Ramla Excavations: finds from the VIIIth century C.E. Catalogue no. 66, Jerusalem: Jerusalem Post Press.

Rosenthal-Heginbottom, Renate.

- 1982 Die kirchen von Sobota und die dreiapsidenkirchen des Nahen Ostens. Gottinger Orientforschungen II Reihe. Band 7. Wiesbaden: Otto Harrasowitz.

Rostovtzeff, M.

- 1933 "Graffiti." In The Excavations at Dura-Europos, by P.V.C. Bauer, M.I. Rostovtzeff, Alfred R. Bellinger. Preliminary Report of Fourth Season of Work October 1930-March 1931. New Haven: Yale University Press.

Saarisalo, Aapeli and Palva, Heikki.

- 1964 "A Byzantine Church at Kafr Kama," Studia Orientalia (1964) 30:3-15.

Saller, Sylvester J.

- 1957 Excavations at Bethany (1949-1953). Publications of the Studium Biblicum Franciscanum No. 12. Jerusalem: Franciscan Press.

Sarre, Friedrich.

- 1923 Islamic Bookbindings. Translated from the German edition Islamische Bucheinbände by F.D. O'Byrne. London: Kegan Paul, Trench, Trubner & Co. Ltd.  
1934 "Die Bronzekanne des Kalifen Marwān II im Arabischen Museum in Kairo," Ars Islamica 1(Kraus Reprint Corporation, 1968): 10-15.

- Sarre, F. und Martin, F. R., eds.  
1912 Die Ausstellung von Meisterwerken Muhammedanischer Kunst in München 1910. 3 vols. Munich: F. Bruckmann A.-G.
- Sauvaget, Jean.  
1947 La Mosquée Omevyade de Médine. Paris: Vanoest.
- Schlumberger, Daniel.  
1986 Qasr el-Heir El Gharbi. Avec contributions de Michel Écochard et Nessib Saliby. Paris: Librairie Orientaliste Paul Geuthner.
- Segal, Arthur.  
1988 Architectural Decoration in Byzantine Shivta, Negev Desert, Israel. BAR International Series 420. Oxford: B.A.R.
- Ševčenko, Ihor.  
N.d. "Inscriptions." In The Monastery of Saint Catherine at Mount Sinai: the church and fortress, edited by George H. Forsyth and Kurt Weitzman. Ann Arbor: The University of Michigan Press.
- Shaw, Henry and Madden, Frederic.  
1833 Illuminated Ornaments selected from Manuscripts and Early Printed Books from the sixth to the seventeenth centuries. London: William Pickering.  
1881 Catalogue of Ancient Manuscripts in the British Museum. Part 1 (Greek). London: Printed by Order of the Trustees.
- Shalem, Avinoam.  
1994 "The Fall of al-Madā'in: Some Literary References Concerning Sasanian Spoils of War in Mediaeval Islamic Treasuries," Iran 32: 77-81.
- Smith, E. Baldwin.  
1956 Architectural Symbolism of Imperial Rome and the Middle Ages. Princeton Monographs in Art and Archaeology XXX. Princeton, New Jersey: Princeton University Press.
- Soucek, Priscilla P.  
1976 "The Temple of Solomon in Islamic Legend and Art." In The Temple of Solomon: archaeological fact and medieval tradition in Christian, Islamic and Jewish art, edited by Joseph Gutmann. Missoula, Montana: Scholars Press.  
1993 "Solomon's throne/Solomon's bath: model or metaphor?," Ars Orientalis 20: 109-134.
- Stern, Henri.  
1953 Le Calendrier de 354. Paris: Librairie Orientaliste Paul Geuthner.  
1963 "Recherches sur la mosquée al-Aqṣā et sur ses mosaïques," Ars Orientalis 5: 27-47.
- Stronach, D.  
1989 "The Royal Garden at Pasargadae: evolution and legacy." In Archaeologia Iranica et Orientalis: Miscellanea in Honorem Louis Vanden Berghe. 2 vols. Ghent: Peeters Press.
- al-Ṭabarī, Abū Ja`far Muḥammad b. Jarīr.  
1992 The History of al-Ṭabarī. Vol. XII, "The Battle of al-Qādisiyyah and the Conquest of

- Syria and Palestine," A.D. 635-637/A.H. 14-15, translated and edited by Yohanan Friedmann. Albany: State University of New York Press.
- 1989 The History of al-Tabarī. Vol. XIII, "The Conquest of Iraq, Southwestern Persia, and Egypt, the Middle Years of `Umar's Caliphate," 636-642/A.H. 15-21, translated and edited by Gautier H.A. Juynboll. Albany: State University of New York Press.
- 1989 The History of al-Tabarī. Vol. XXII, "The Marwānid Restoration," AD 693-701/AH 74-81, translated and annotated by Everett K. Rowson. Albany: State University of New York Press.
- 1990 The History of al-Tabarī. Vol. XXIII, "The Zenith of the Marwānid House," AD 700-715/AH 81-96, translated and annotated by Martin Hinds. Albany: State University of New York Press.
- 1989 The History of al-Tabarī. Vol. XXX, "The `Abbāsīd Caliphate in Equilibrium," AD 785-809/AH 169-193, translated and annotated by C.E. Bosworth. Albany: State University of New York Press.
- Tardy.  
1977 Les Ivoires, Deuxième Partie, Paris: Tardy.
- Thompson, Deborah.  
1976 Stucco from Chal Tarkhan-Eshqabad near Rayy. Warminster: Aris & Phillips Ltd.
- Tisserant, Eugenius.  
1914 Specimina Codicum Orientalium. Bonn: A. Marcus et E. Weber.
- Trendall, A. D.  
1973 The Shellal Mosaic and Other Classical Antiquities in the Australian War Memorial Canberra. 4th edition. Canberra: Australian War Memorial.
- Turtledove, Harry.  
1982 The Chronicle of Theophanes: an English translation of *anni mundi* 6095-6305 (A.D. 602-813), with an introduction and notes. Philadelphia: University of Philadelphia Press.
- Tushingham, A. D.  
1985 Excavations in Jerusalem 1961-1967. Vol. 1. With contributions by John W. Hayes, R.B.Y. Scott and Emmett Willard Hamrick. Toronto: Royal Ontario Museum.
- Tyan, Emile.  
1954 Institutions du droit public musulman. Tome I, "Le Califat". Beirut.  
1955 "Judicial Organization." In Law in the Middle East, vol. 1, "Origin and development of Islamic law," edited by Majid Khadduri and Herbert J. Liebesny. Washington, D.C.: The Middle East Institute.  
1960 Histoire de l'organisation judiciaire en pays d'Islam. Deuxième édition revue et corrigée. Leiden: E. J. Brill.
- Tzaferis, Vassilios.  
1983 "The Excavations of Kursi-Gergesa," Atiqot, English Series 14 (whole volume).
- Ulbert, Thilo.  
1993 "Ein umayyadischer Pavillon in Resafa-Ruṣāfat Hiṣām," Damascener Mitteilungen 7: 213-231.



- Underwood, Paul A.  
1950 "The Fountain of Life in Manuscripts of the Gospels." Dumbarton Oaks Papers No. 5: 43-138.
- Urice, Stephen K.  
1987 Qasr Kharana in the Transjordan. Durham, North Carolina: American Schools of Oriental Research.
- Vaccarini, G.  
1989 "I capitelli di Ma'in," Liber Annuus 39: 213-242.
- Vincent, P. L.-Hughes et Steve, P. M.-A.  
1956 Jérusalem de l'ancien Testament. Recherches d'Archéologie et d'Histoire, Paris: Librairie Lecoffre.
- Vogüé, Melchior de  
1864 Le Temple de Jérusalem. Paris: Noblet & Baudry.  
1865-1877 Syrie centrale: architecture civile et religieuse du Ier au VIIe siècle. Paris: J. Baudry.
- Volbach, W. Fritz.  
1969 Early Decorative Textiles. Translated from the Italian edition of 1966. Feltham, Middlesex: The Hamlyn Publishing Group.
- Ward-Perkins, J. B.  
1993 The Severan Buildings of Lepcis Magna. An Architectural Survey. Edited by Philip Kenrick, Society for Libyan Studies Monograph No. 2, London: The Society for Libyan Studies.  
1994 "Constantine and the Christian Basilica." Reprinted in Studies in Roman and Early Christian Architecture. London: The Pindar Press.  
"Severan Art and Architecture at Lepcis Magna." Reprinted in Studies.
- Ward-Perkins, J. B. and Goodchild, R. G.  
1953 "The Christian Antiquities of Tripolitania," Archaeologia Second series 45: 1-83.
- Warren, Charles and Conder, Claude Reignier.  
1884 The Survey of Western Palestine. London: The Palestine Exploration Fund.  
G159
- Weiss, Harvey, ed.  
1985 Ebla to Damascus: art and archaeology of ancient Syria. Washington, D.C.: Smithsonian Institution.
- Weitzmann, Kurt.  
N.d. "Introduction to the Mosaics and Monumental Paintings." In The Monastery of Saint Catherine at Mount Sinai: the church and fortress, edited by George H. Forsyth and Kurt Weitzman. Ann Arbor: The University of Michigan Press.  
1977 Late Antique and Early Christian Book Illumination. New York: George Braziller.
- Weitzmann, Kurt and Kessler, Herbert L.  
1990 The Frescoes of the Dura Synagogue and Christian Art. Washington, D.C.: Dumbarton

## Oaks Research Library and Collection.

**Whelan, Estelle.**

1990 "Writing the Word of God: some early Qur'ān manuscripts and their milieux, Part I,"  
Ars Orientalis 20: 113-147.

**Wilkinson, John.**

1981 "Architectural Procedures in Byzantine Palestine," Levant 13: 156-172.

**Wilson, Charles W.**

1980 Ordinance Survey of Jerusalem. Facsimile of the 1865 edition, Jerusalem: Ariel  
Publishing House.

**Wilson, Charles W. and Warren, Charles.**

1871 The Recovery of Jerusalem. A Narrative of Exploration and Discovery in the City and  
the Holy Land. New York: Appleton & Company.

**Woolley, Leonard and Lawrence, T.E.**

1914-15 "The Wilderness of Zin," Palestine Exploration Fund Annual 3.

**Zayadine, Fawzi.**

1984 "Islamic Art and Archaeology in the Publications of Marguerite Gauthier-van Berchem,"  
Annual of the Department of Antiquities of Jordan 24: 202-210.

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Fig. 1

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A

B

C

D

Fig. 2

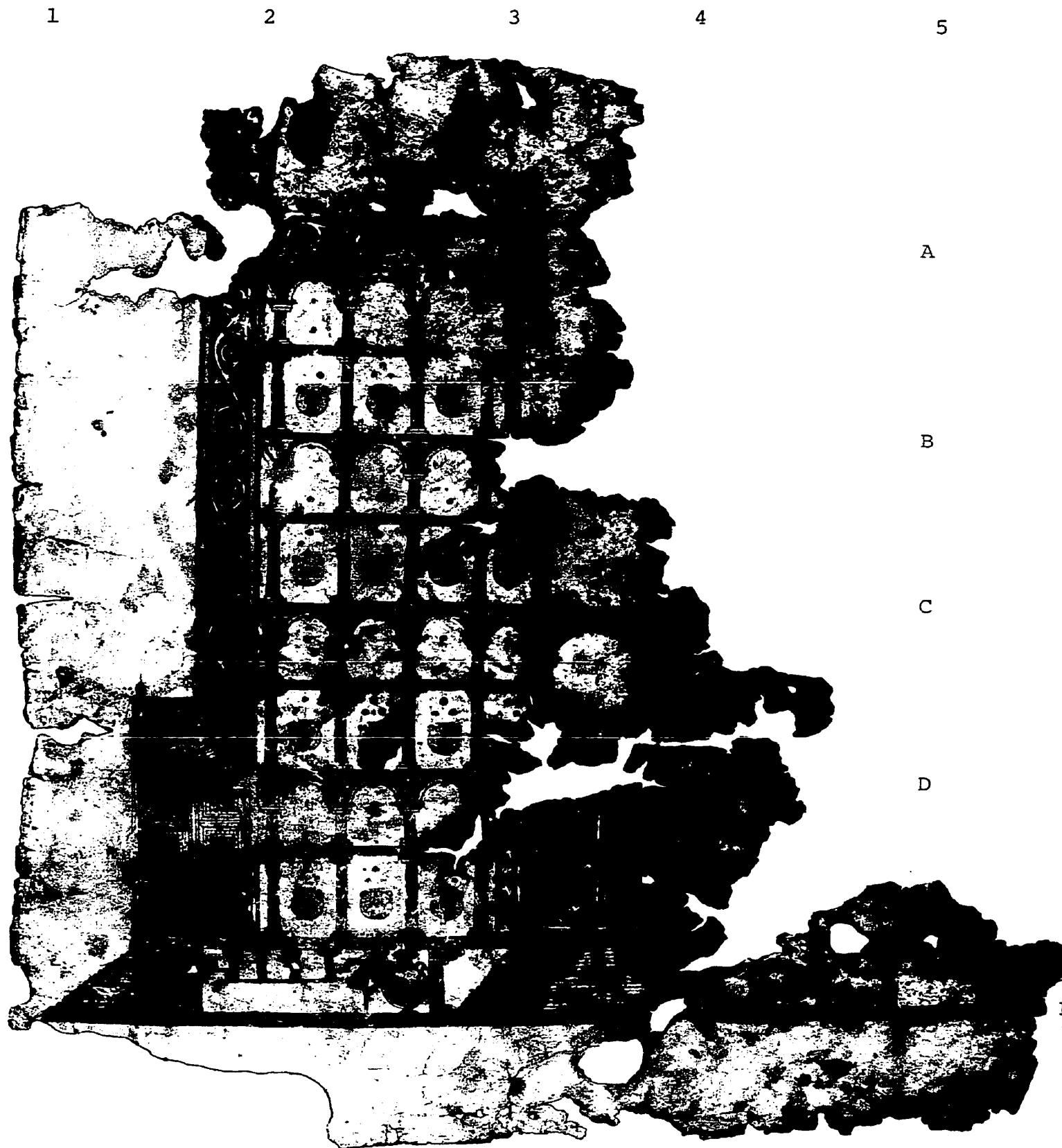
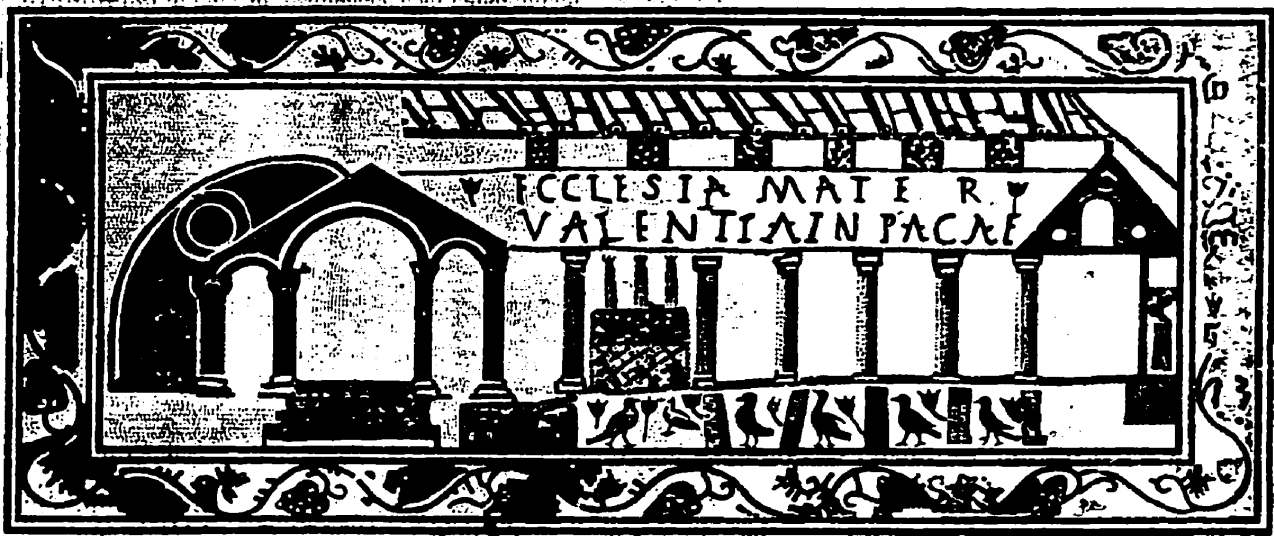
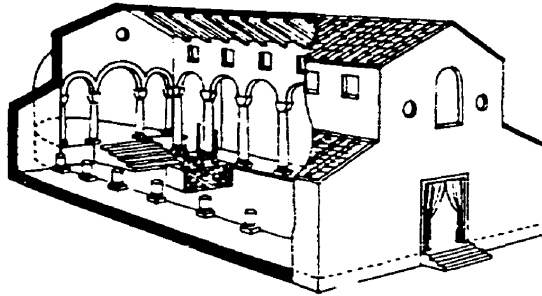


Fig. 3

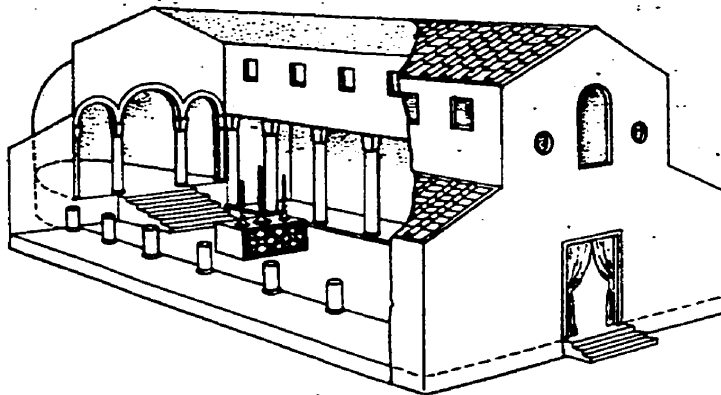




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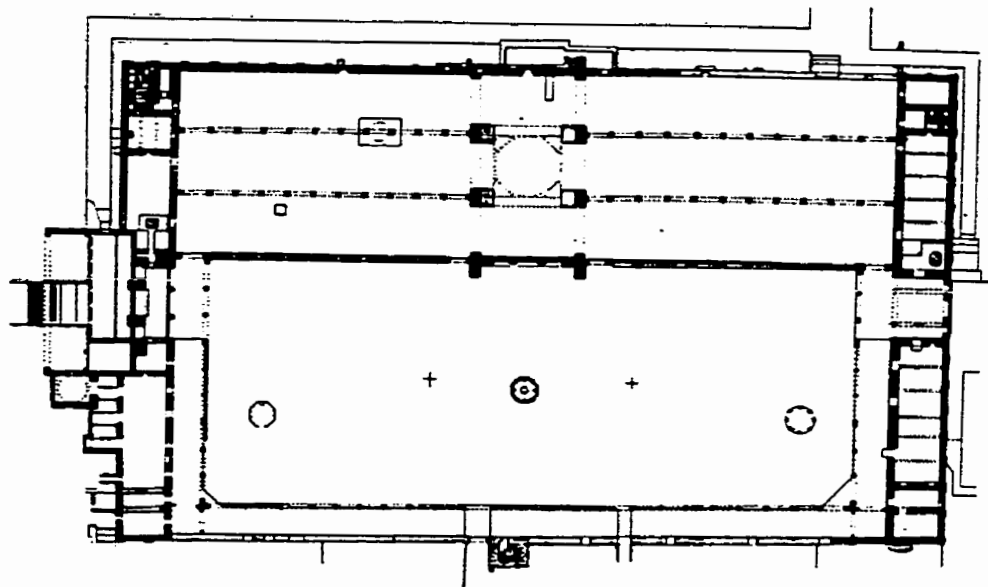
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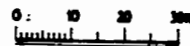
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- PRE - MUSLIM
- AL - WALID
- MALIK SHAH
- 12<sup>TH</sup> C.
- 14<sup>TH</sup> C.
- MODERN
- INDETERMINATE



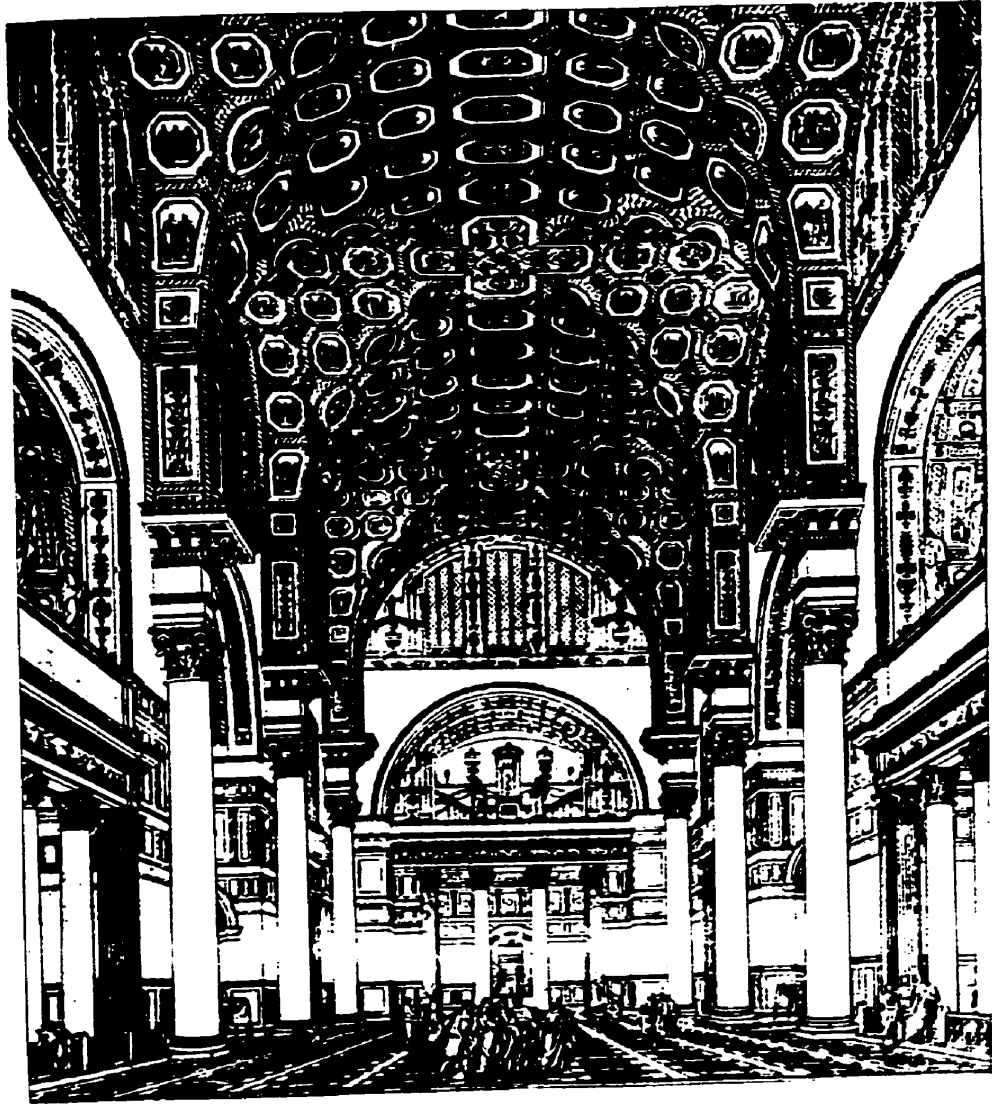
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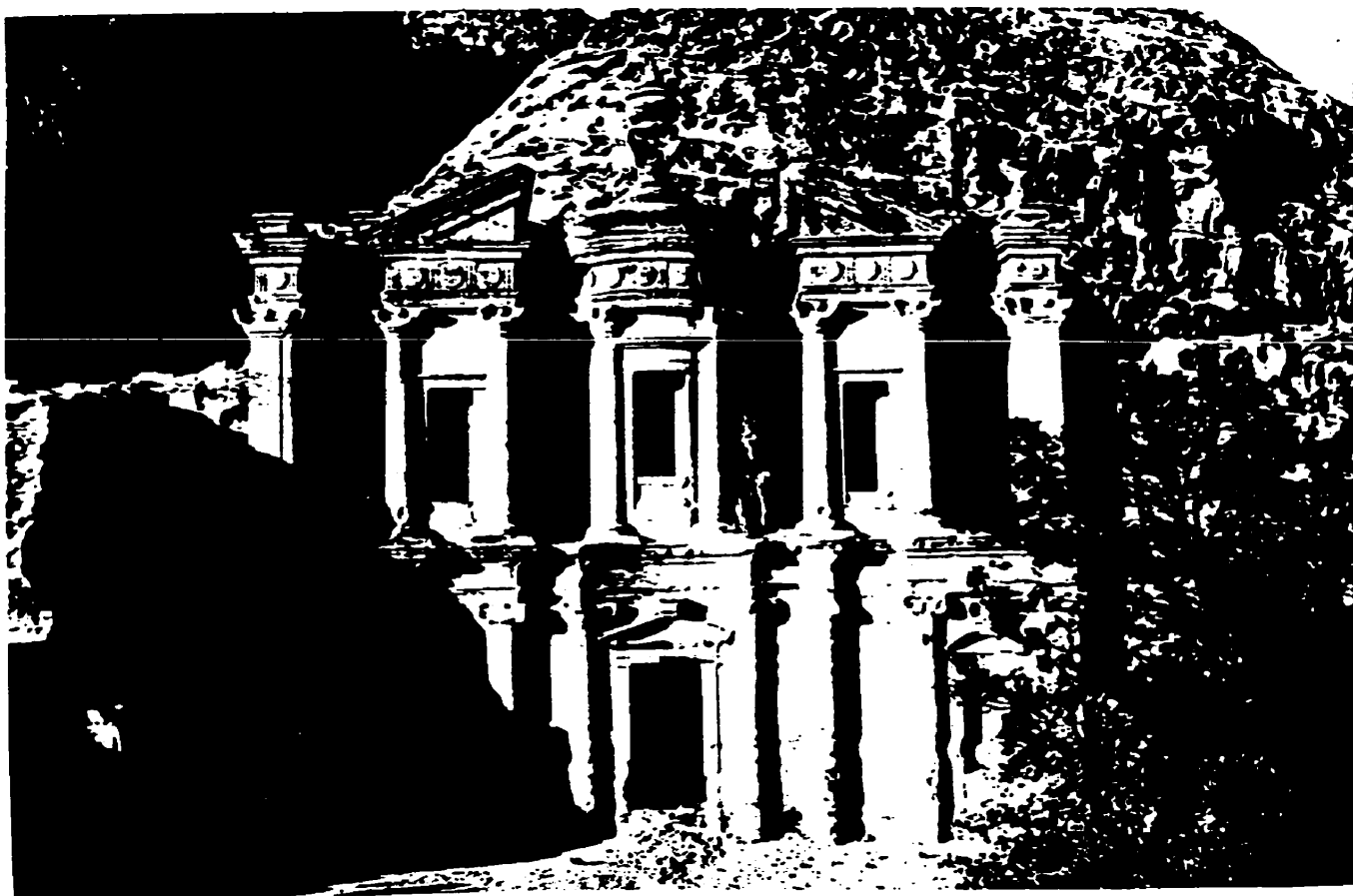
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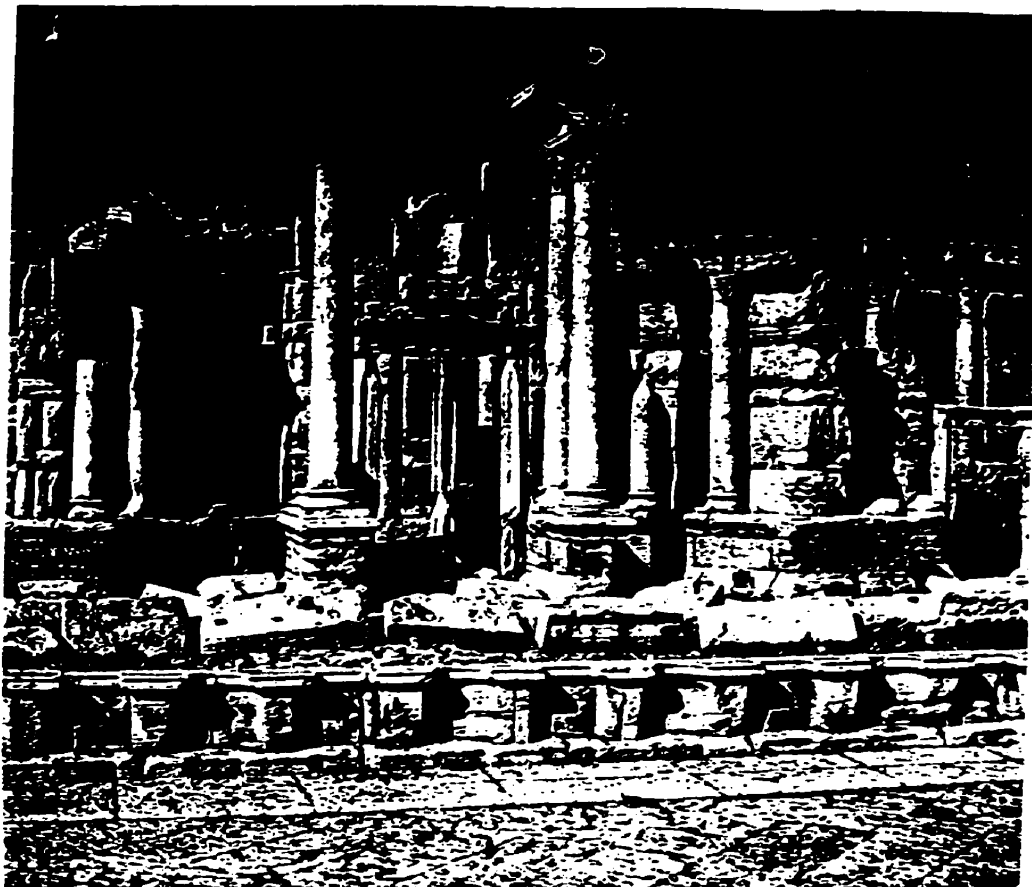
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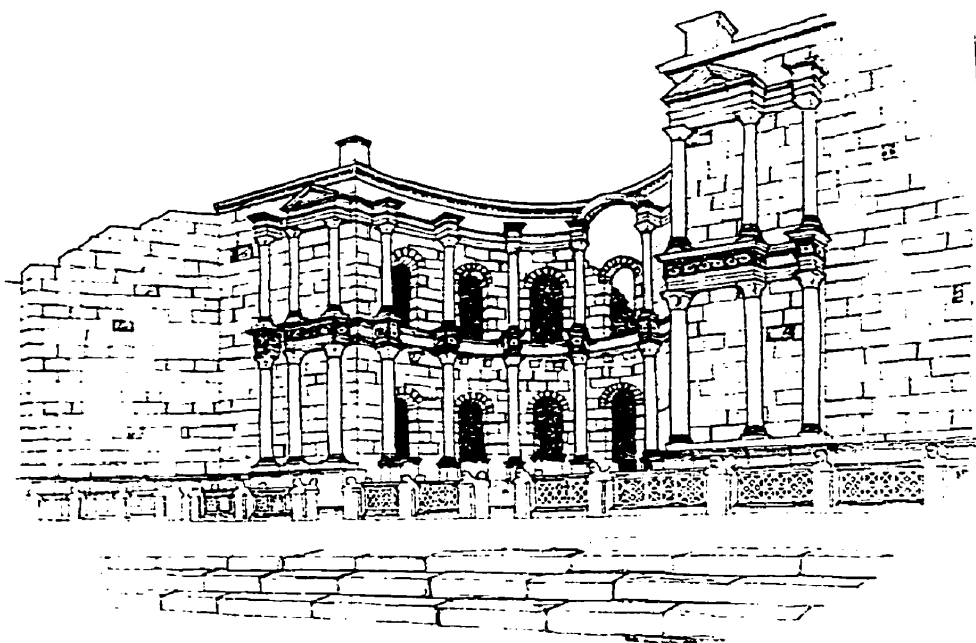
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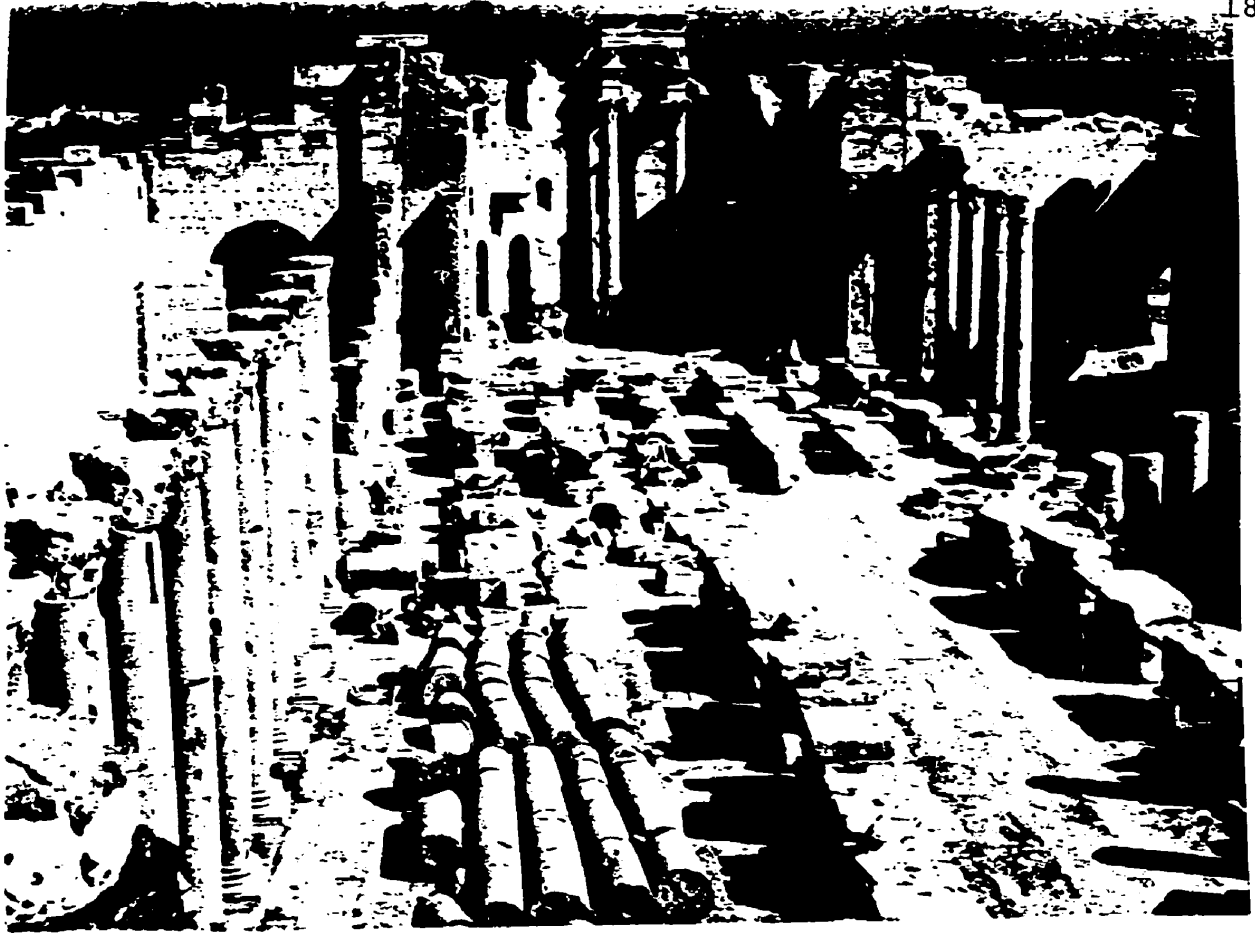


