Muqarnas
Muqarnas

Editor:
Gülru Necipoğlu

Founding Editor:
Oleg Grabar

Managing Editor:
Karen A. Leal

Consulting Editors:
Peri Bearman
András Riedlmayer

Imaging Technician:
Daniel L. Glade

Editorial Board:
Ali Asani, William Graham, Wolfhart Heinrichs, Eva Hoffman, Cemal Kafadar,
Roy Mottahedeh, Afsaneh Najmabadi, Nasser Rabbat, David Roxburgh,
Wheeler Thackston, James Wescoat, Irene Winter

Advisory Board:
Catherine Asher, Ülkü Bates, Irene Bierman, Zeynep Çelik, Howard Crane,
Giovanni Curatola, Walter Denny, Jerrilynn Dodds, Massumeh Farhad, Finbarr B. Flood,
Heinz Gaube, Lisa Golombek, Robert Hillenbrand, Renata Holod, Stephen Humphreys,
Nuha Khoury, Machiel Kiel, Linda Komaroff, Thomas Leisten, R. D. McChesney, Bernard O’Kane,
Scott Redford, Cynthia Robinson, J. Michael Rogers, D. Fairchild Ruggles, Priscilla Soucek,
Maria Subtelny, Heghnar Watenpaugh, Anthony Welch
Note to Contributors: *Muqarnas* will consider for publication articles on all aspects of Islamic visual cultures, historical and contemporary. Articles submitted for publication are subject to review by the editors and/or outside readers. Manuscripts should be no more than 50 double-spaced typed pages of text (not including endnotes) and have no more than 25–30 illustrations. Exceptions can be made for articles dealing with unpublished visual or textual primary sources, but if they are particularly long, they may be divided into two or more parts for publication in successive volumes.

Both text and endnotes should be double-spaced; endnotes should conform to the usage of *The Chicago Manual of Style*, 15th edition. Illustrations should be labeled and accompanied by a double-spaced caption list. Authors are responsible for obtaining permission to reproduce copyrighted illustrations and for supplying the proper credit-line information.

For the transliteration of Arabic and Persian, *Muqarnas* uses the *Encyclopaedia of Islam* system, but with the omission of subscript bars and the substitution of *q* for *k* and *j* for *dj*; for Ottoman Turkish, authors should use the *EI* system. All transliterated words and phrases in the text and transliterated author’s names and titles in the endnotes must follow this system. Exceptions are proper nouns (names of persons, dynasties, and places) and Arabic words that have entered the English language and have generally recognized English forms (e.g., madrasa, iwan, mihrab, Abbasid, Muhammad); these should be anglicized and not italicized. Place names and names of historical personages with no English equivalent should be transliterated but, aside from *‘ayn* and *hamza*, diacritical marks should be omitted (e.g., Maqrizi, Fustat, San’a). A detailed style sheet and further information can be obtained at http://agakhan.fas.harvard.edu (under Publications), or by writing to the Managing Editor, Aga Khan Program, Sackler Museum, Harvard University, 485 Broadway, Cambridge, MA 02138. E-mail: muqarnas@fas.harvard.edu; fax: 617-496-8389.

This book is printed on acid-free paper.
## CONTENTS

Jere L. Bacharach, Signs of Sovereignty: The *Shahāda*, Qur’anic Verses, and the Coinage of ’Abd al-Malik ................................................................. 1


Kathryn Blair Moore, Textual Transmission and Pictorial Transformations: The Post-Crusade Image of the Dome of the Rock in Italy ............................................................. 51

Alicia Walker, Middle Byzantine Aesthetics of Power and the Incomparability of Islamic Art: The Architectural Ekphraseis of Nikolaos Mesarites ..................................................... 79

Julia Gonnella, Columns and Hieroglyphs: Magic *Spolia* in Medieval Islamic Architecture of Northern Syria ................................................................. 103


Todd Willmert, Alhambra Palace Architecture: An Environmental Consideration of Its Inhabitation ......................................................................................... 157

Elias I. Muhanna, The Sultan’s New Clothes: Ottoman–Mamluk Gift Exchange in the Fifteenth Century .................................................................................................................. 189