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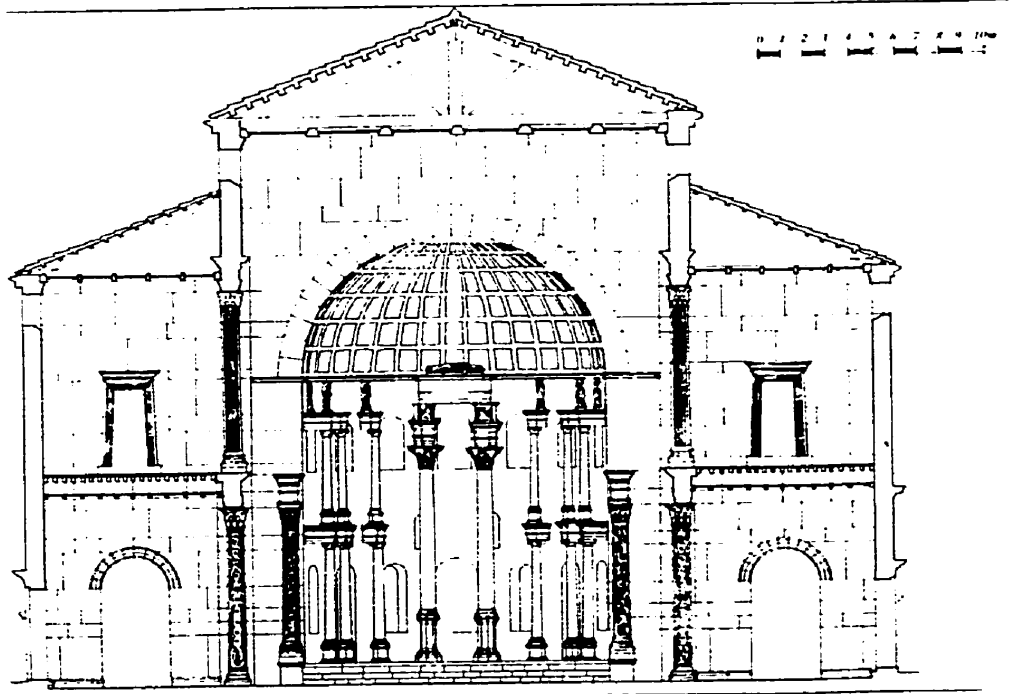


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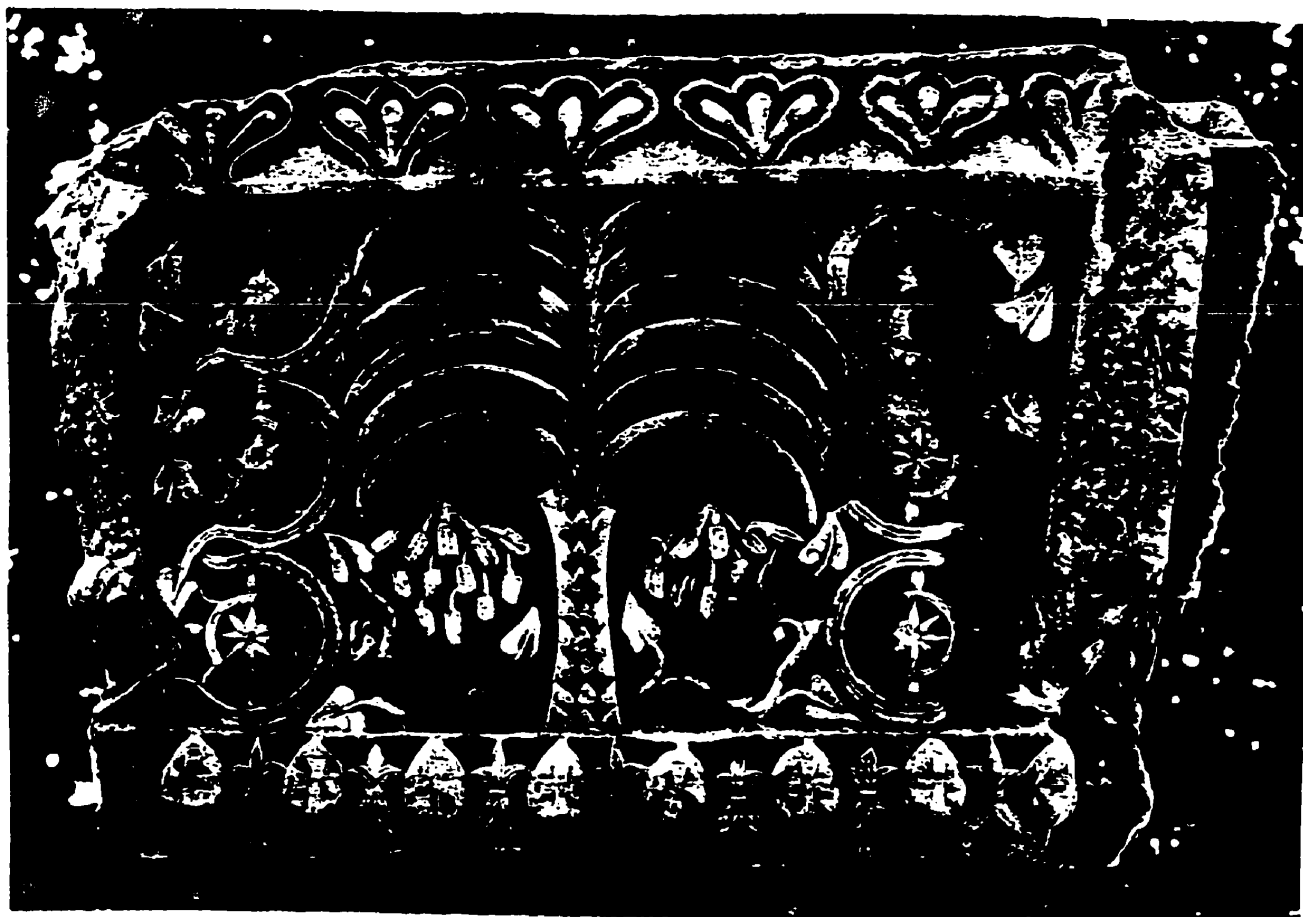
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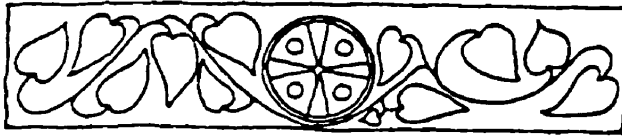


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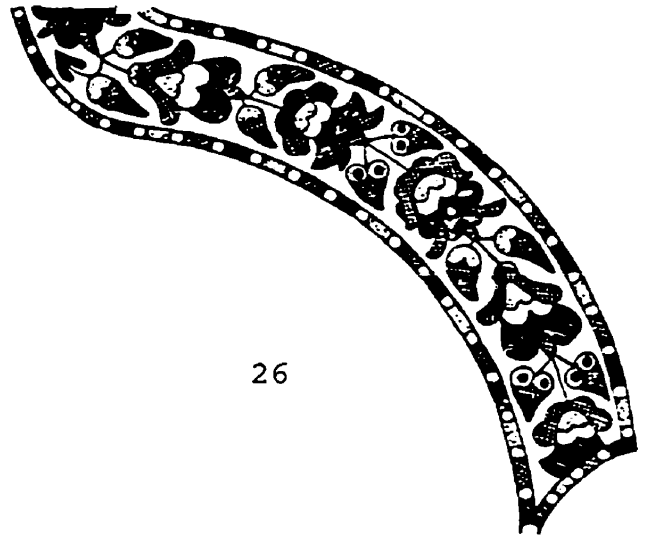


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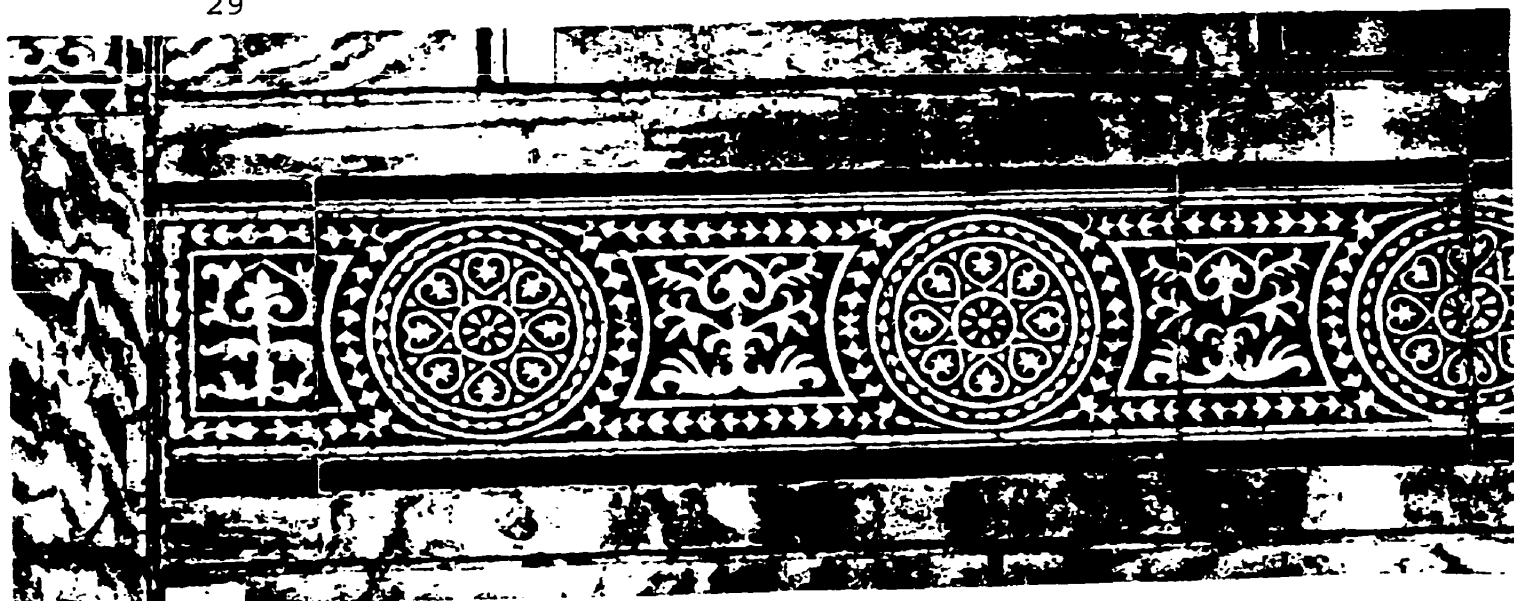
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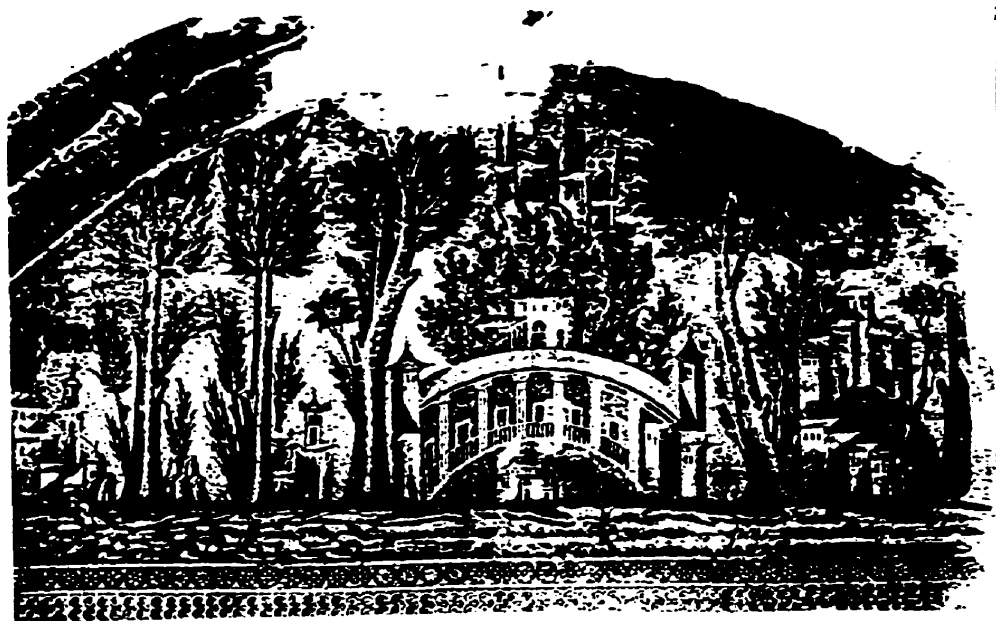
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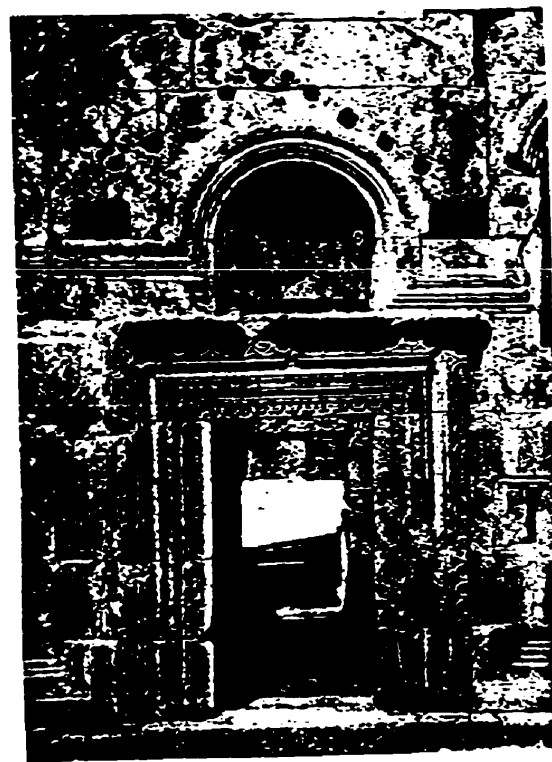


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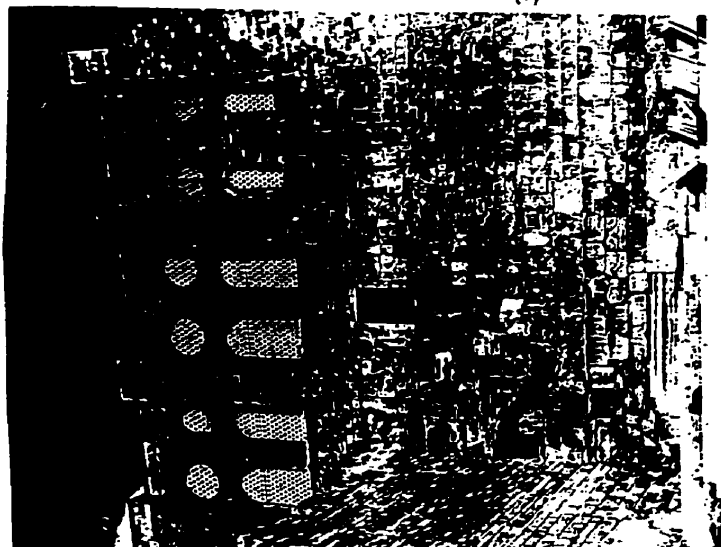




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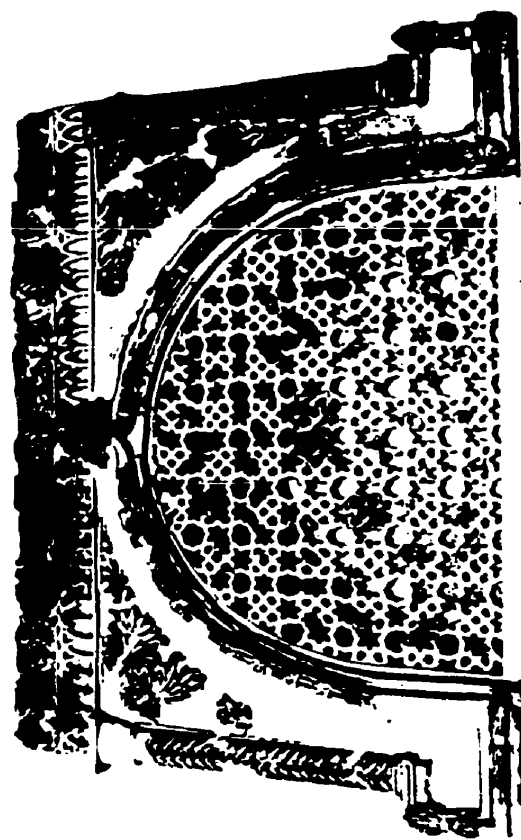
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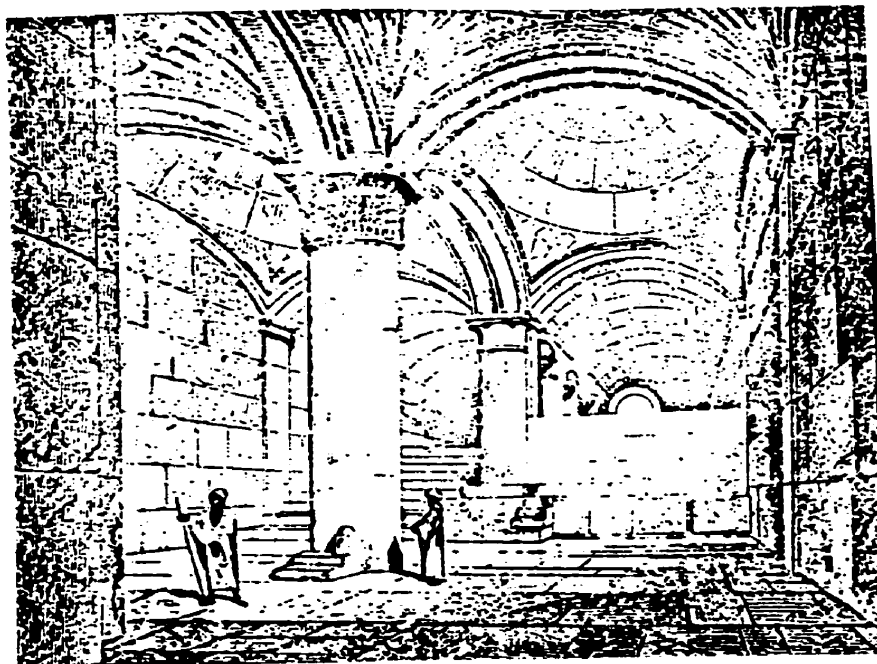


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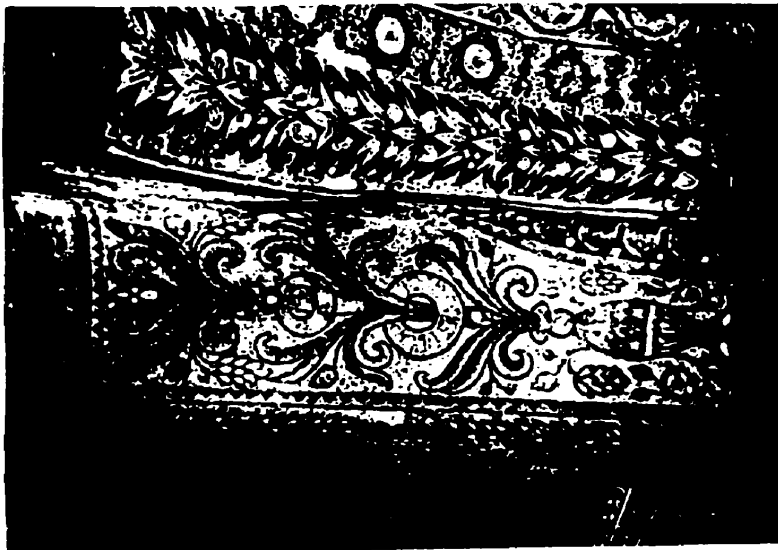
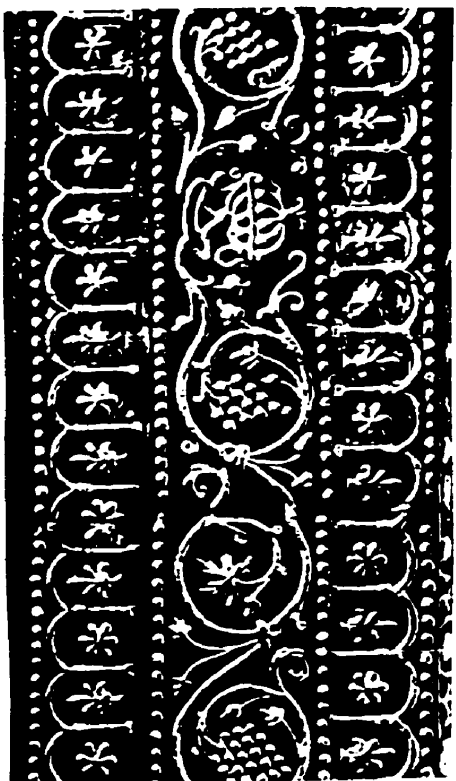


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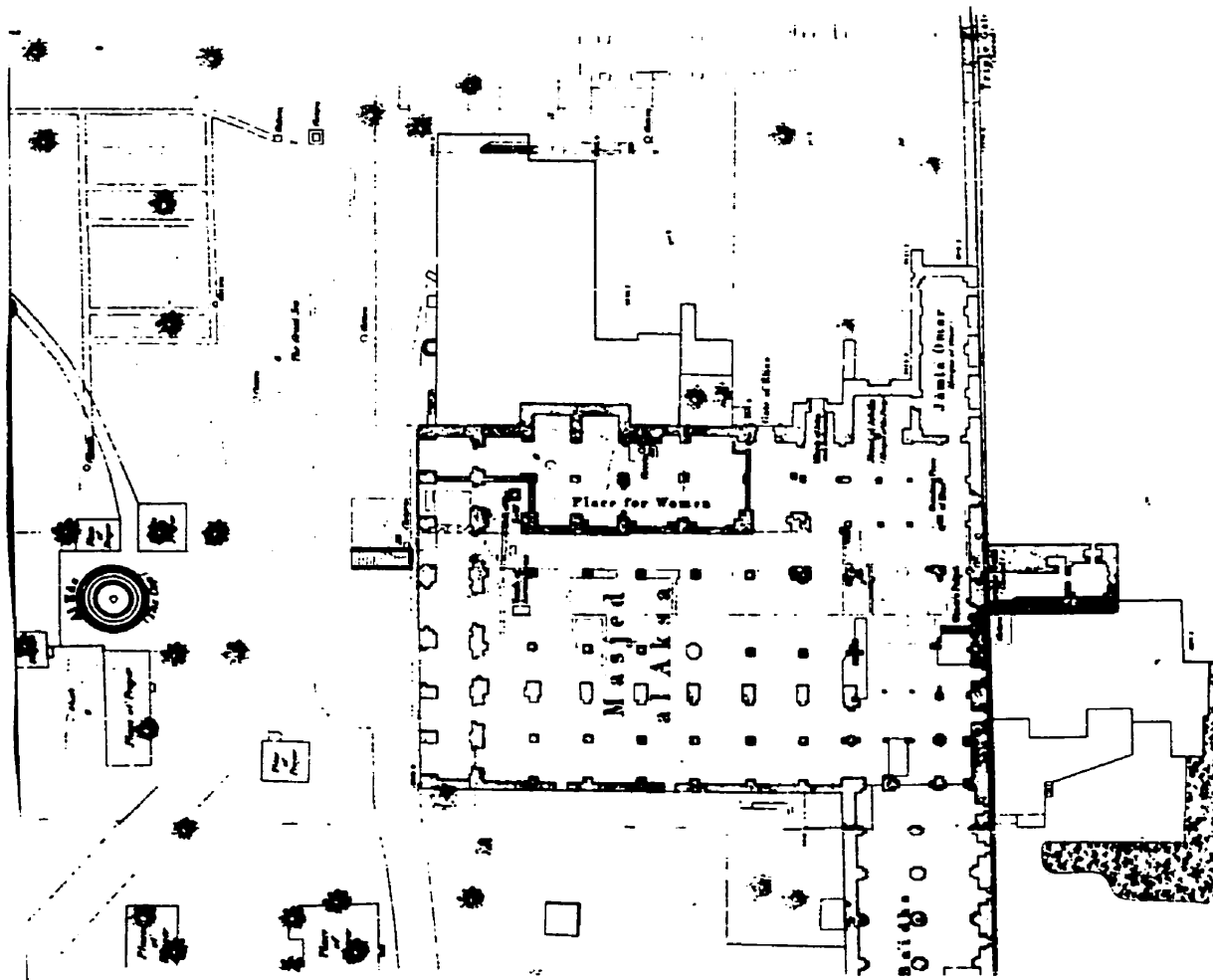
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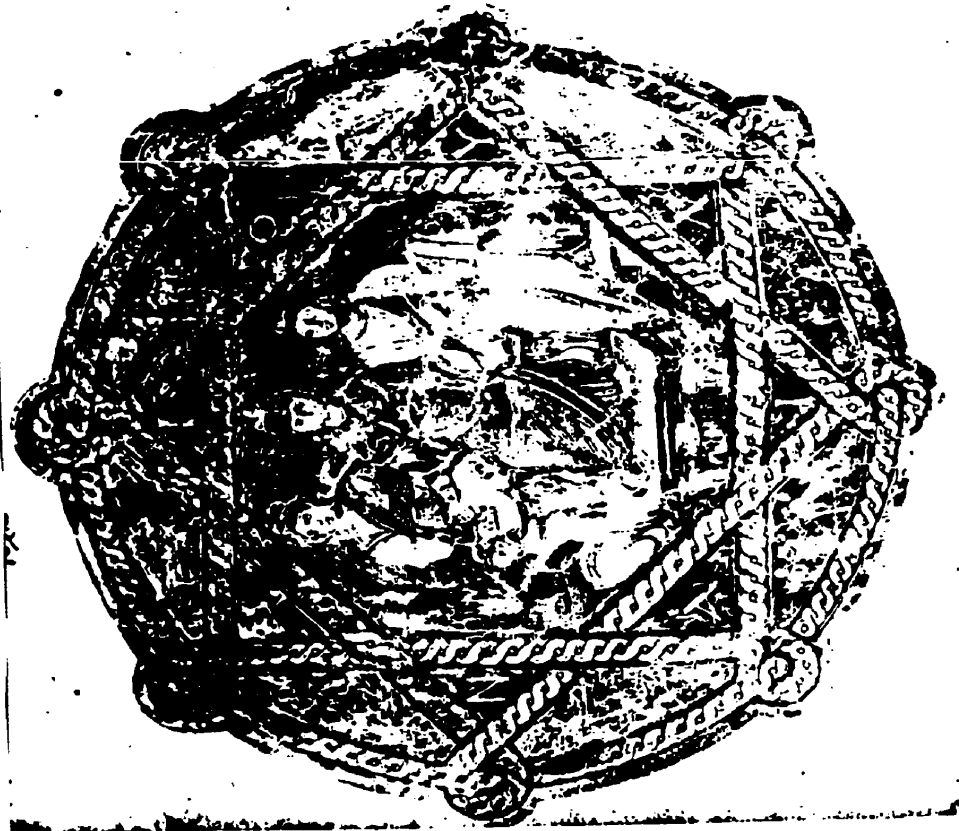
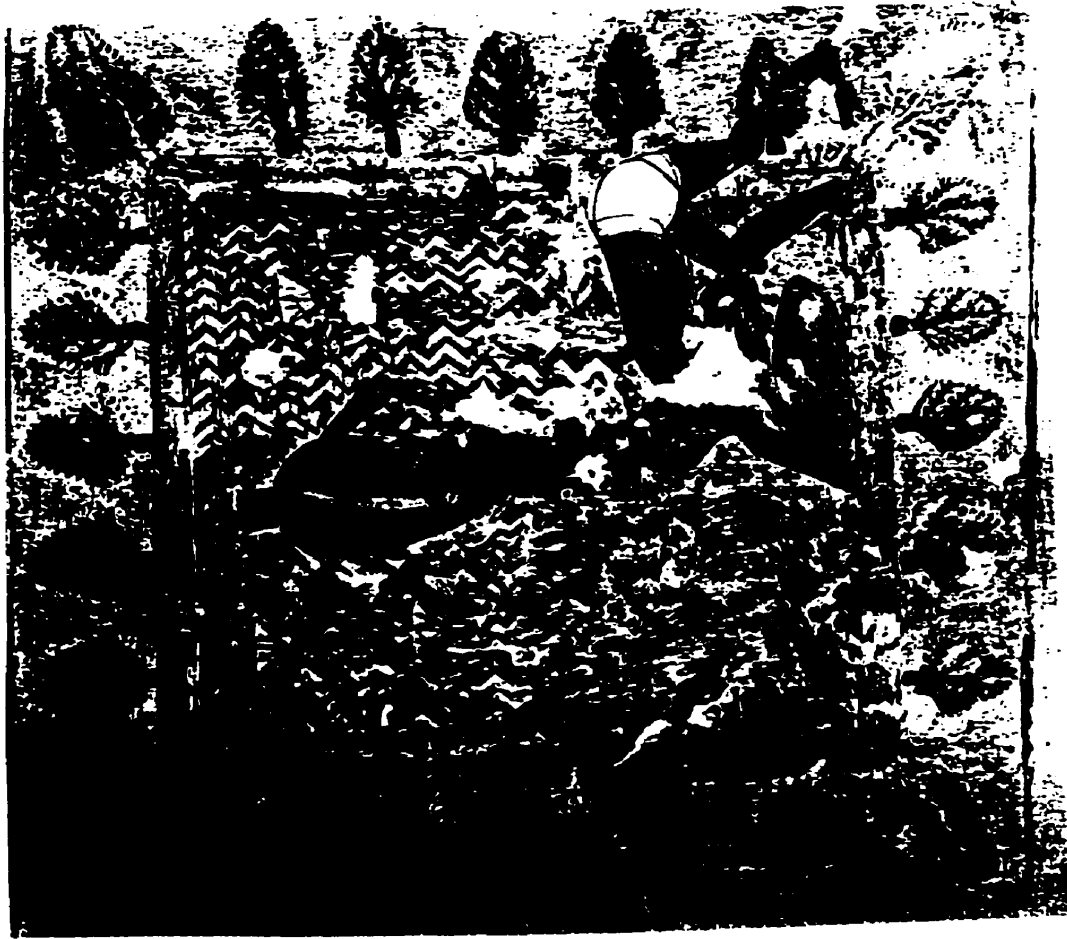
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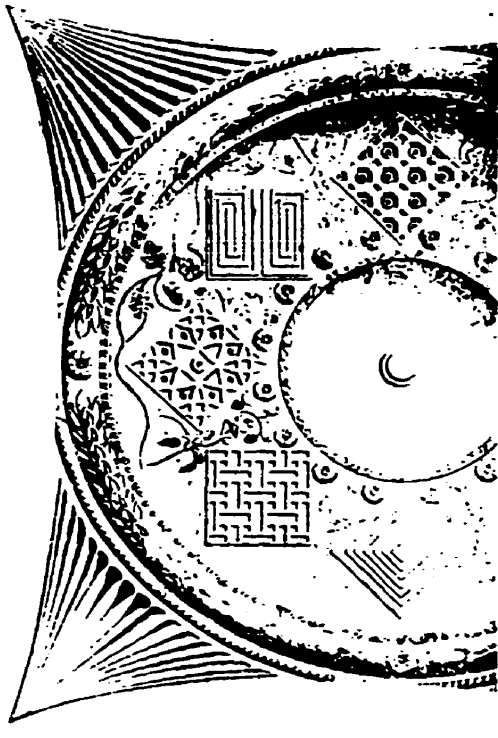
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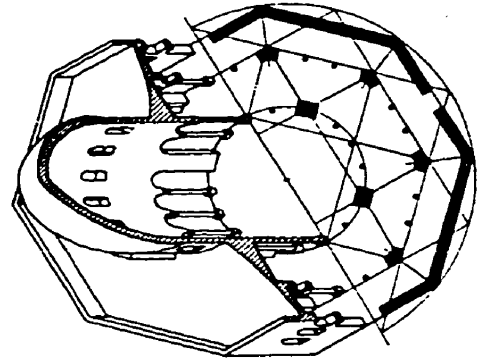








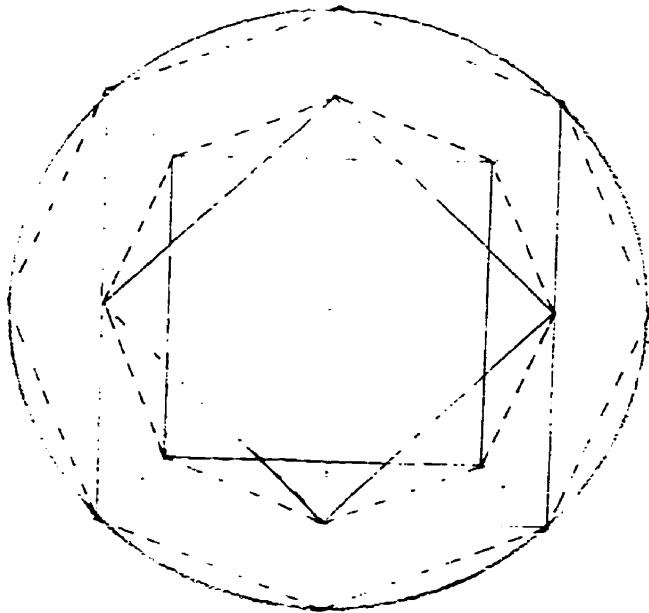
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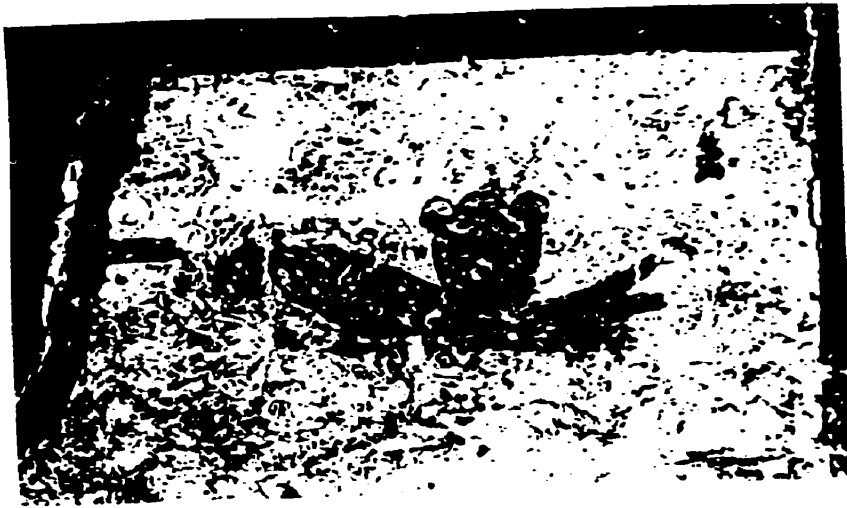
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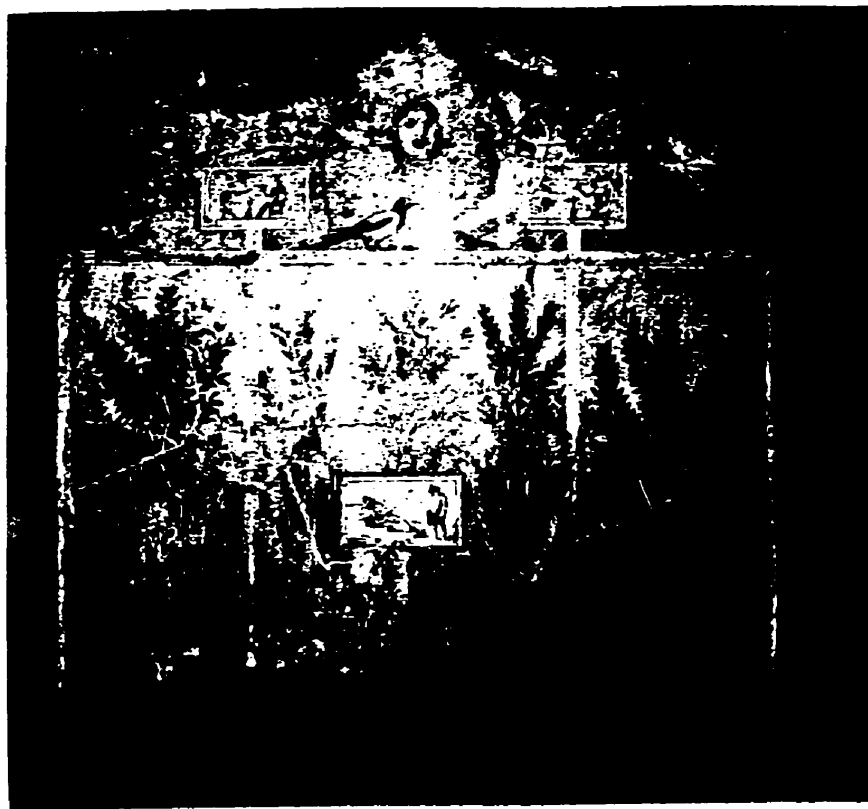
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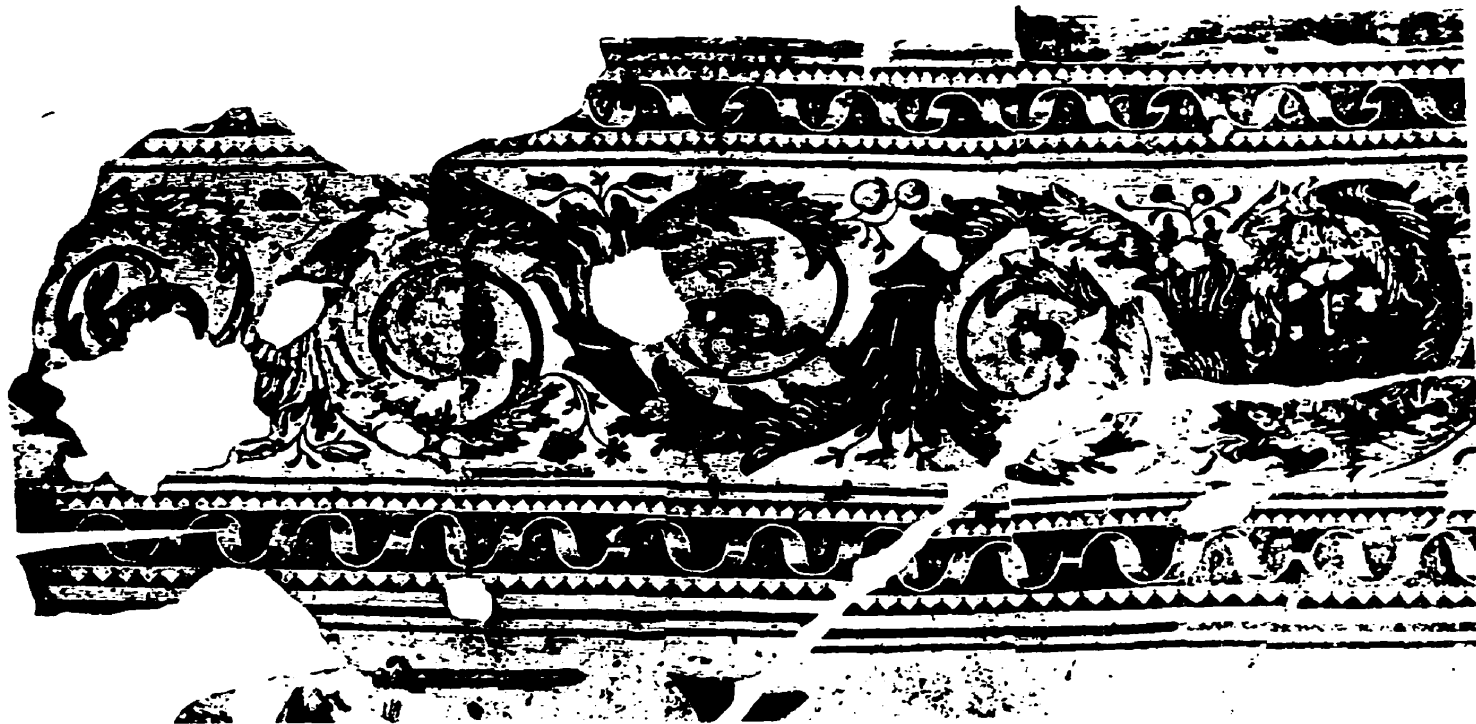


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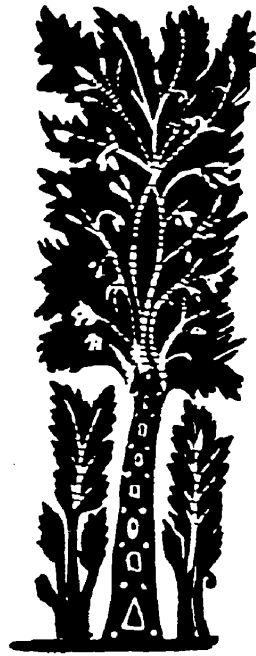


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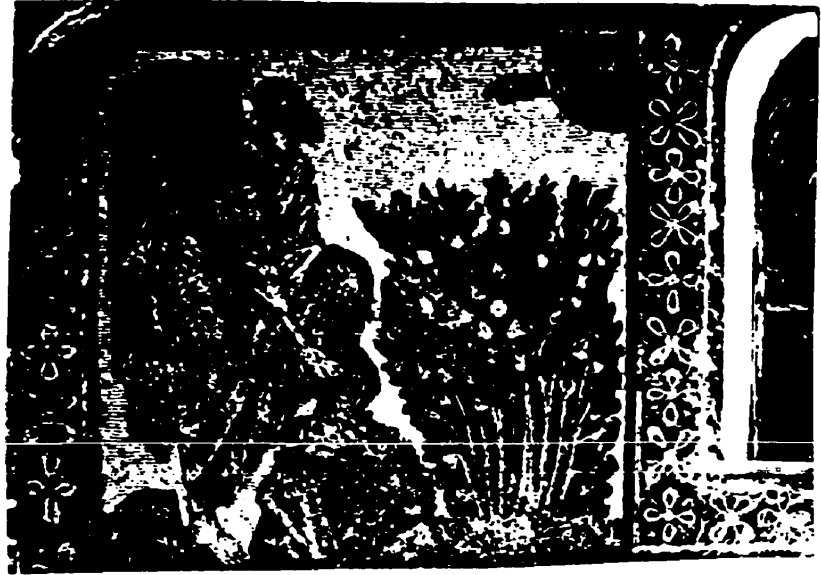


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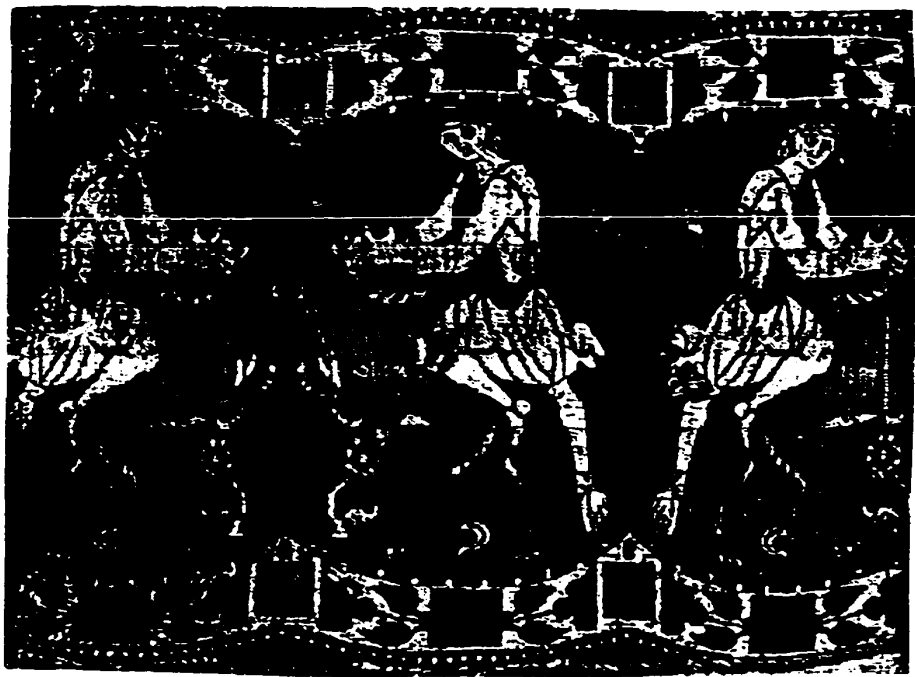


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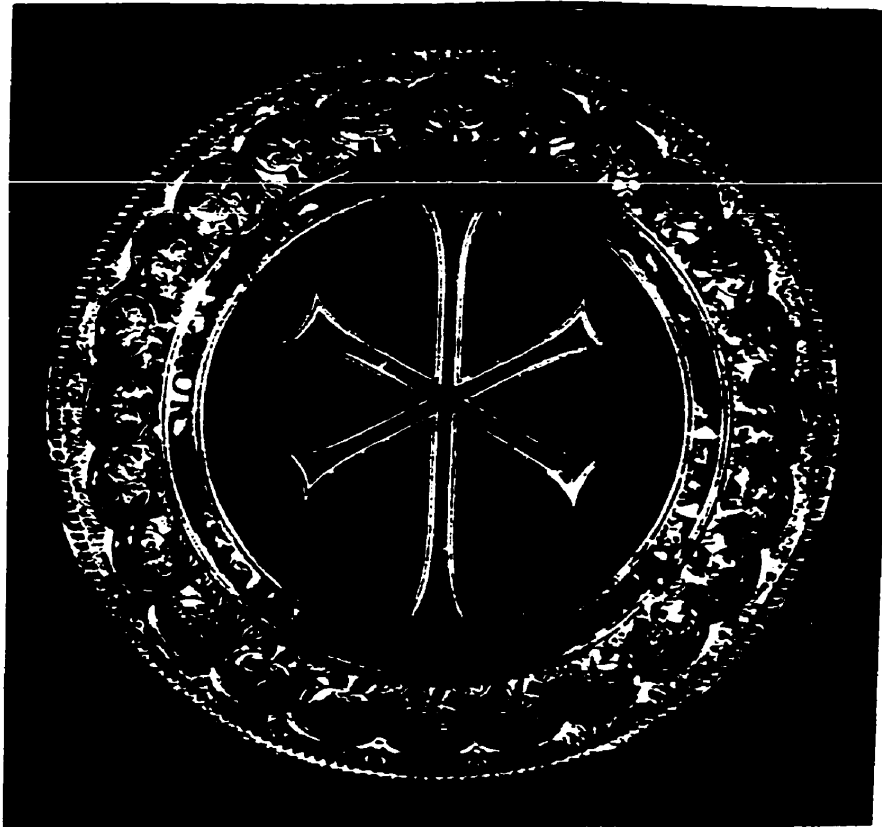


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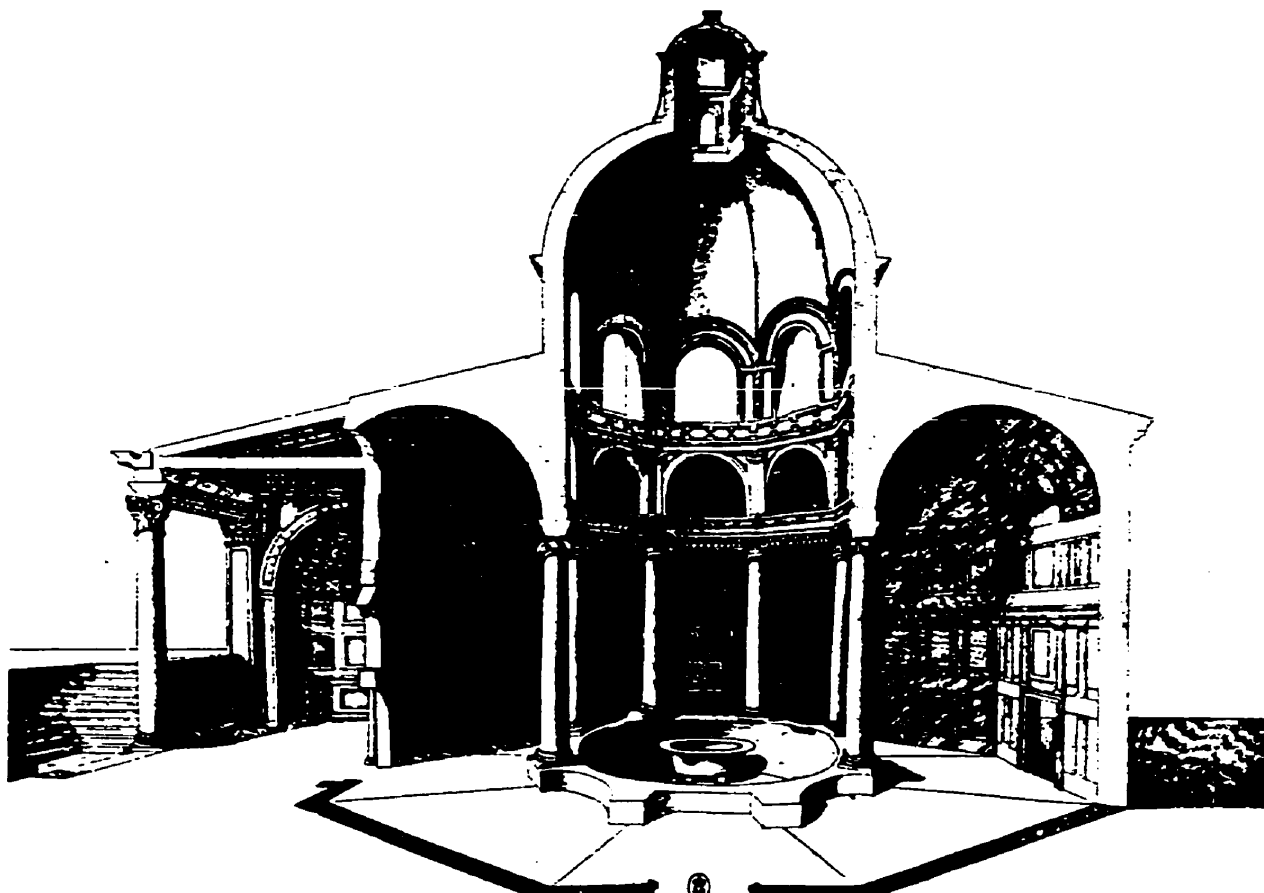





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78a


 Invenit Laurentius, Crux ad orientem, Confessio Christi, Corpus sanctum in  
 uno altissimo super foveam, prout patet in libro, quod  
 est in archiepiscopatu, in libro de officio, in folio 12, verso.



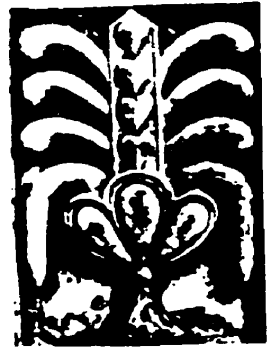
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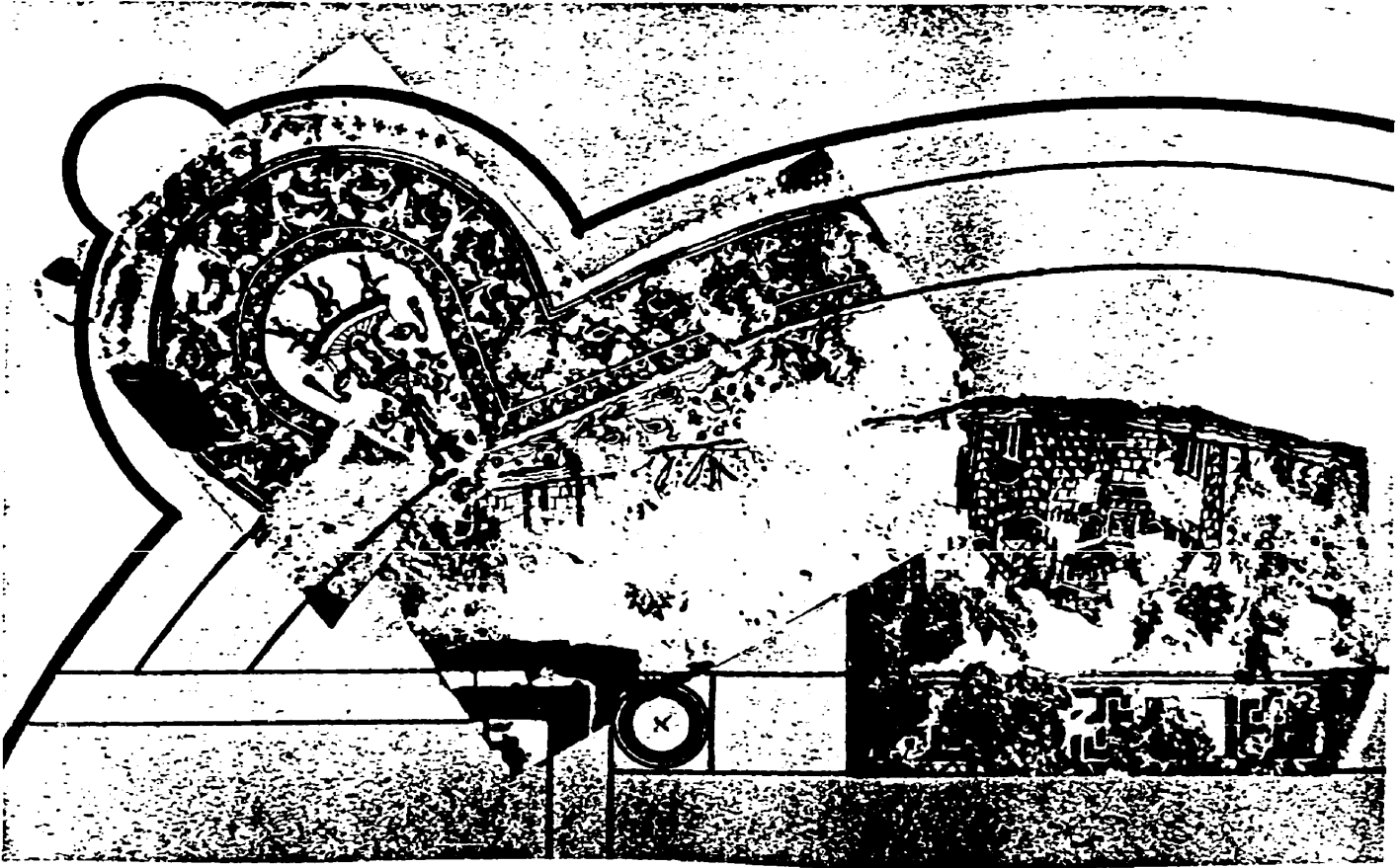
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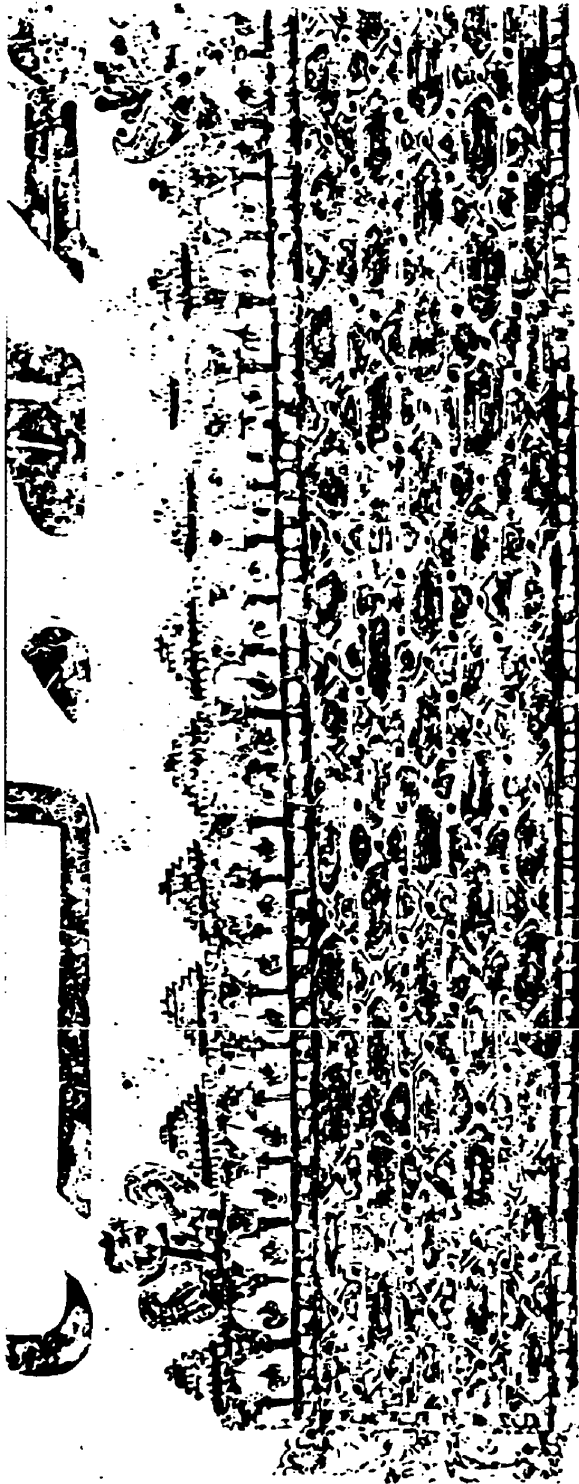


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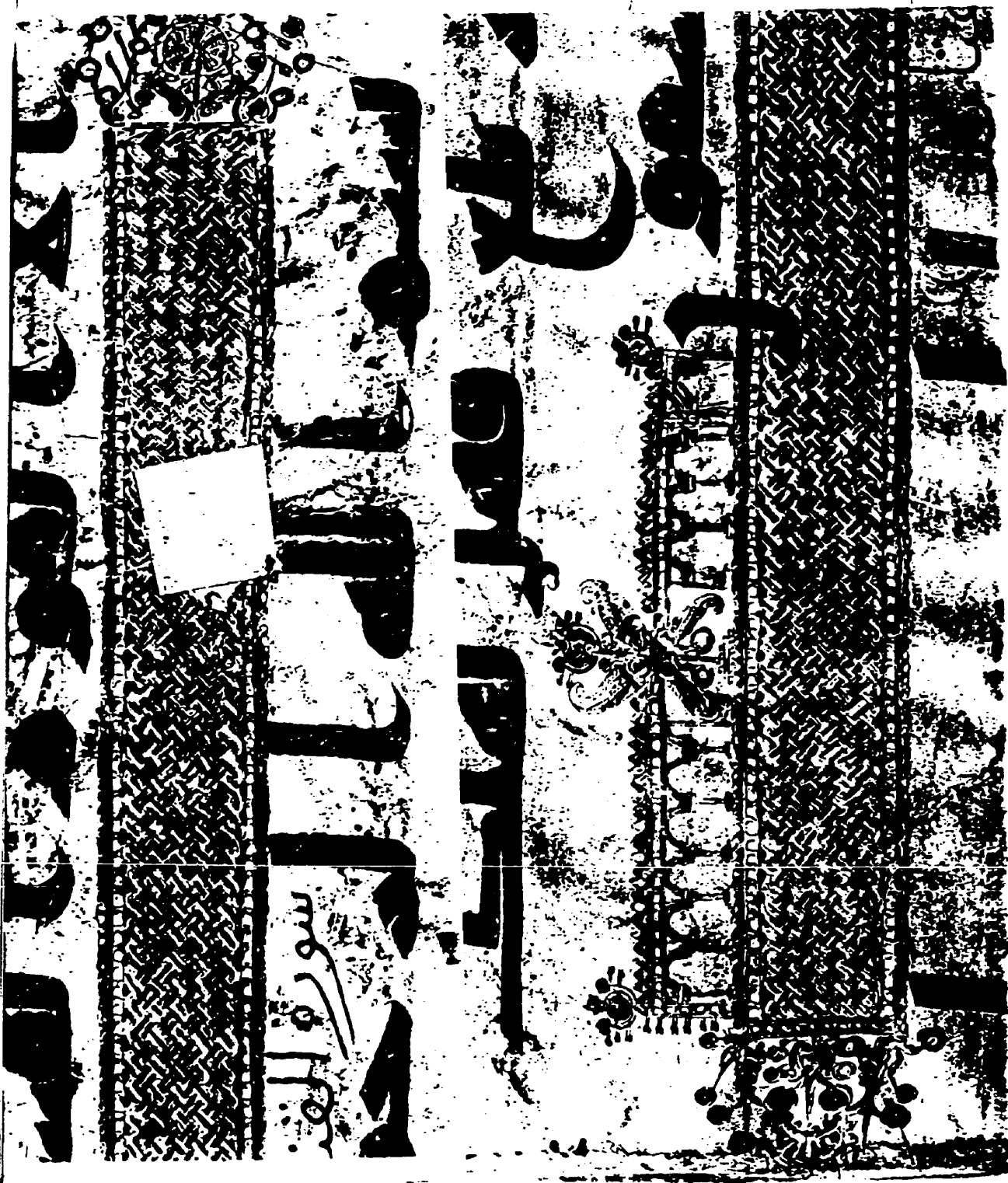


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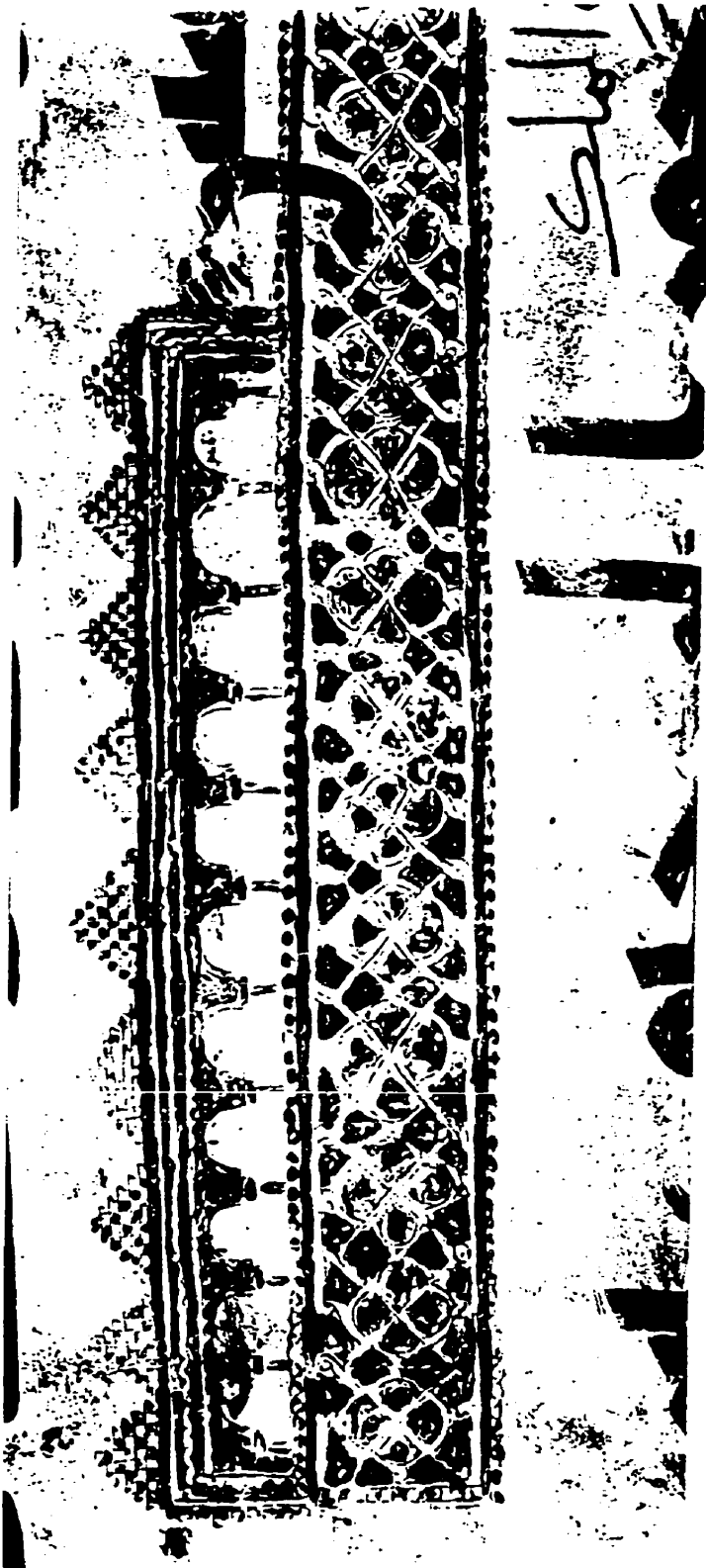
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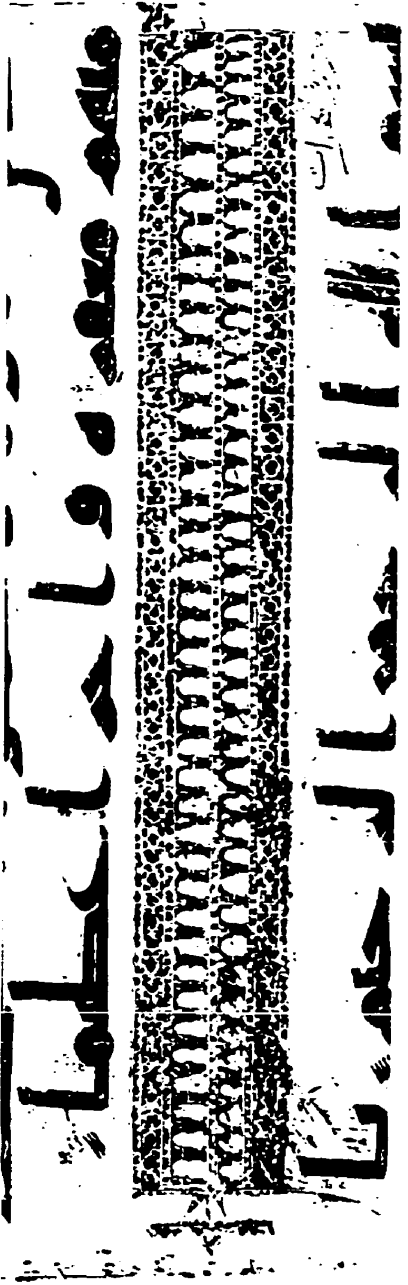




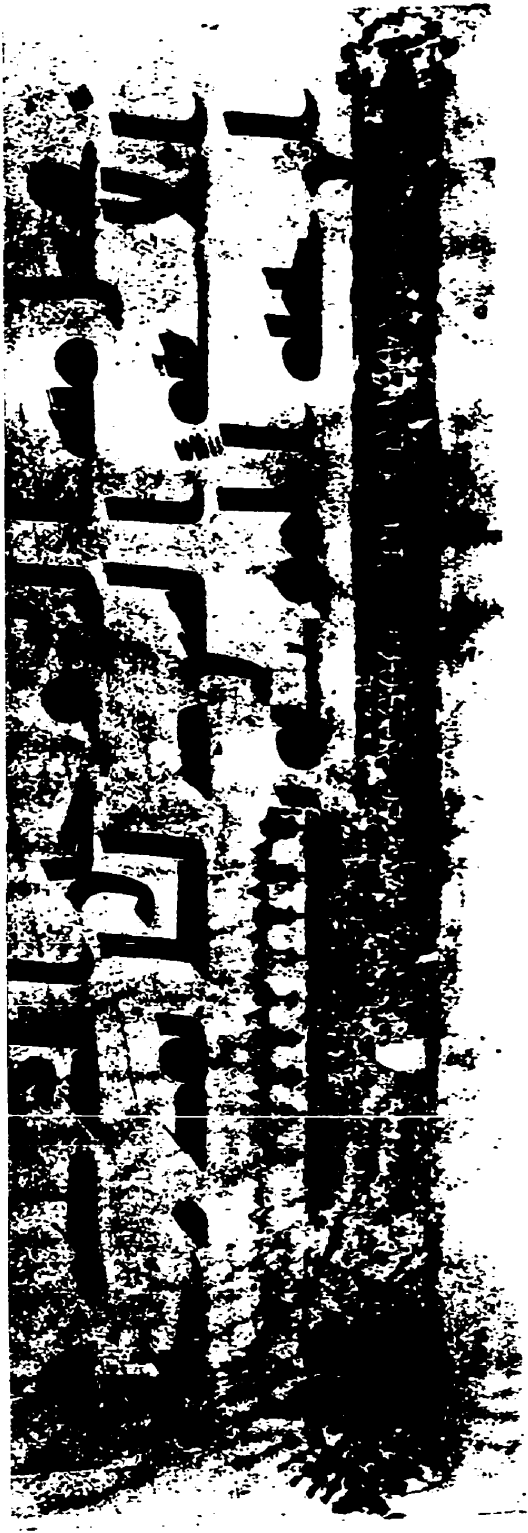
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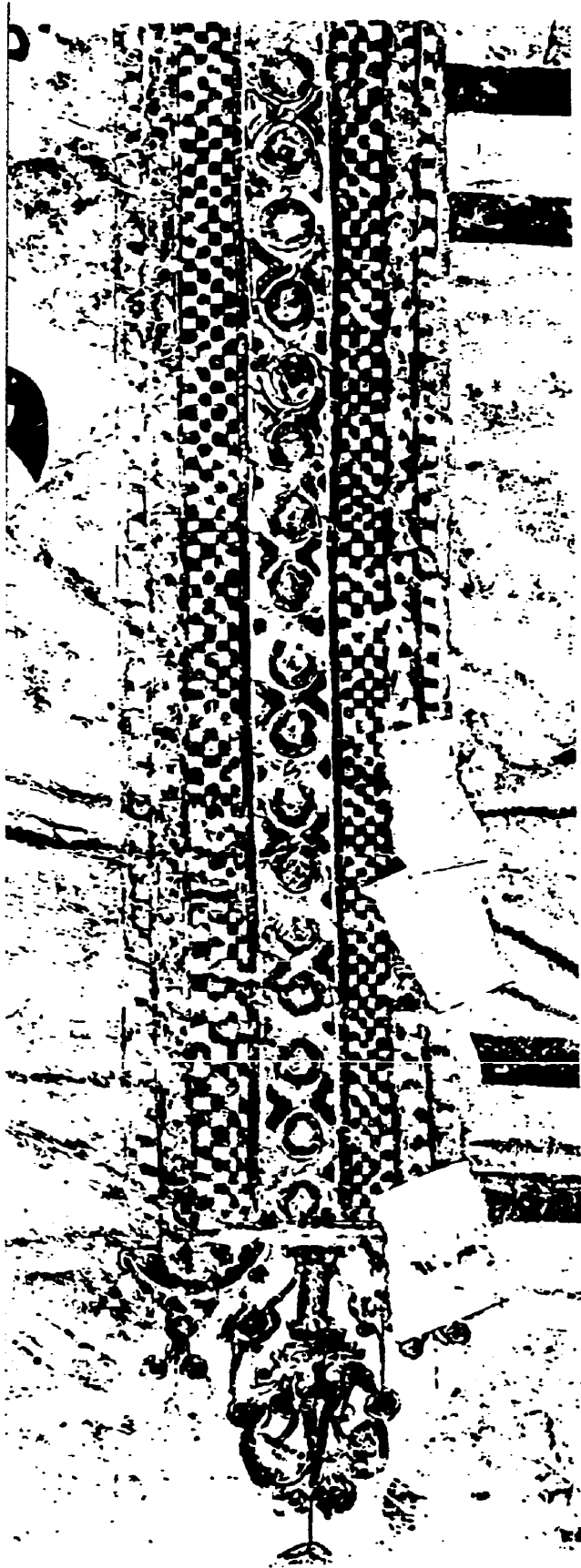
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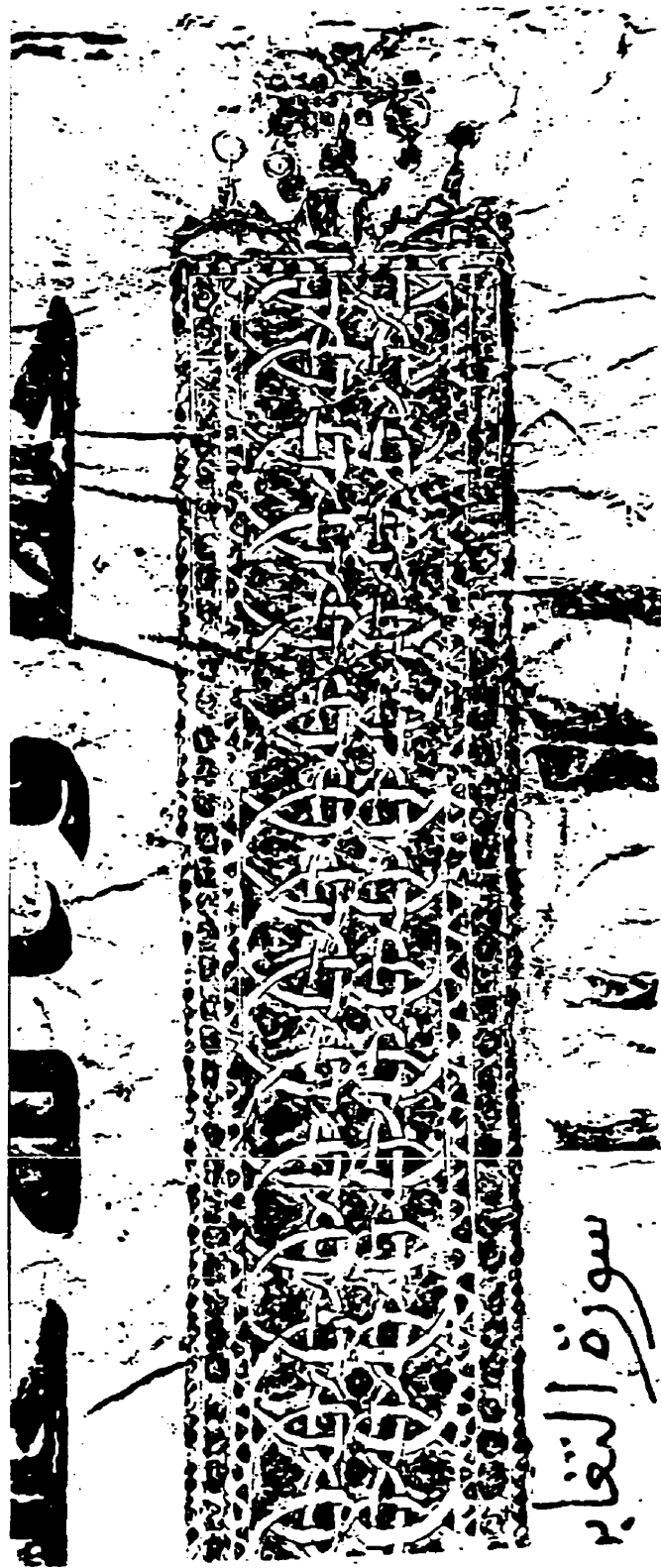
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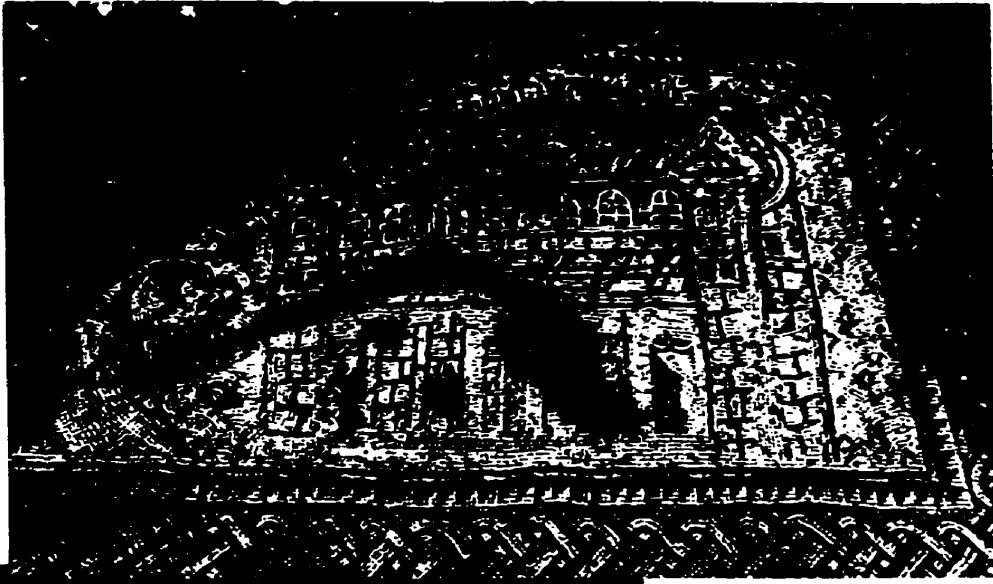
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سورة التغاب

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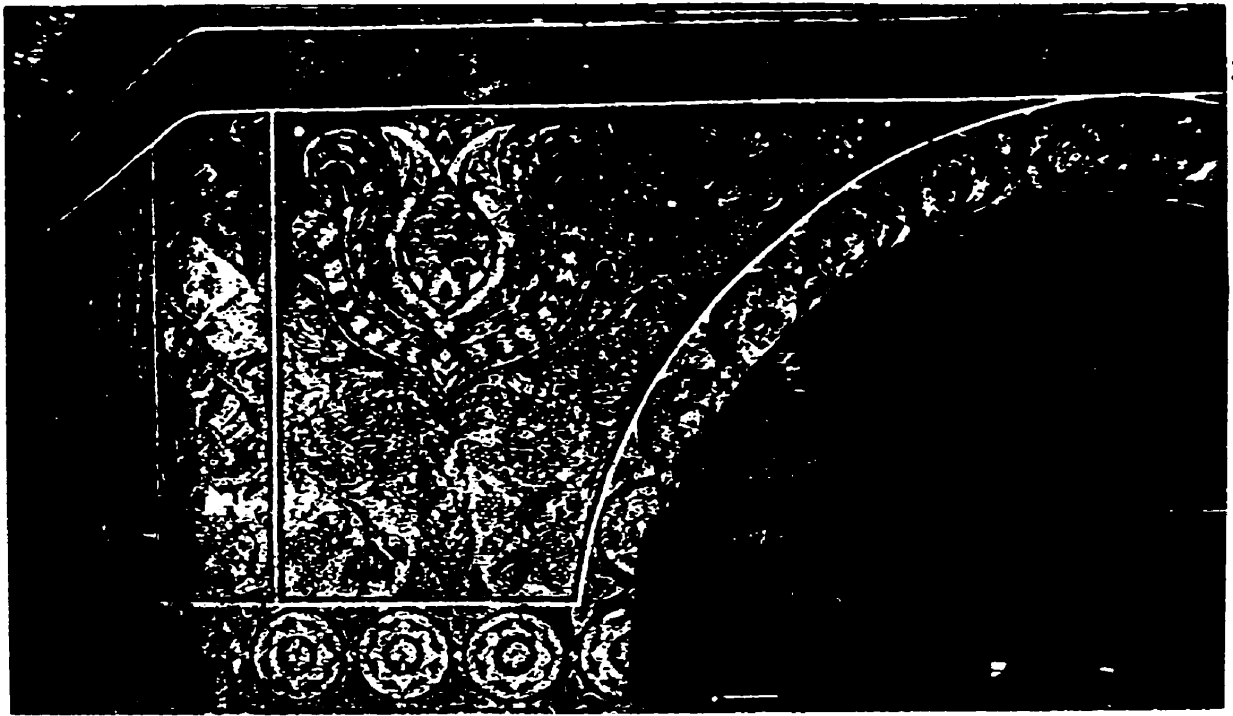
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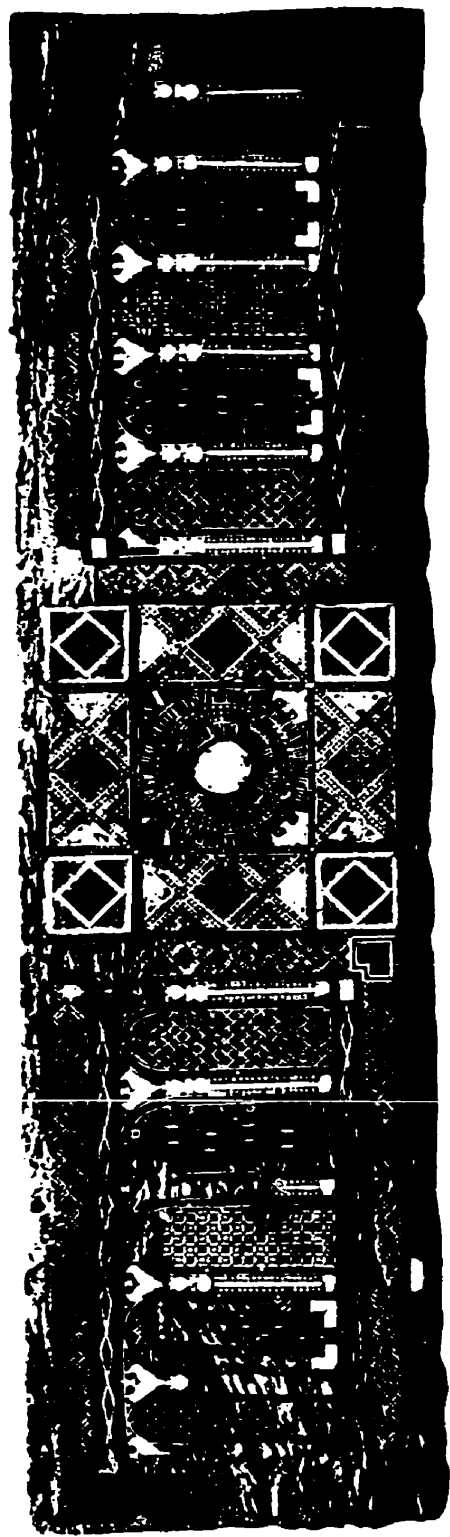


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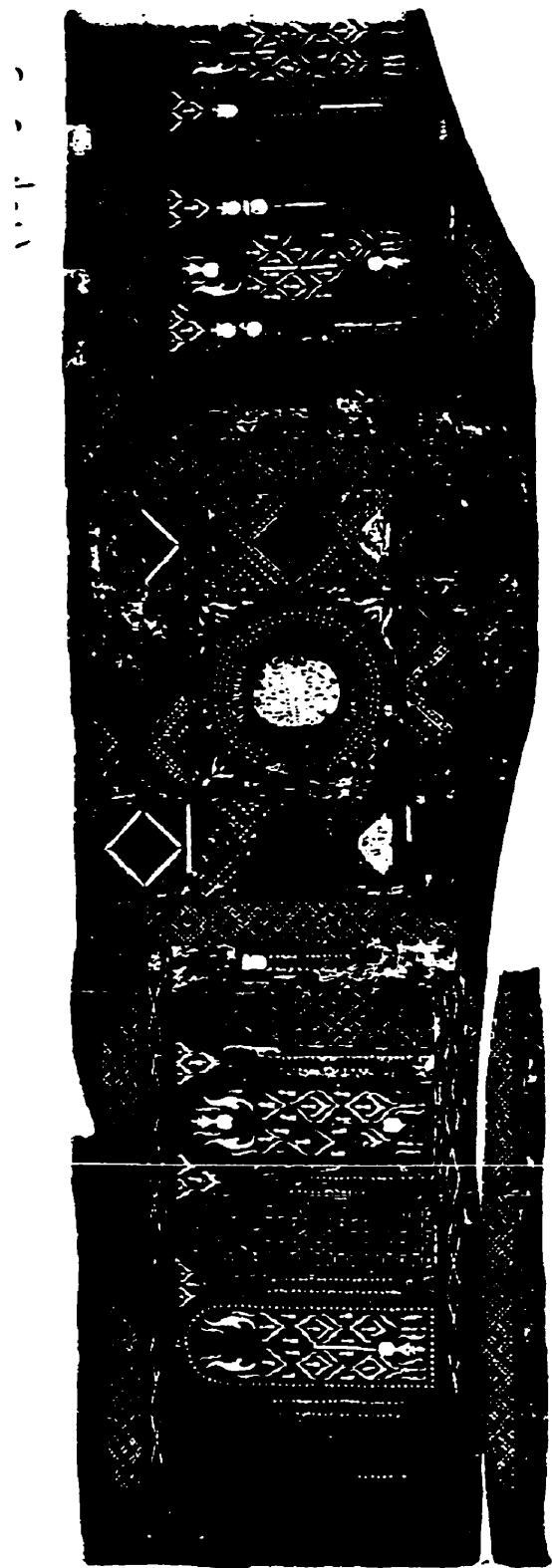


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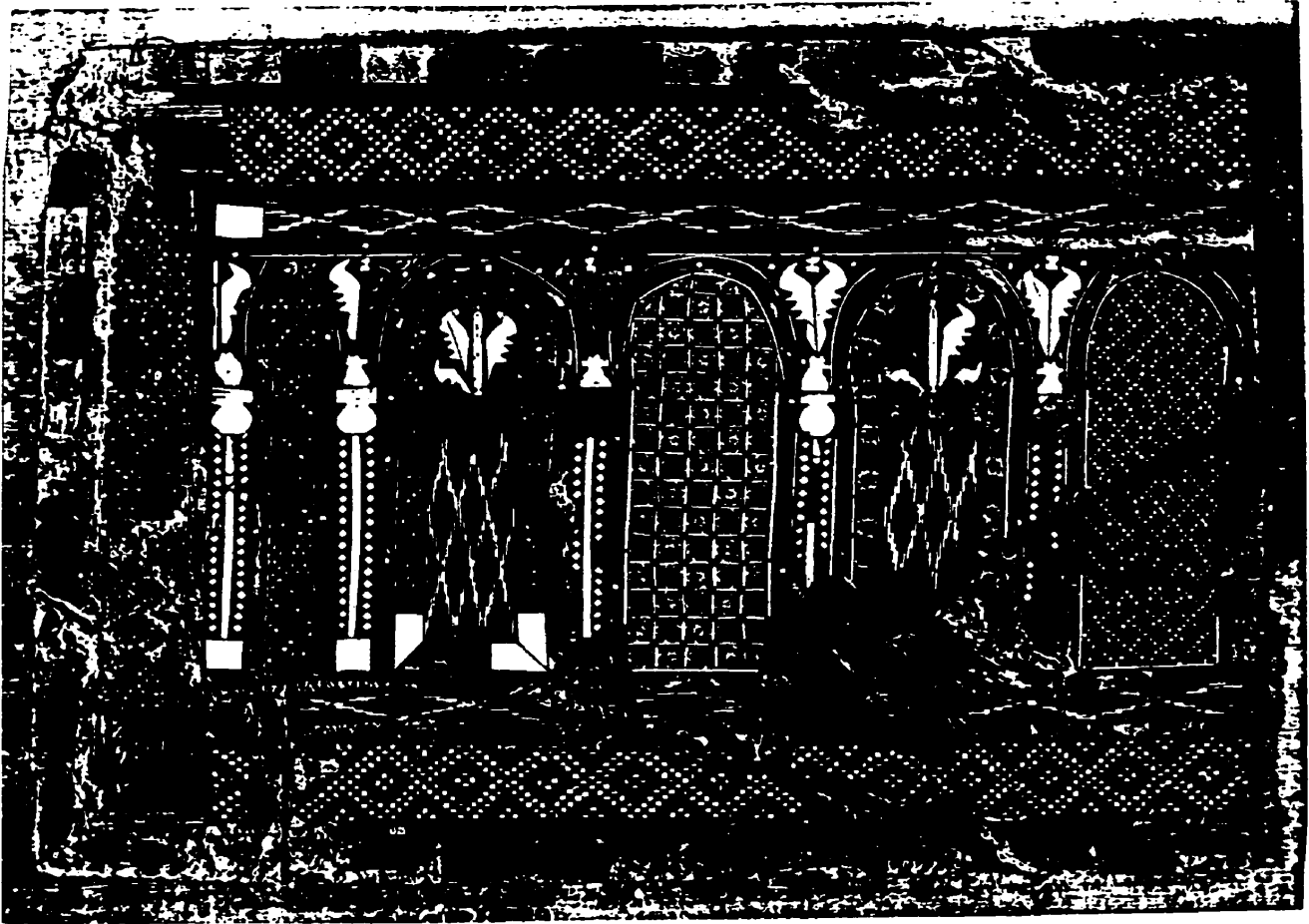




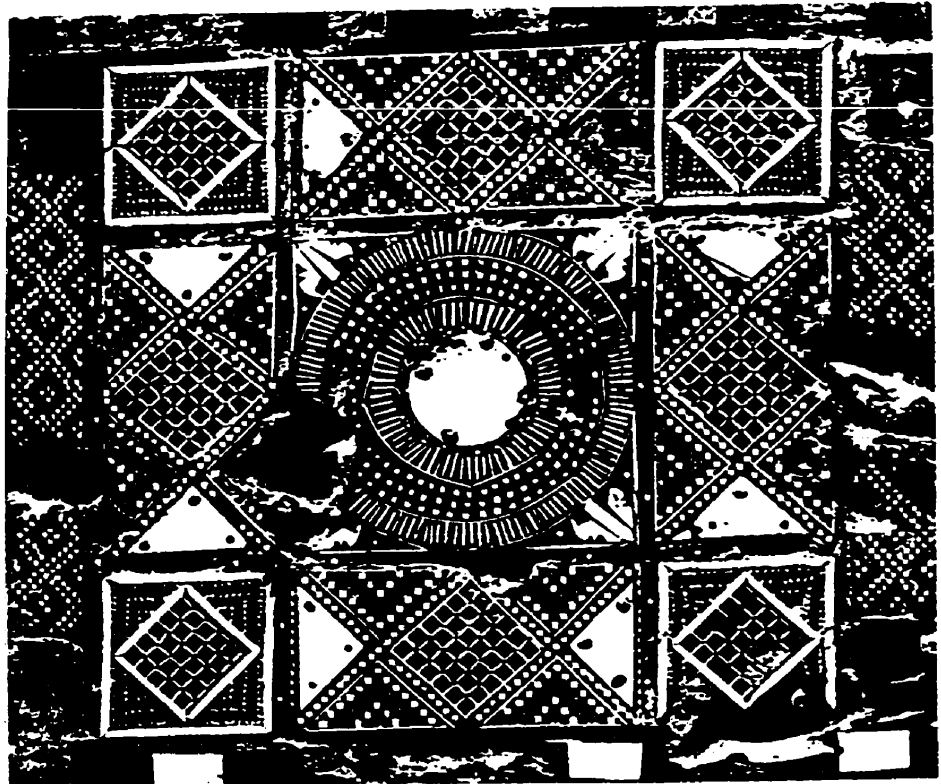
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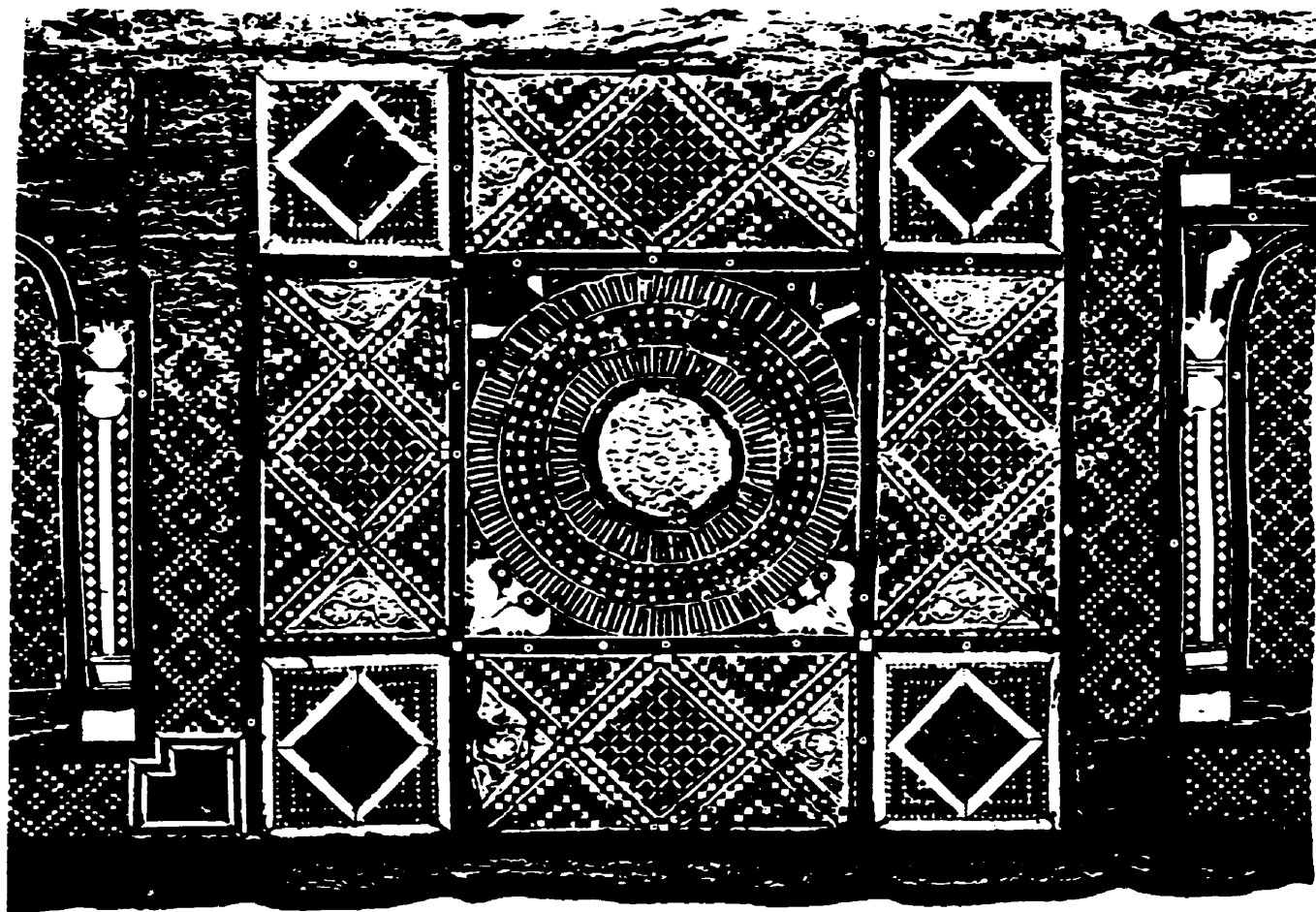
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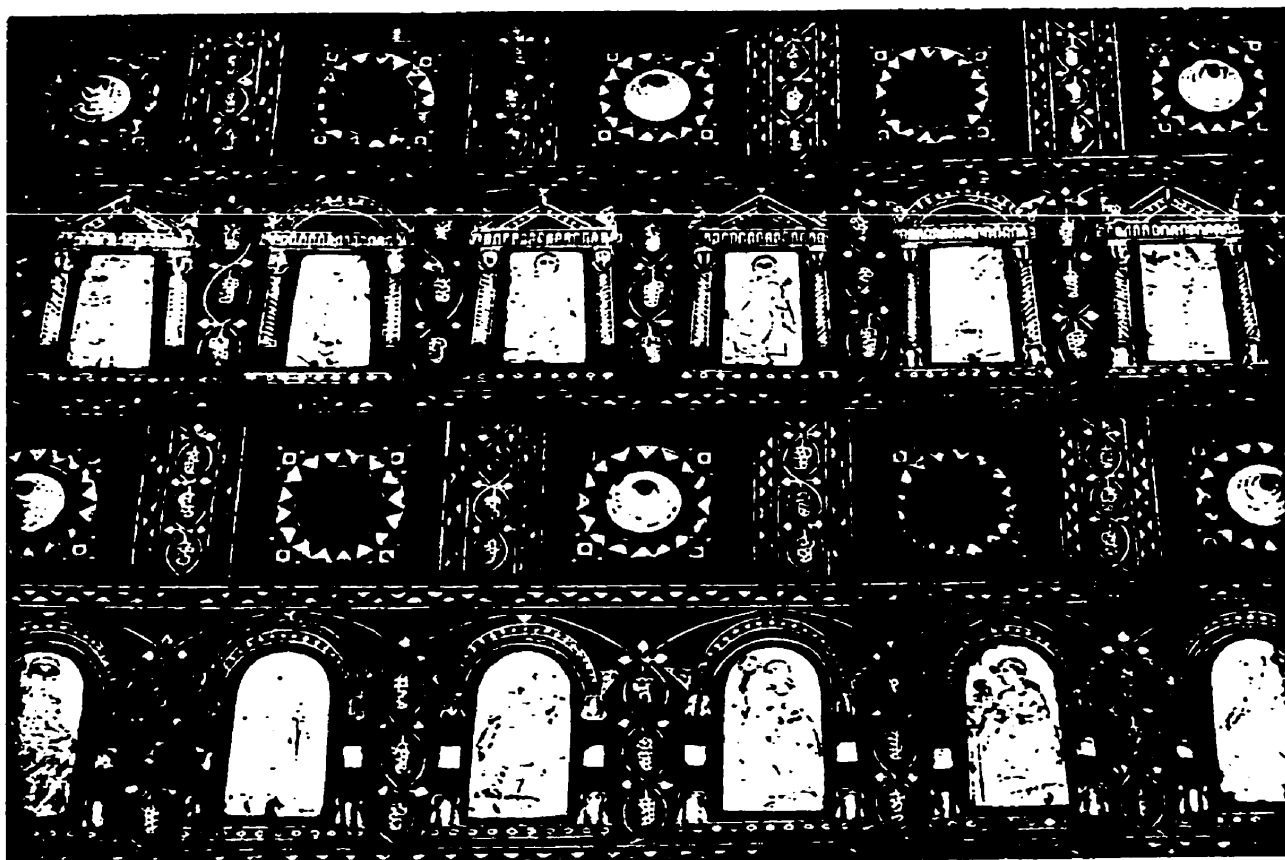
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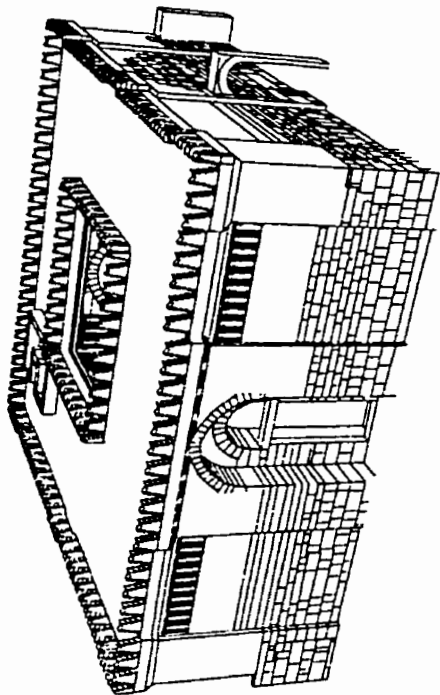
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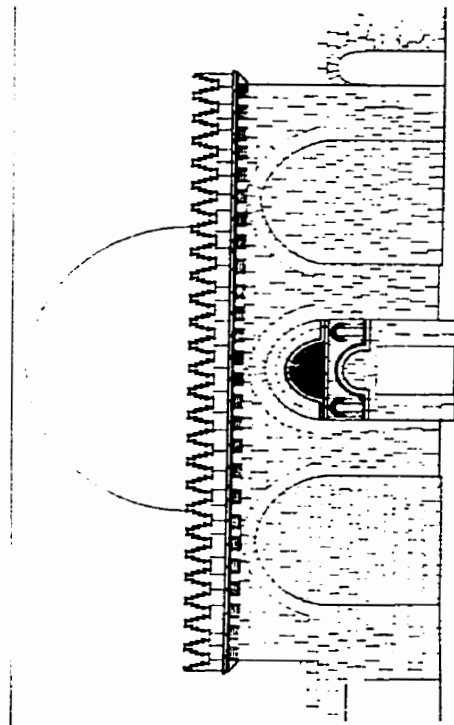
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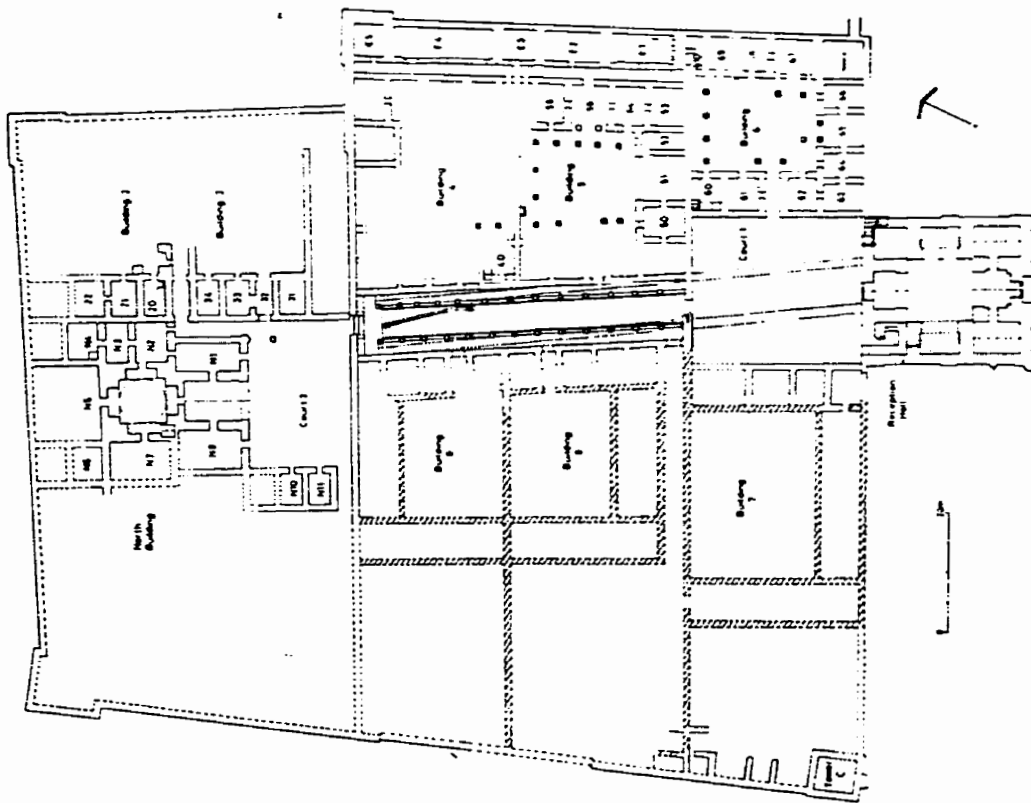
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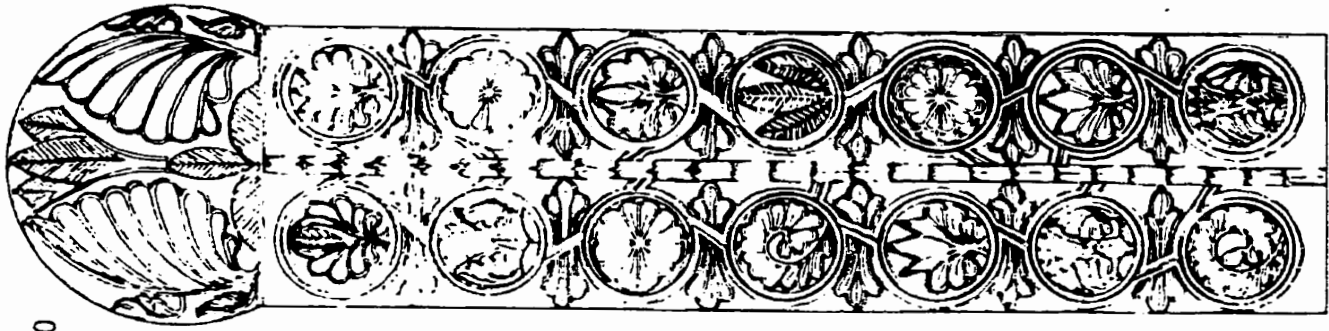
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117



115



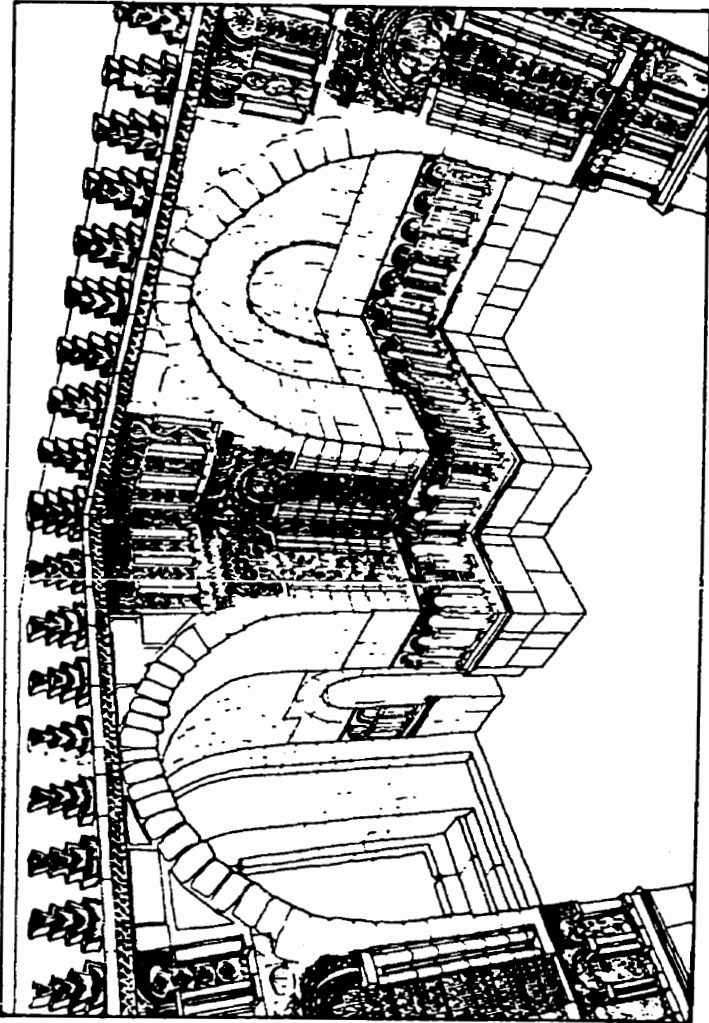
2 NY/D

120



10. 8645/B

119



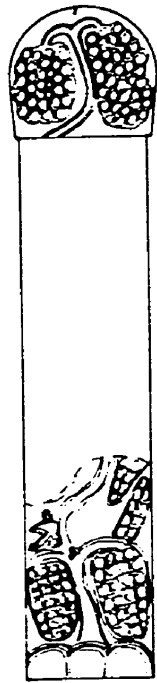
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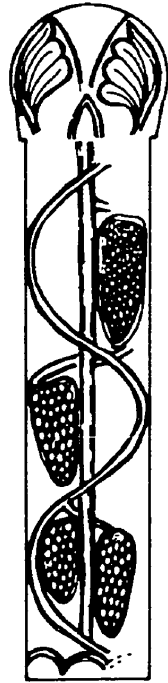
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122

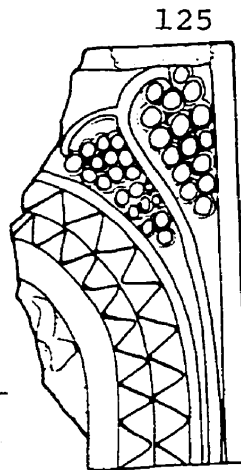


5. 30.Ab. SN/26



6. 80.Ab/B

123



125



124

1. SW/D



FIG. 133 (PLATE 12 f and 26 b), Octagonal arcade



FIG. 134 (PLATE 14 d), Octagonal arcade



FIG. 135 (PLATE 11 d), Octagonal arcade



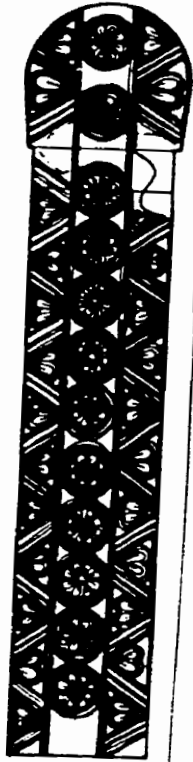
FIG. 136 (PLATE 15 a), Octagonal arcade

126



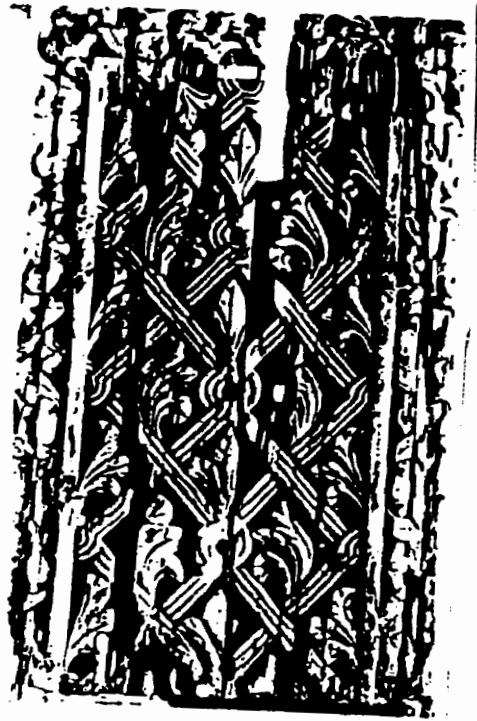
7. 22Ab

127



128

11. 21Ab/B



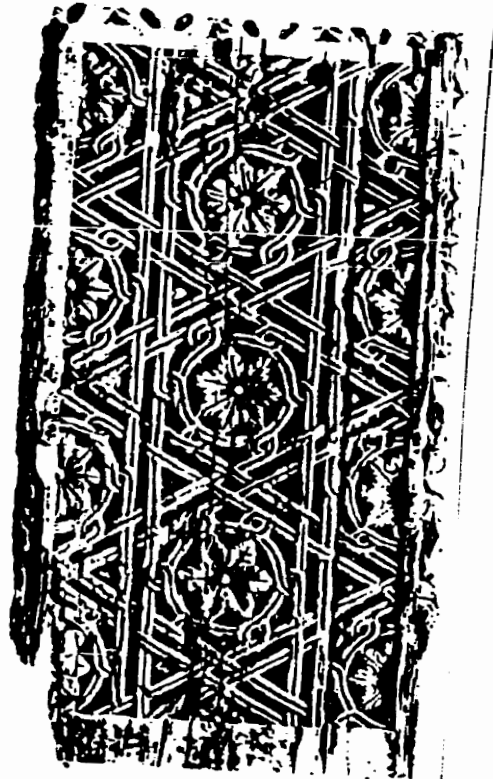
129

129

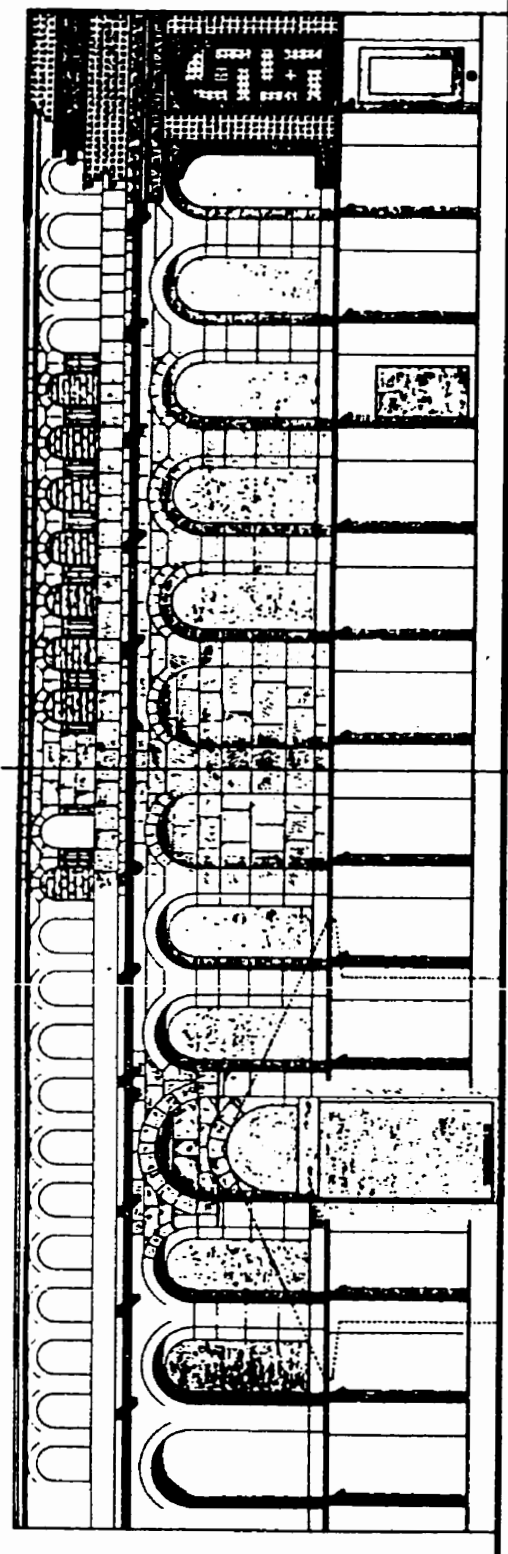


14 SN-23

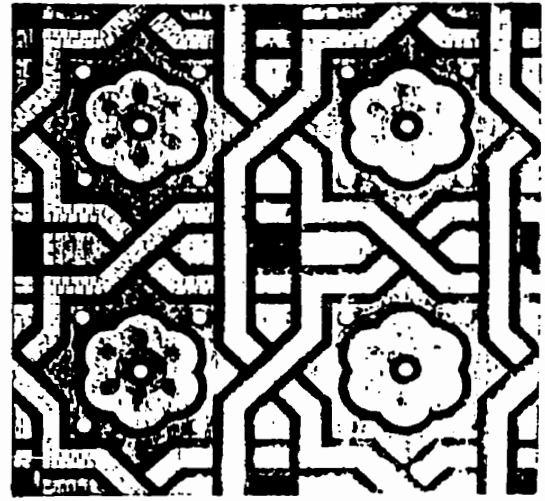
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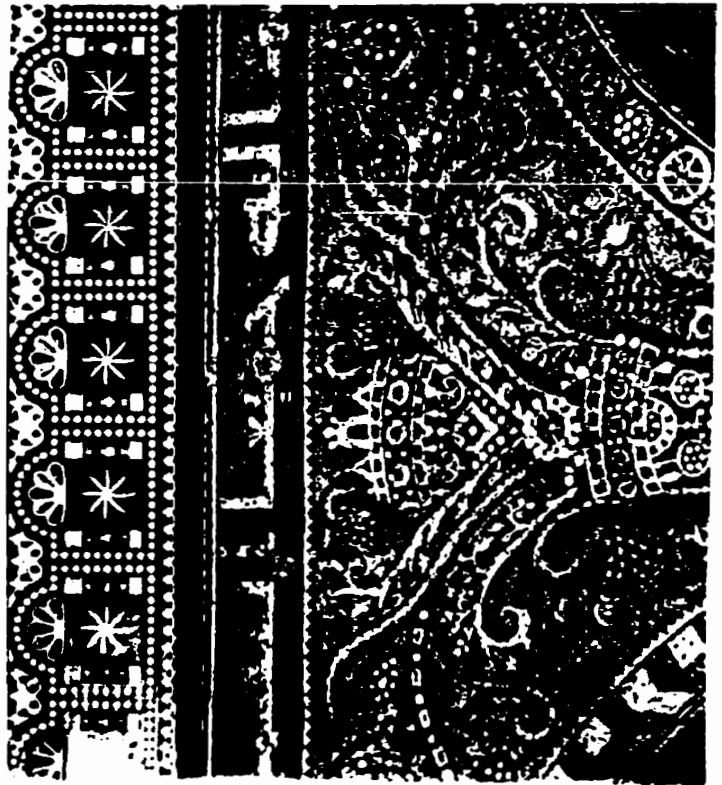
131 1-E



133



134

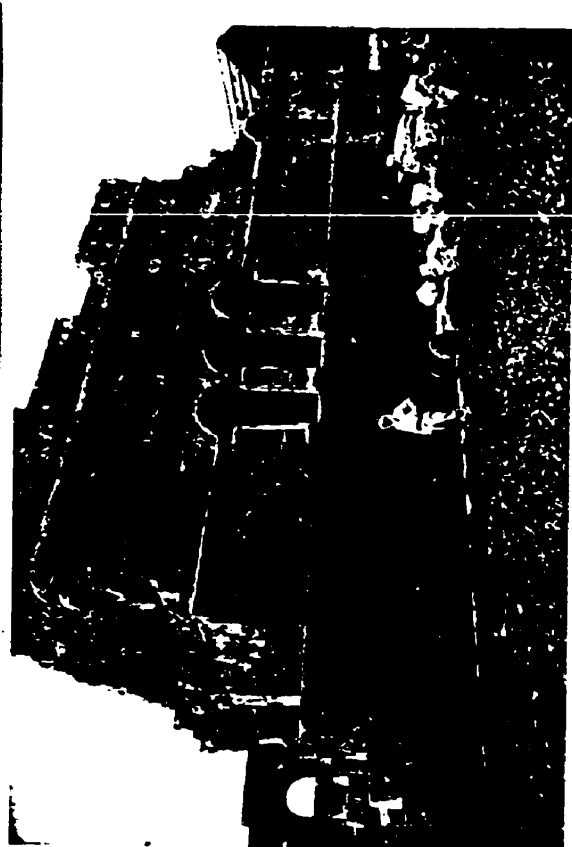


132





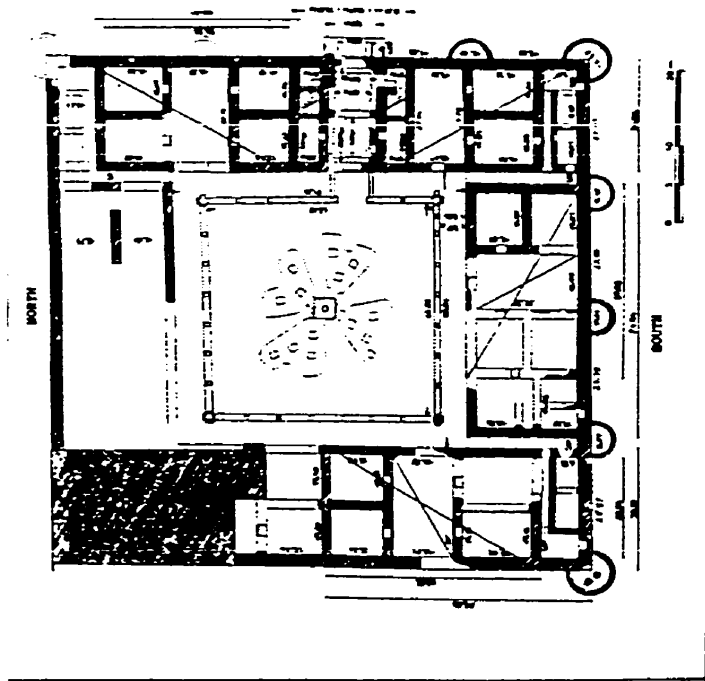
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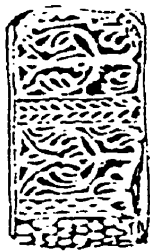
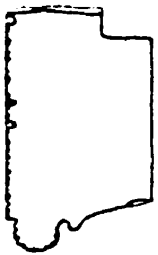
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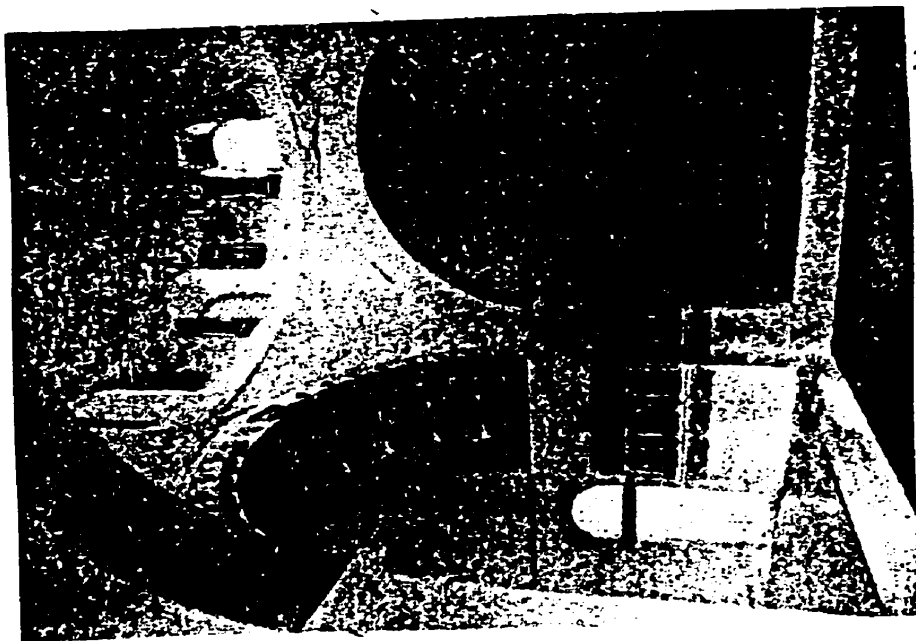
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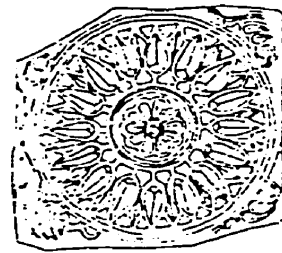
138



142



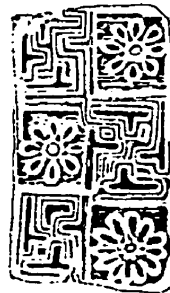
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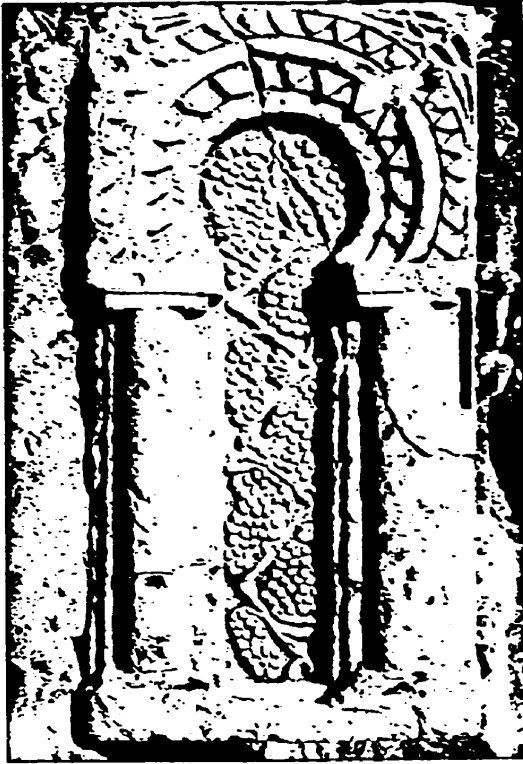
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139



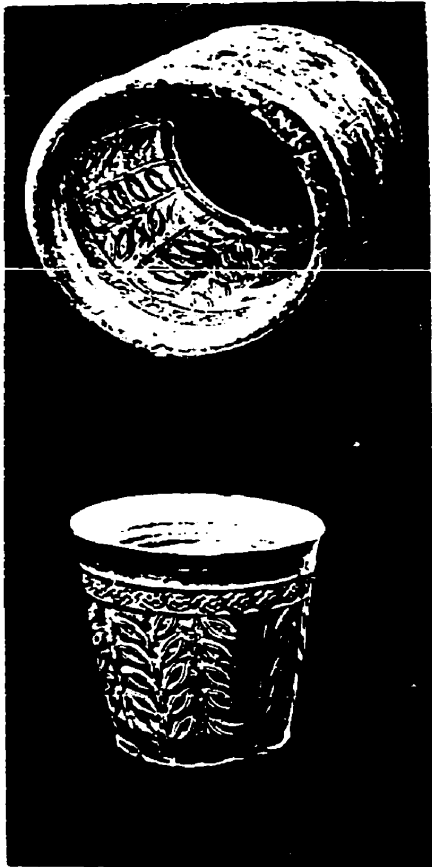
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144



145

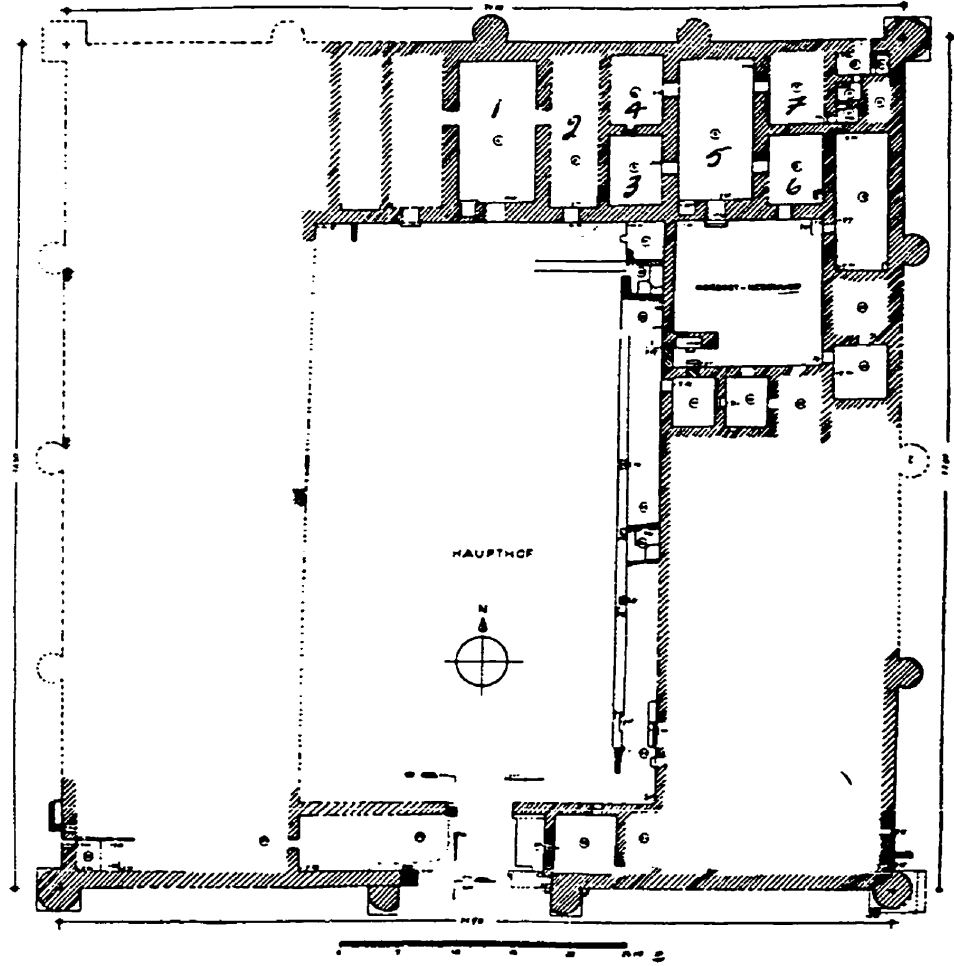


146



147

7



148



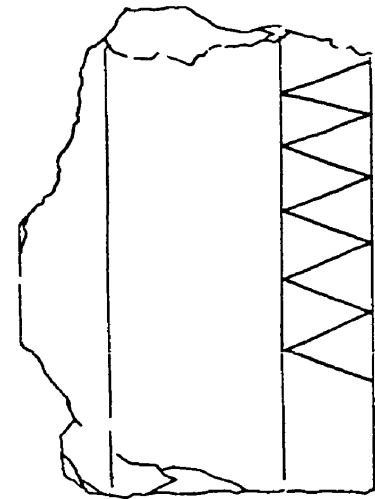
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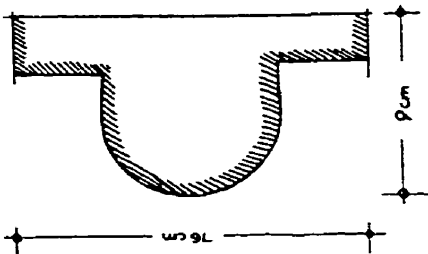
150



151



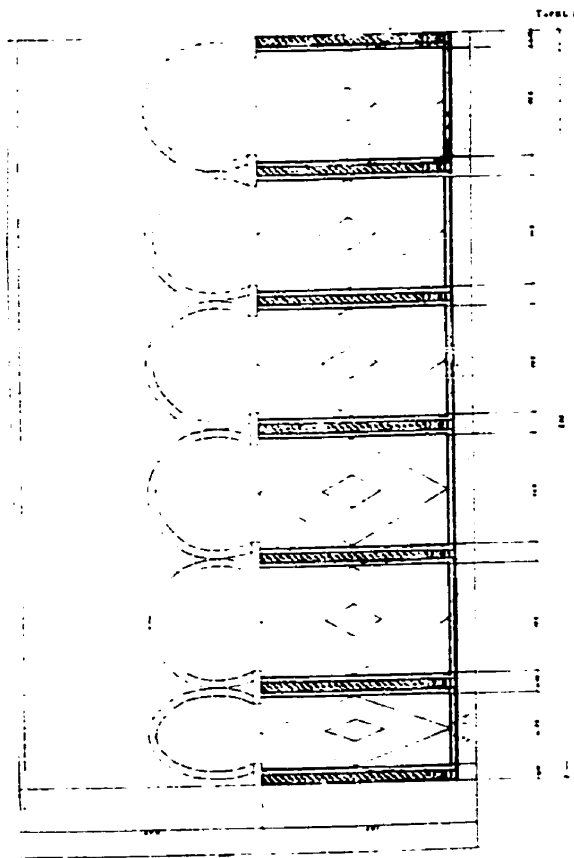
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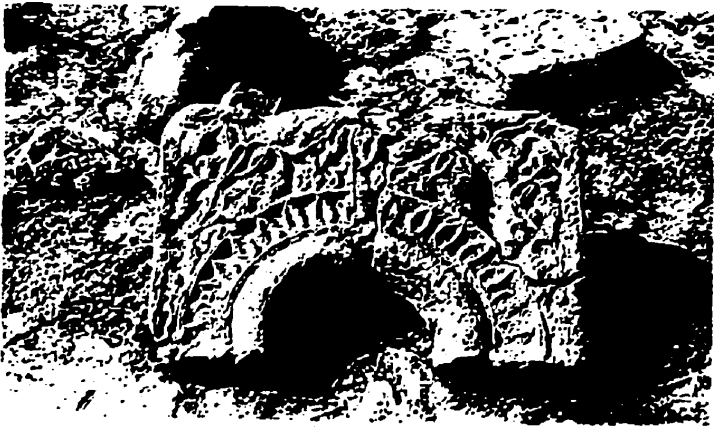
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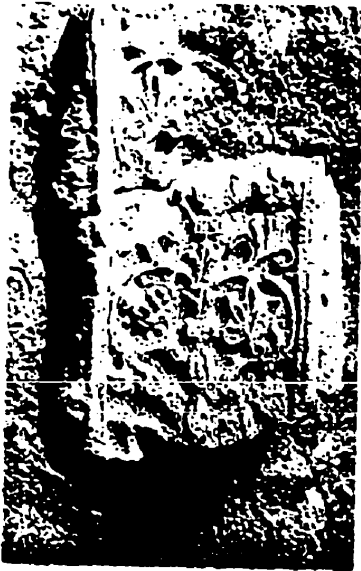
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153



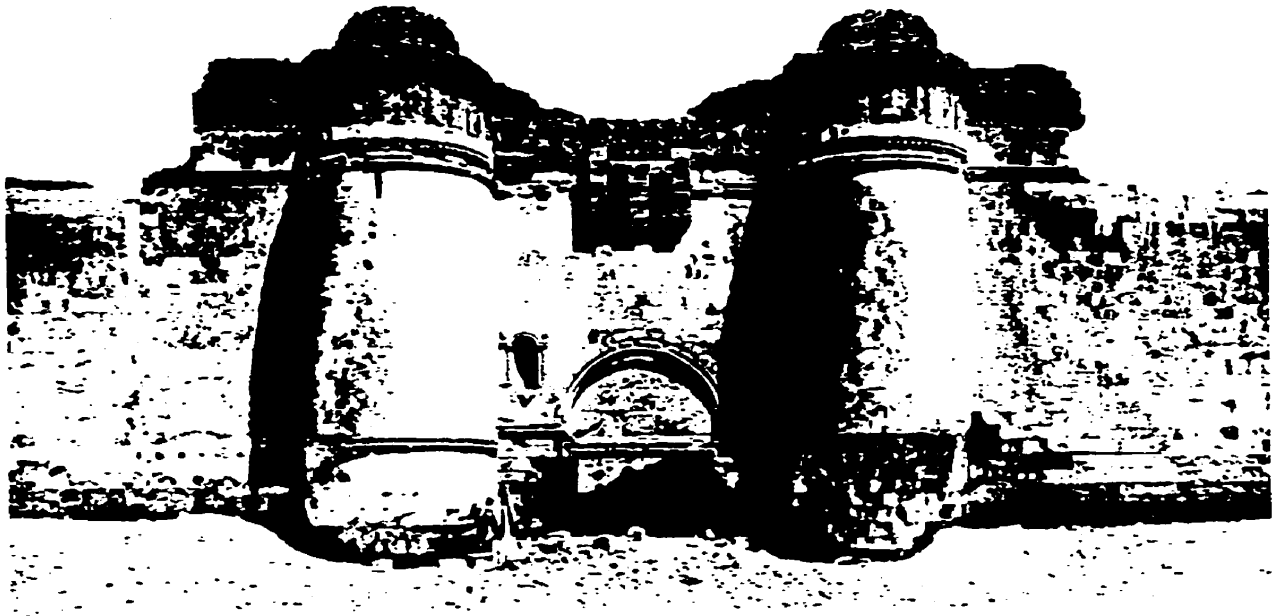
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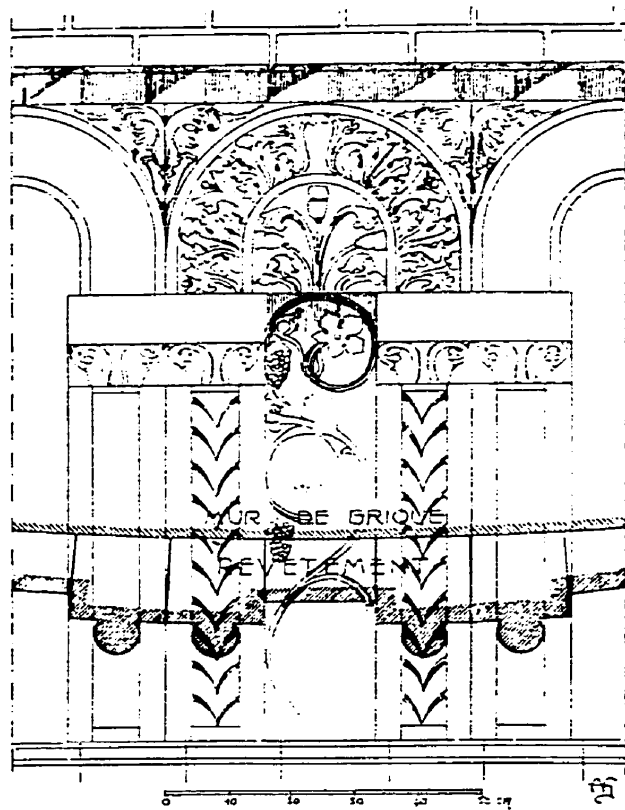
156



157



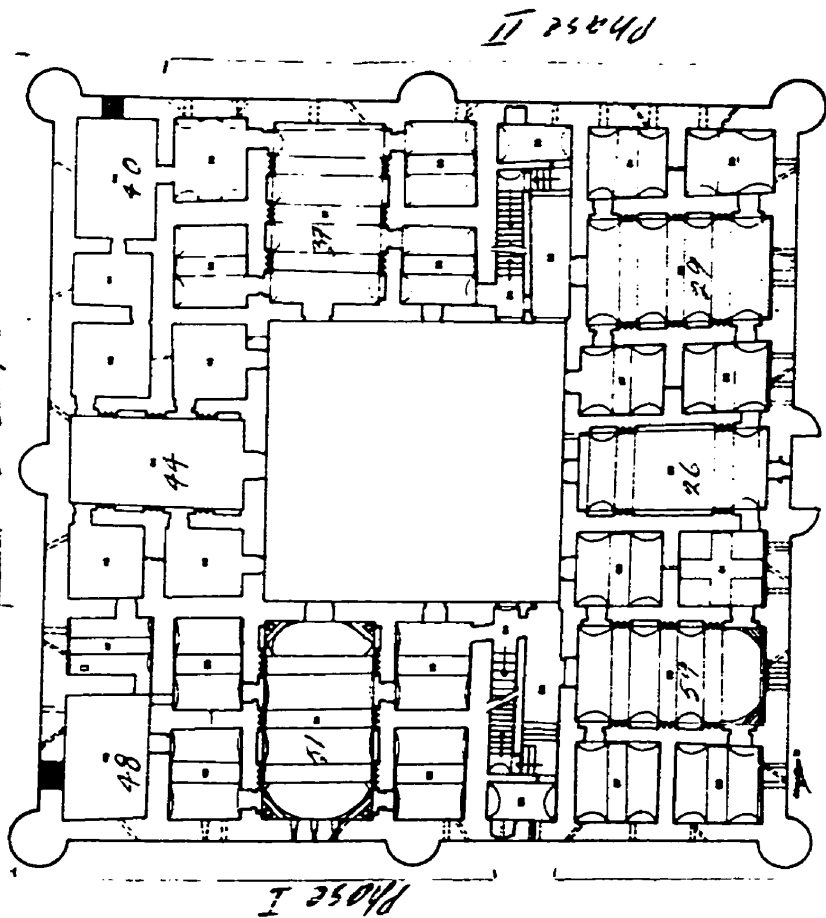
158



159

161  
159

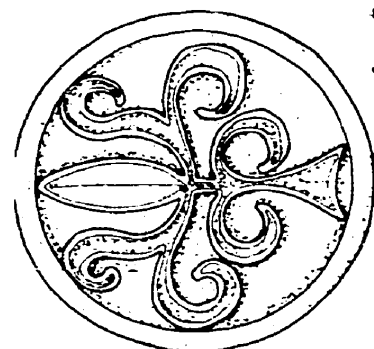
*Not completed.*



Phase II

∅

163



1979

160



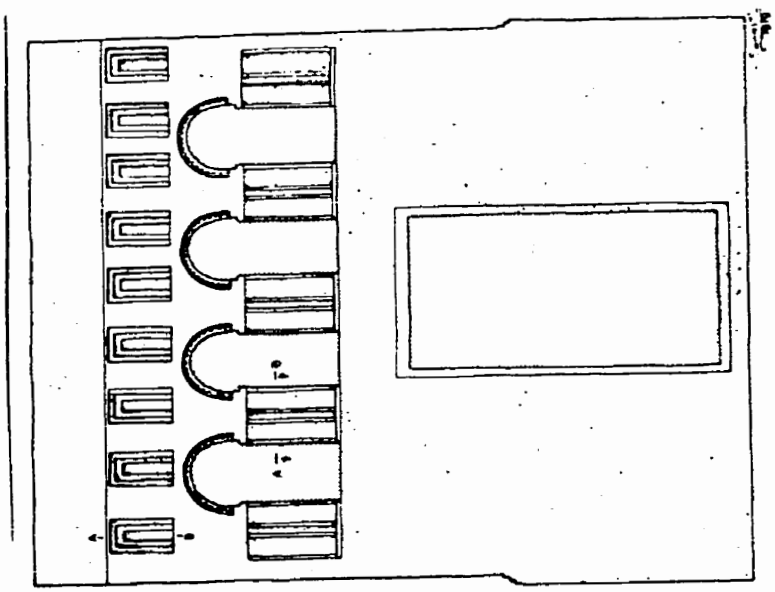
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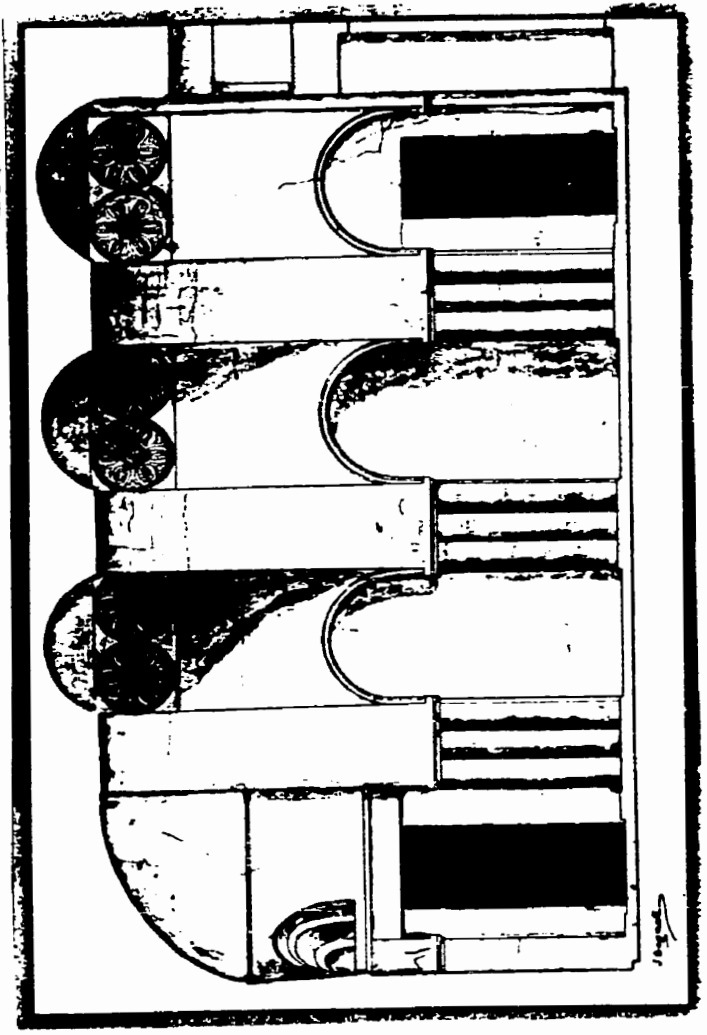
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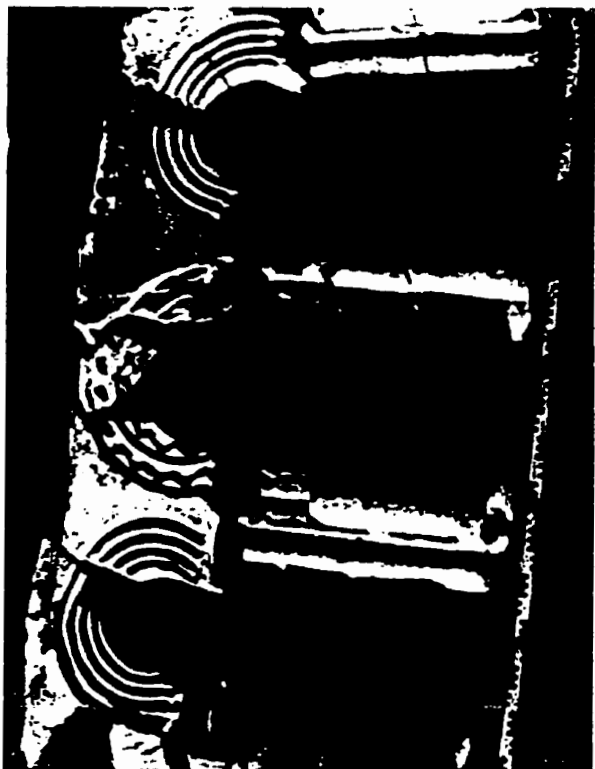


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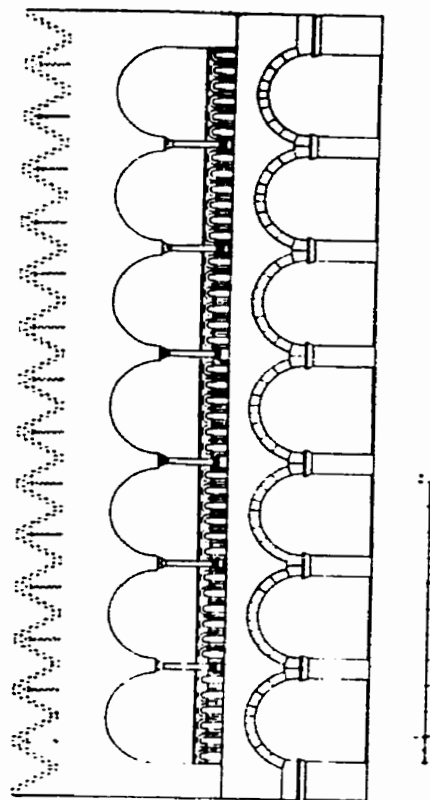


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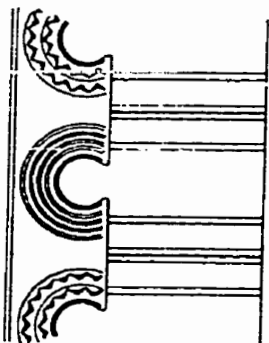
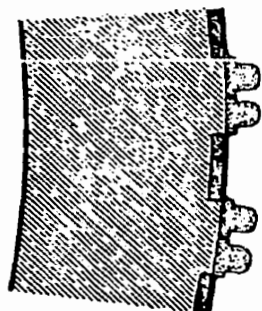




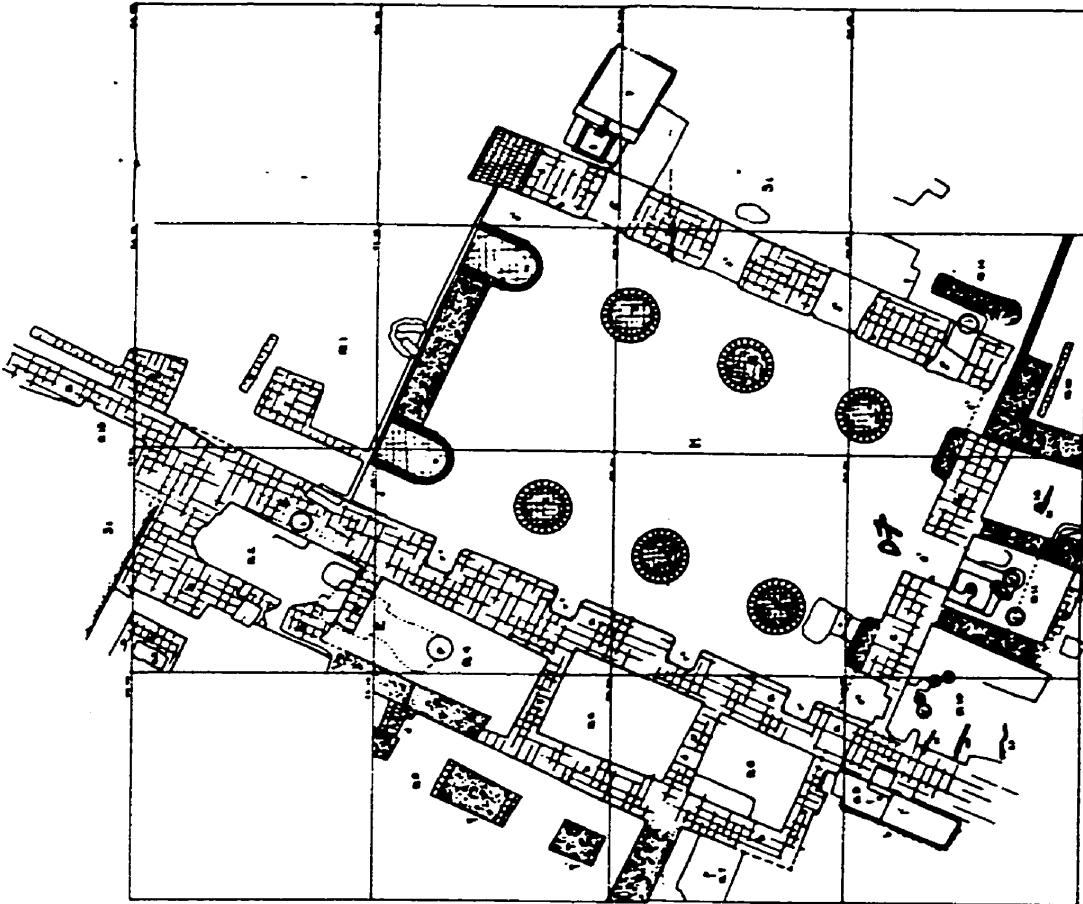
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169



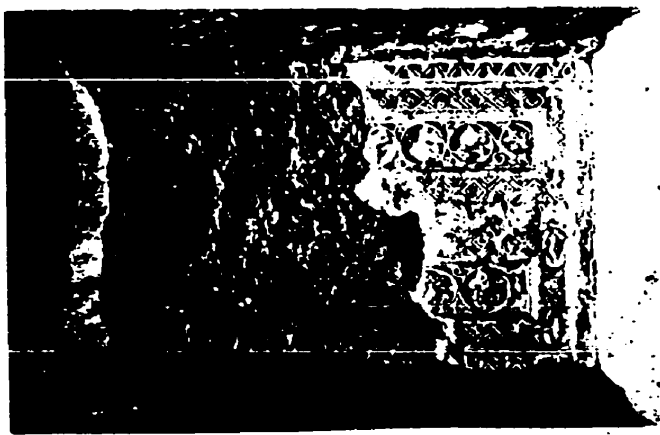
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173



172



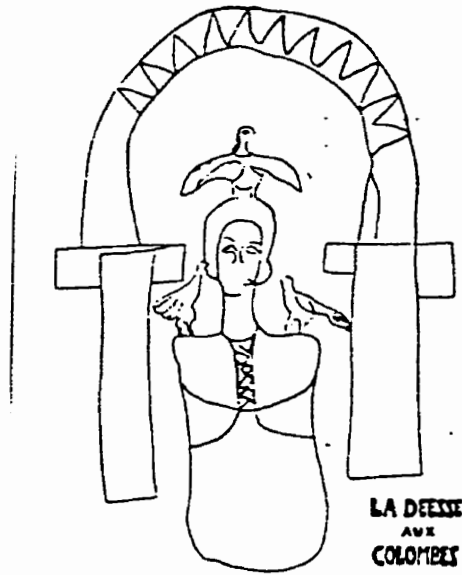
170

Fig. 1 (C.295)



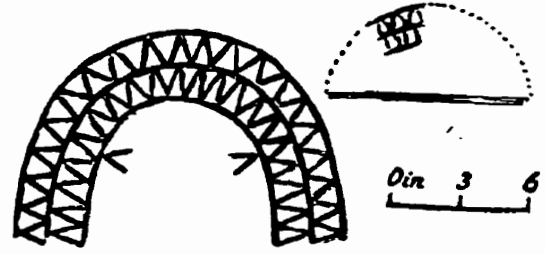
171

Fig. 6 (C.296)

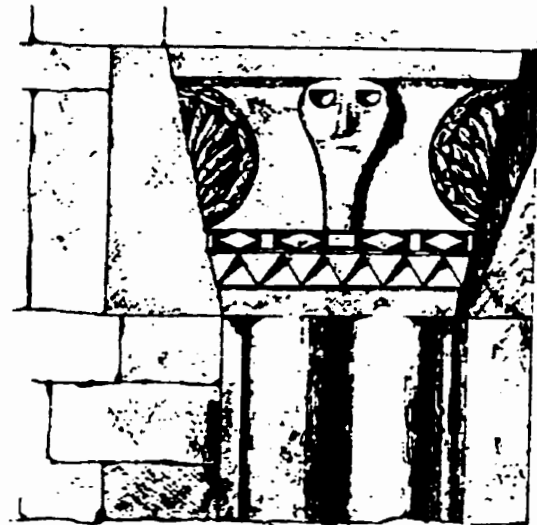


LA DEESSE  
AUX  
COLOMBES

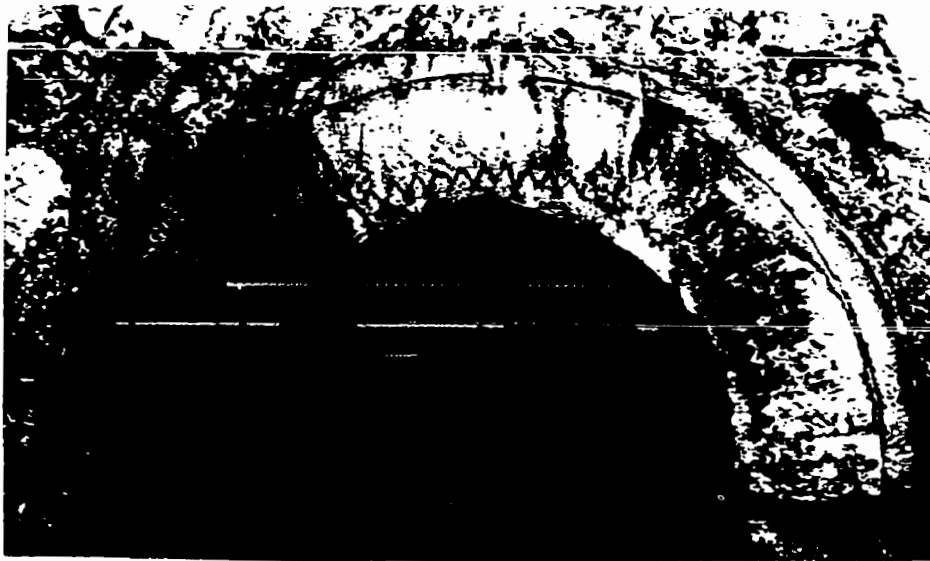
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175



176



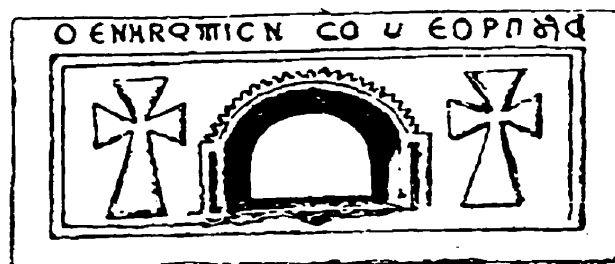
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178



179

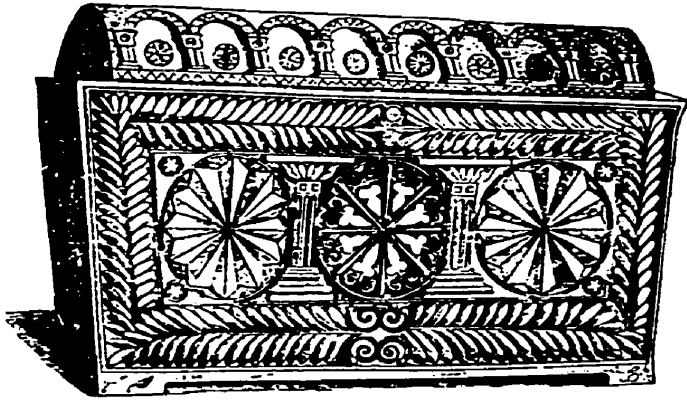


181

DEIR DUGHIVA



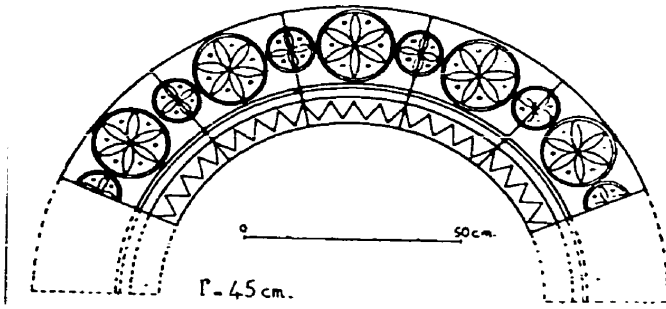
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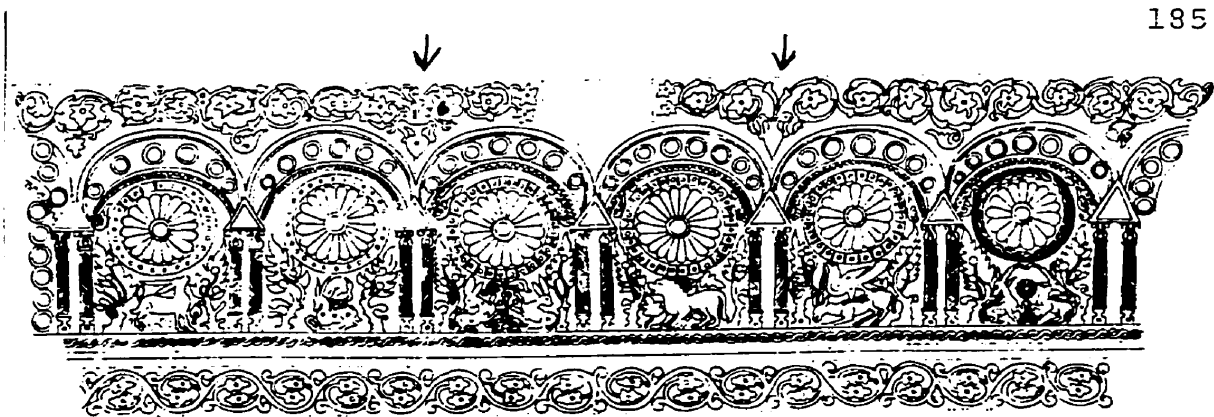
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183



184



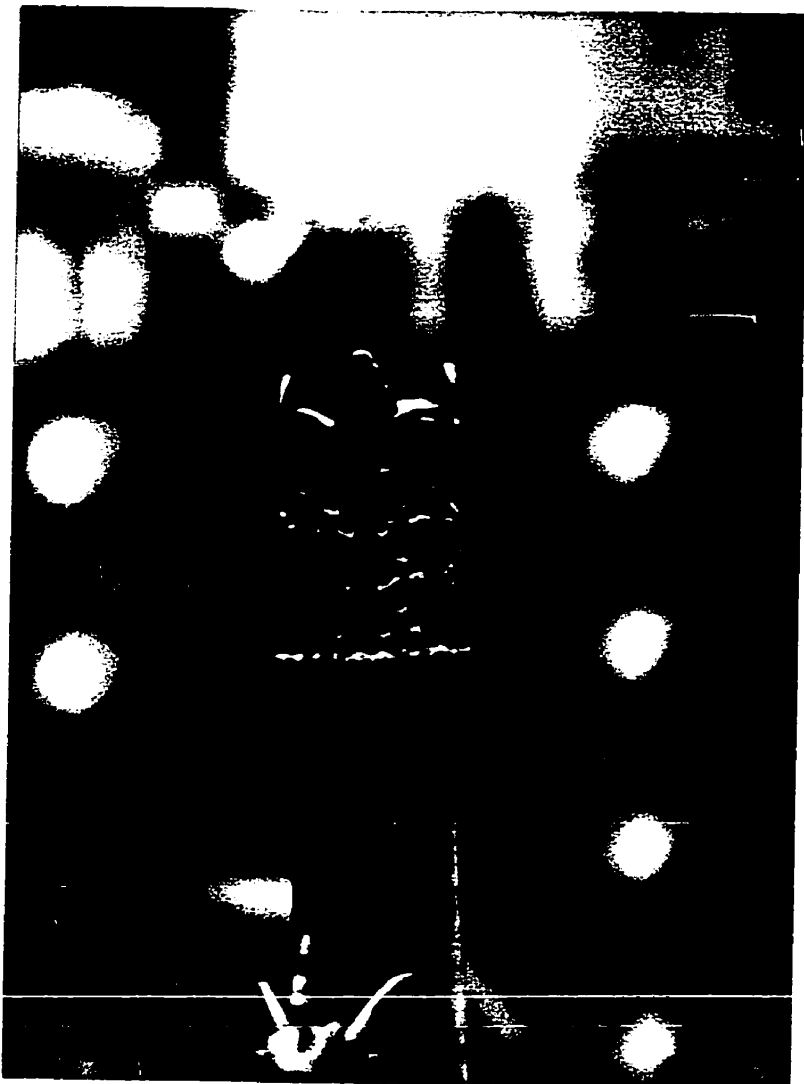
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187



186



188



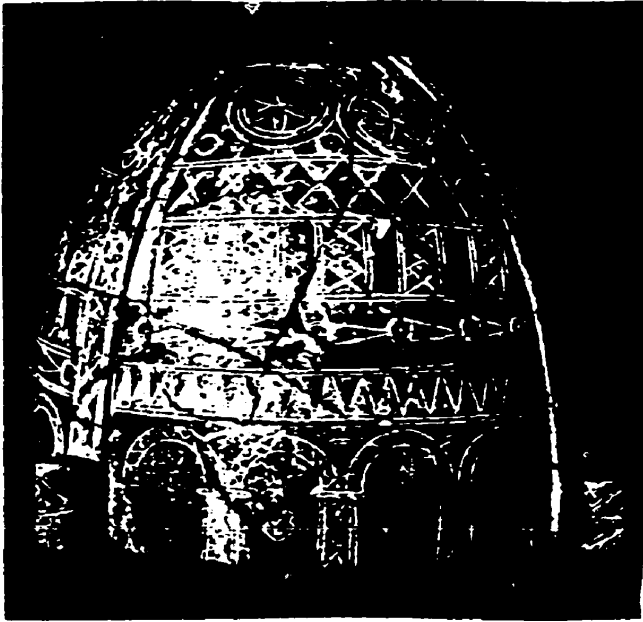
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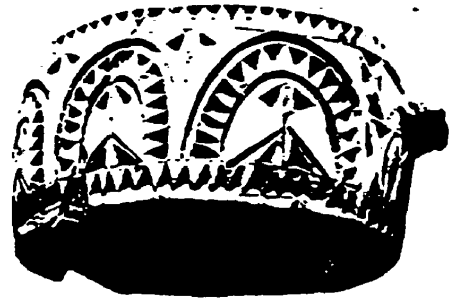
190

2. F.-N. 28



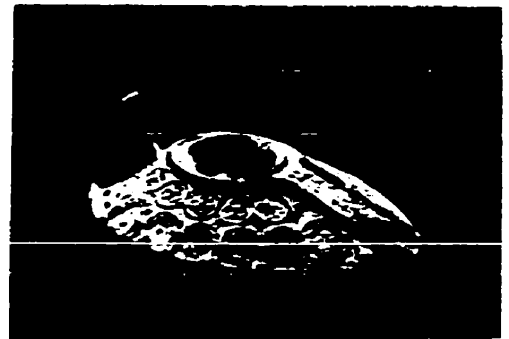
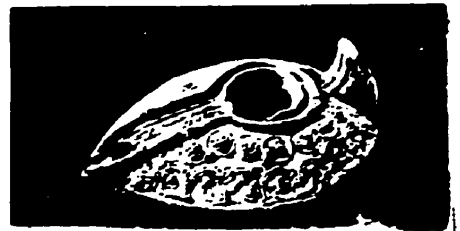


191

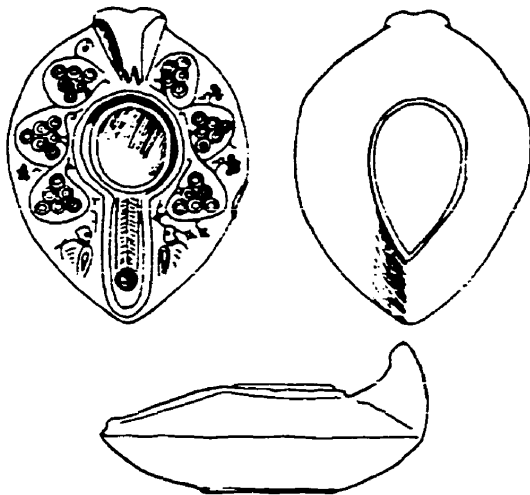


192

194

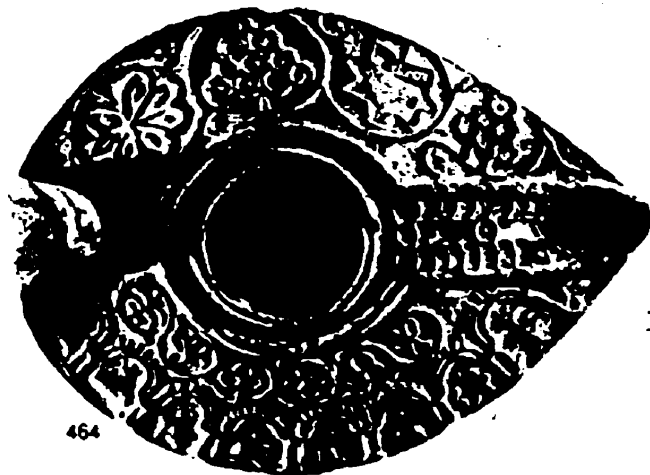


196



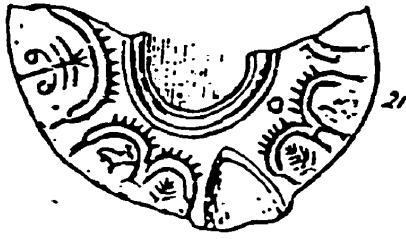
From Mexico Excavations. Cilia.

193

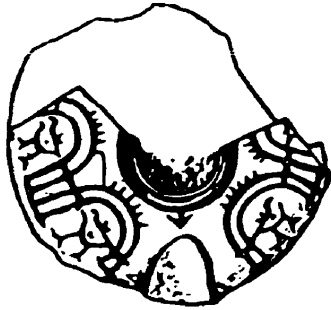


195

464

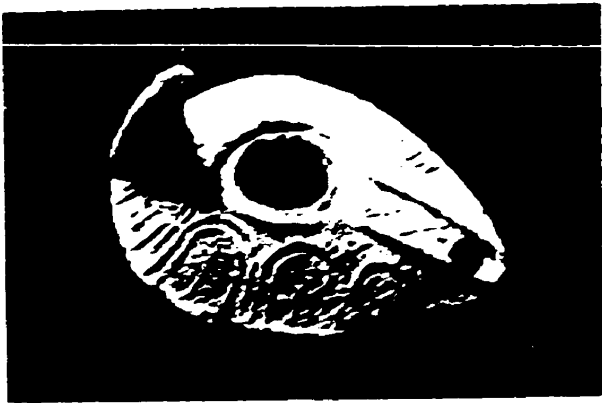


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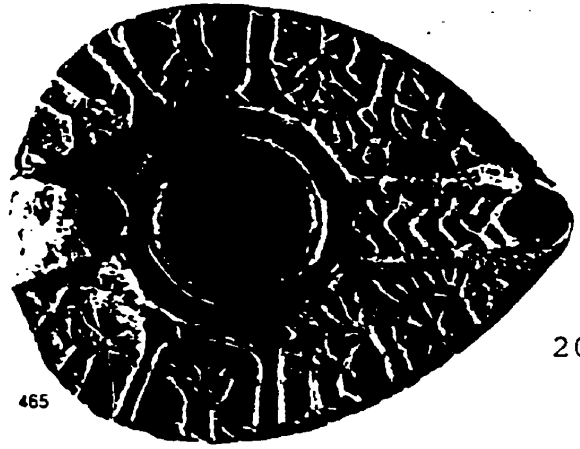


198

199

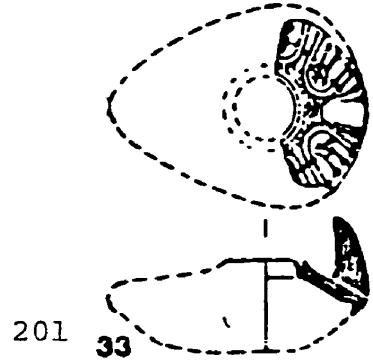


199.



465

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201

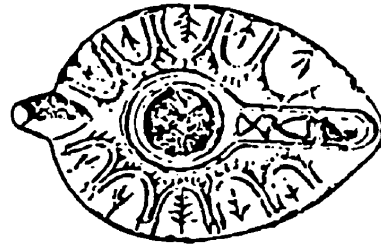


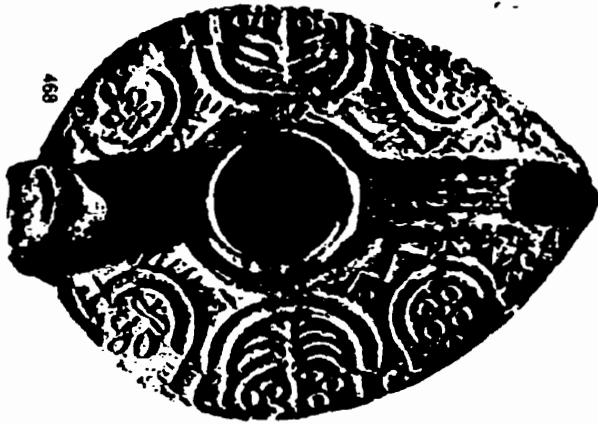
01

202



203



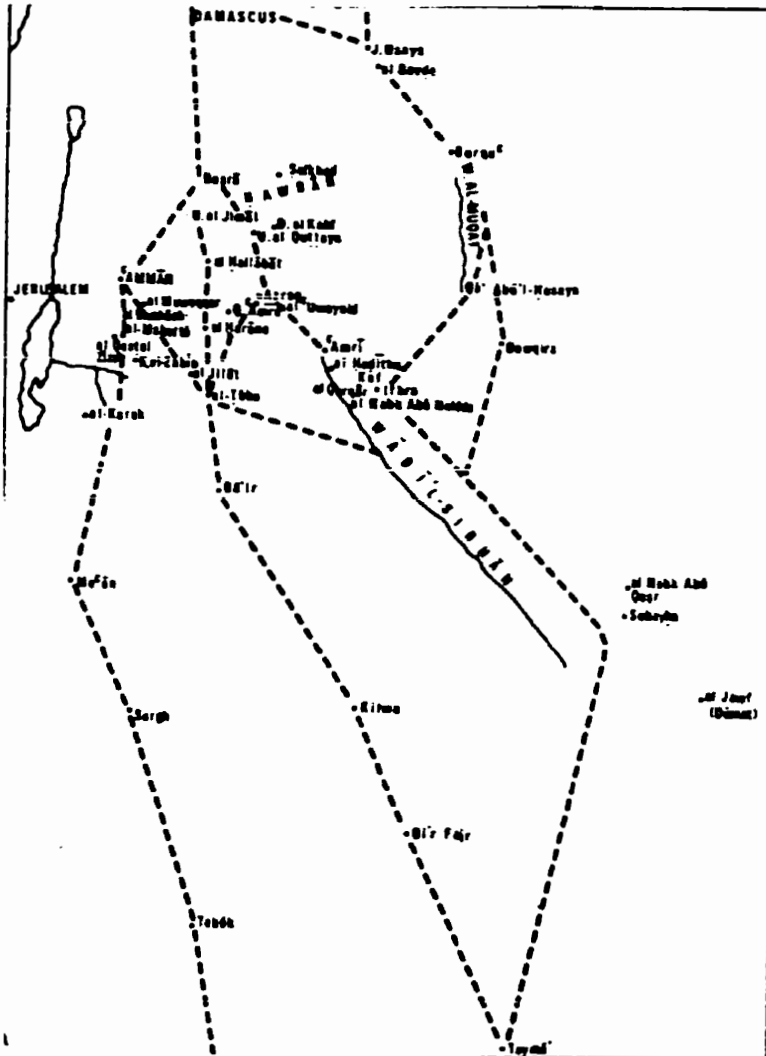


204



205

247



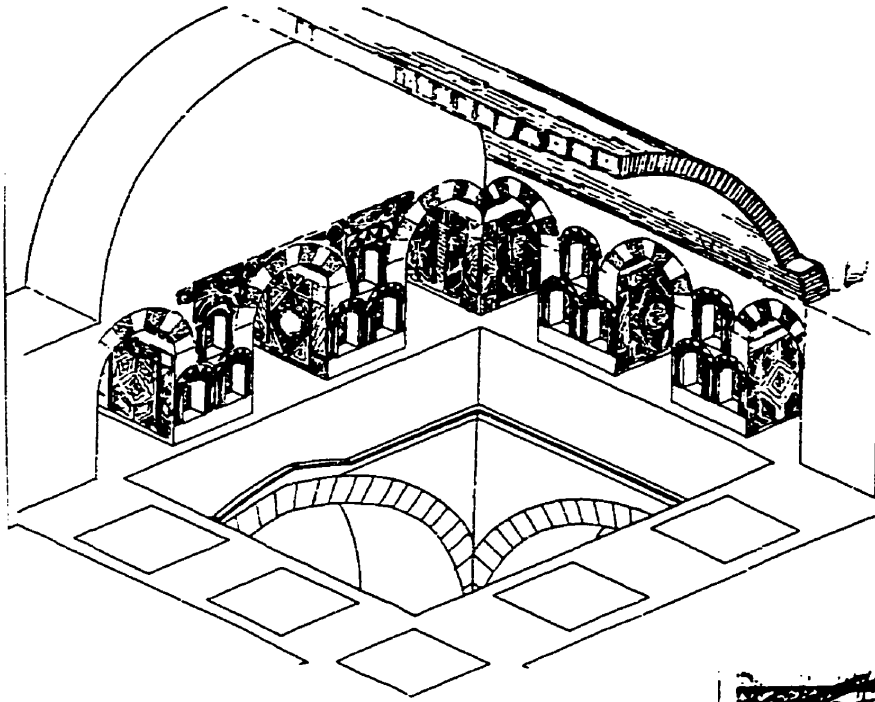
206



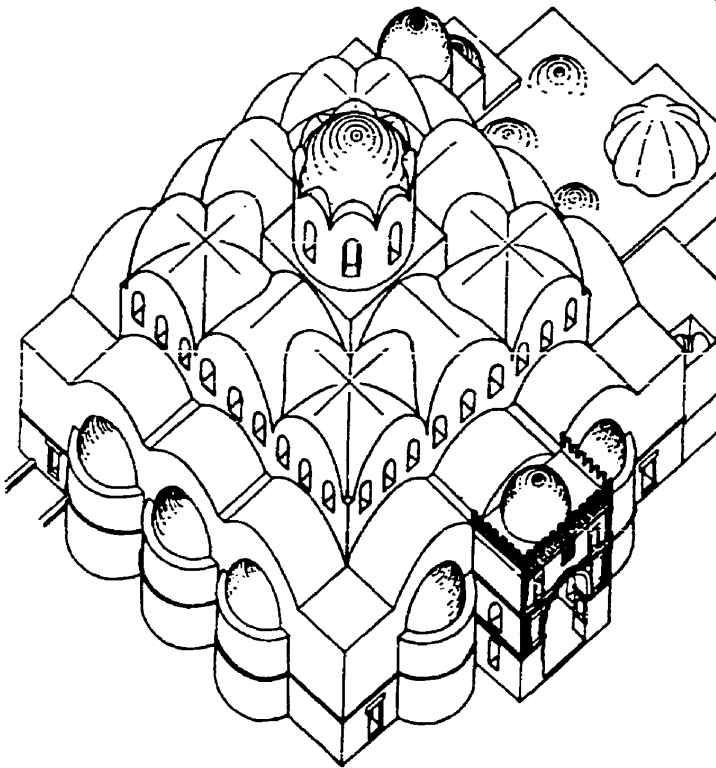
207

208

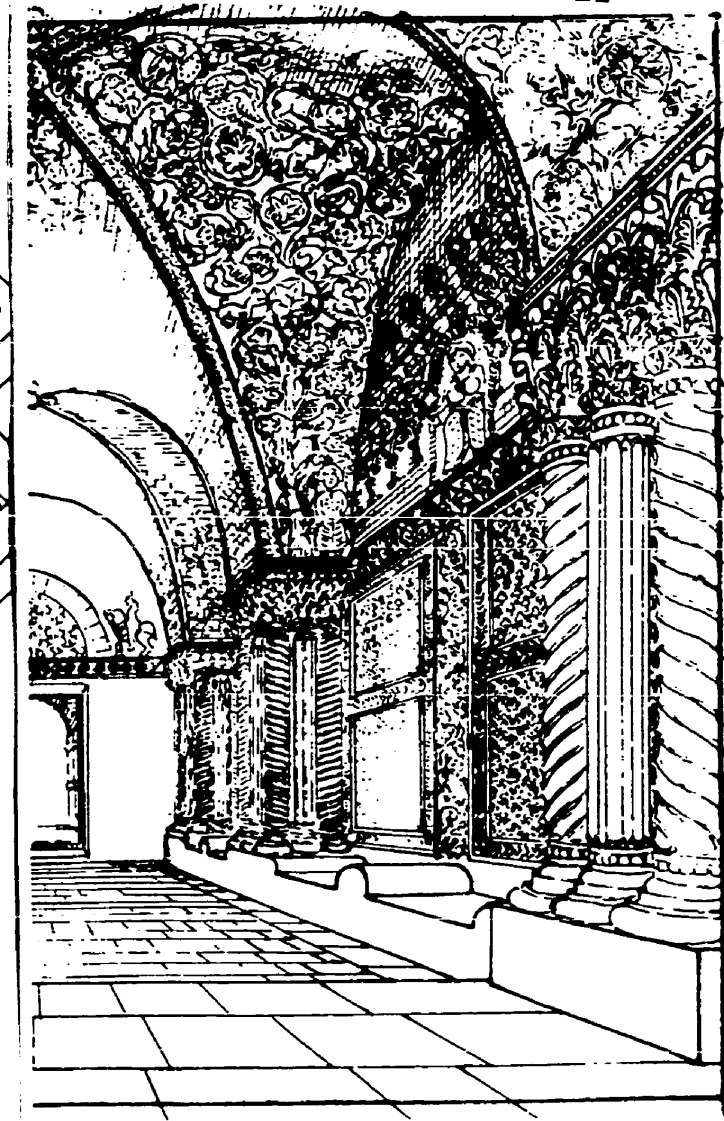
209



210



211



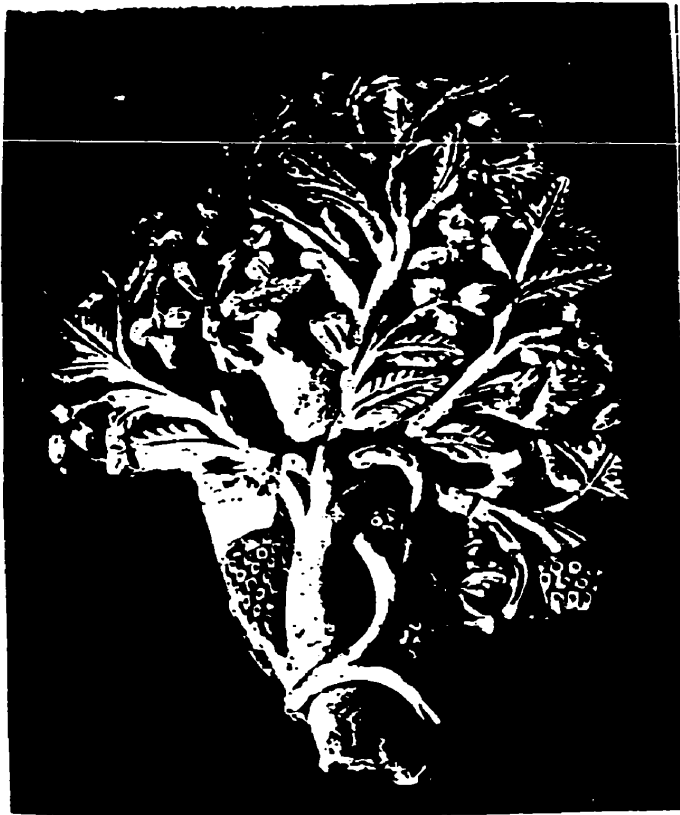
212



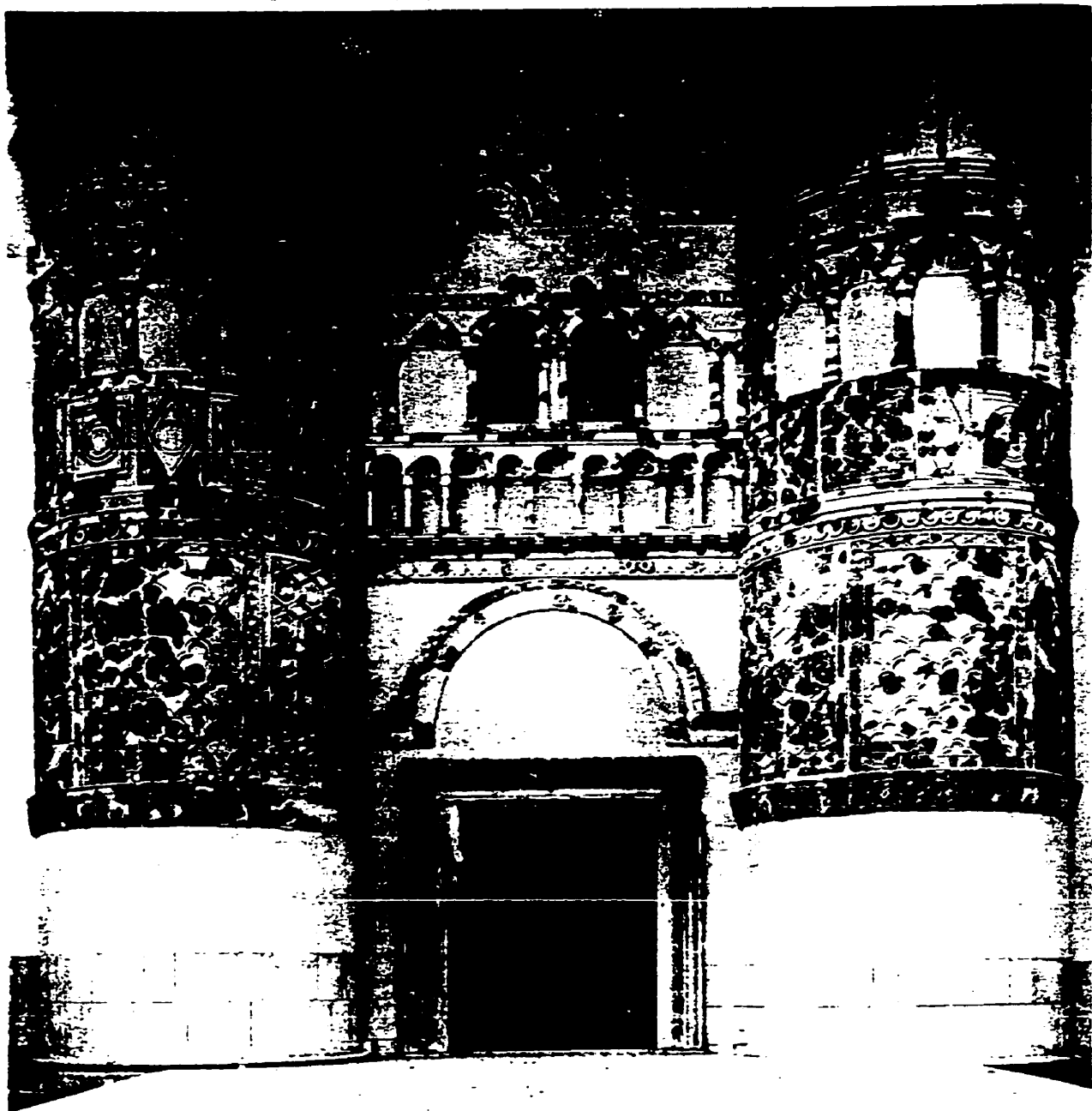
213



214

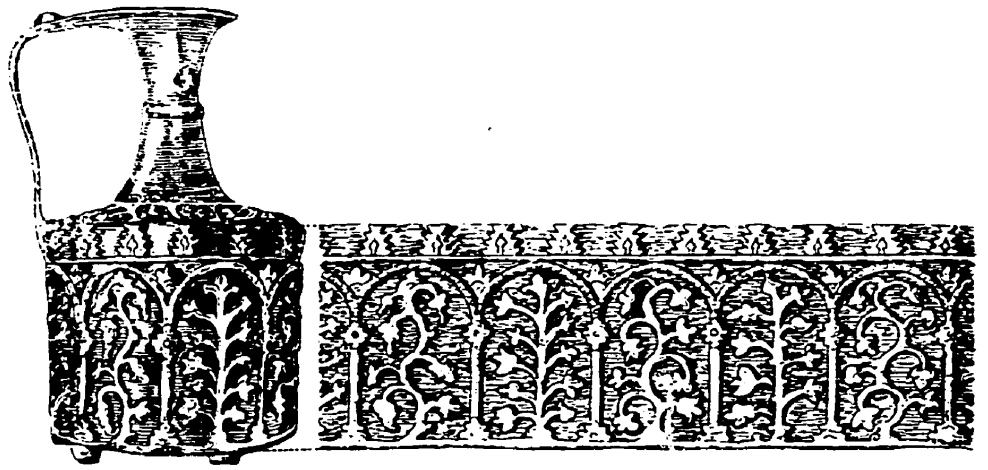


216

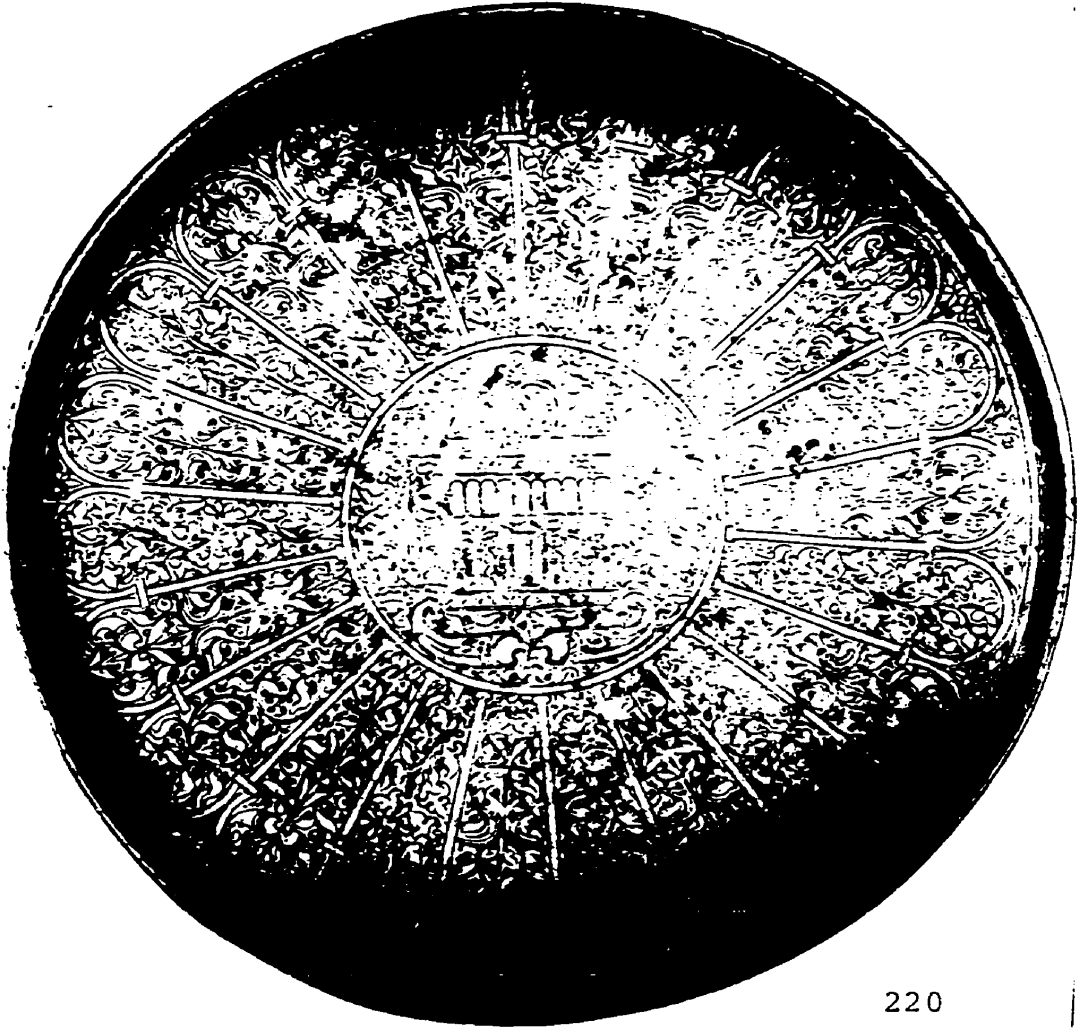




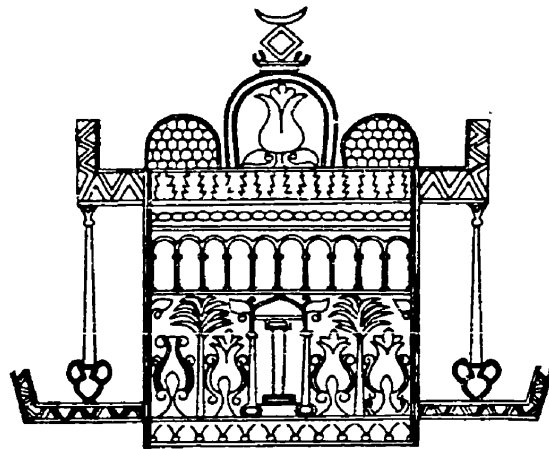
217



218



220



219





Fig. 194.

221

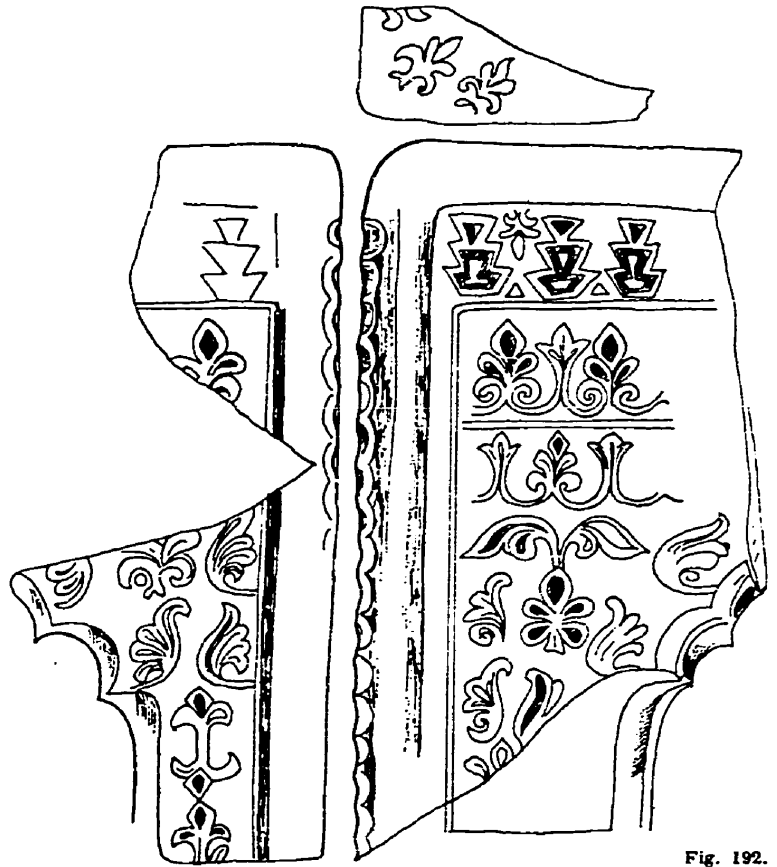


Fig. 192.

222

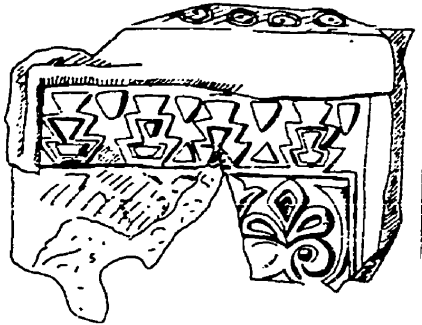


Fig. 193.

223

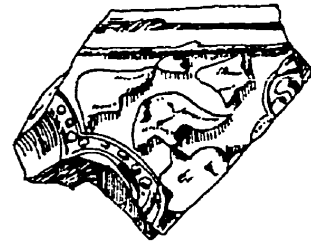


Fig. 195.

224

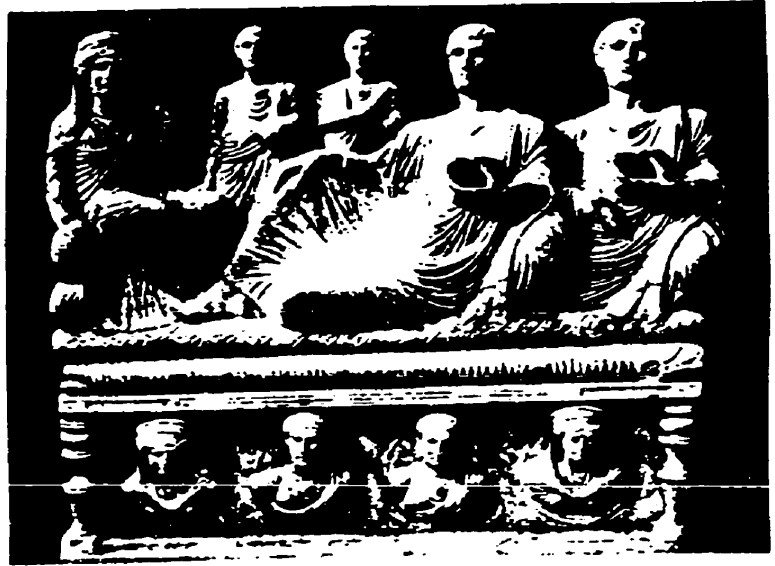


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