Zeynep Tarım Ertuğ, The Depiction of Ceremonies in Ottoman Miniatures: Historical Record or a Matter of Protocol? .......................................................................................... 251

Ebba Koch, The Mughal Emperor as Solomon, Majnun, and Orpheus, or the Album as a Think Tank for Allegory ............................................................................................................. 277

### NOTES AND SOURCES

Heike Franke, Akbar’s *Kathāsaritsāgara*: The Translator and Illustrations of an Imperial Manuscript .............................................................................. 313

Vincenza Garofalo, A Methodology for Studying Muqarnas: The Extant Examples in Palermo ................................................................................. 357

Numismatic evidence is an essential source for reconstructing the visual and textual history of the first eight decades of Islamic rule, particularly the reign of the Marwanid caliph ʿAbd al-Malik (r. a.h. 65–86 [685–705]), when a large number of coin varieties, many with human representation, were struck. Specifically, between the years a.h. 72 (692) and 78 (698), more than a half dozen different coin types were minted—in gold and silver by the caliph in Syria and in silver by his family and his governor, al-Hajjaj (d. a.h. 95 [714]), in Iraq. Historians, art historians, and numismatists have traditionally referred to those coins minted before the all-epigraphic gold dinars of late a.h. 77 (early 697) and the silver dirhams of a.h. 78 as “experimental” or “transitional,” while the all-epigraphic issues are labeled “reformed.” All of these terms imply that the appearance of the all-epigraphic pieces was the logical conclusion of a series of steps culminating in proper “Islamic” coinage.

This study does not accept such labeling and begins with the premise that when a new coin type was struck, that is, a coin with a design that differed from earlier issues through the inclusion of more information than simply a new date or mint, the new elements were added as the result of unique historical factors. These new-style coins carried messages in the form of images and/or text that the ruler or his representative wished to transmit, that is, the new coinage served as a form of propaganda. The word “propaganda” is used in the sense of the dissemination of information aimed at reflecting the views of the issuing authorities and for the purpose of informing, if not influencing, the opinions of those who learned what was inscribed on the new coin type. This approach assumes that the new elements carried political and religious messages in a society where both concepts were inextricably intertwined.

For this study, the definition of a Muslim coin is one that includes words in Arabic. Examples will be cited below in which Muslim rulers before ʿAbd al-Malik minted gold and silver coins that lacked an inscription in Arabic, that is, any visual sign that they were associated with Islam. It is doubtful that most contemporaries would have realized that such coins had been struck by Muslim rulers.

I will argue that there were specific historical reasons for the addition of new elements on each Muslim coin type issued by the Marwanids between a.h. 72 and 78, including the all-epigraphic coinage of a.h. 77 and 78. These issues were experimental in that there was no guarantee that the new messages would be understood, or that the new coin type would be accepted in the marketplace. In examining this gold and silver coinage for those years, the political, military, and religious settings in which each new coin type was struck will be identified. The increasing use of Arabic in the form of pious phrases and, eventually, Qurʾanic verses (sing. ʿāya), and of other data such as mint names and dates is one of the hallmarks of this coinage and will be traced through the all-epigraphic issues of a.h. 77 and 78. Finally, ʿAbd al-Malik’s authorization of the use of specific Qurʾanic verses on his all-epigraphic dinars and dirhams was a deliberate act and the verses chosen carried messages that either the caliph himself or his agents considered important at that time and under those specific historical conditions. Therefore, those who assume that these dinars and dirhams “triumphed” over earlier Muslim coinage because they represented “true” Islam are projecting backwards onto earlier times the ultimate success of the new-style coinage rather than accounting for the reasons that it was issued and was successful in the market.
Although this study focuses upon the context and meaning of the new messages and images on the Marwanid gold and silver issues, it is doubtful that most of these innovations were noted by the users of the coinage, which is true for most, if not all, historical periods. Few of the changes made in the language or imagery were recorded in historical texts. The primary role of the coins was to aid economic and monetary exchanges. If the coinage “looked” right, it was accepted in the market. As long as the degree of fineness of the gold and silver coinage remained constant—and there is no evidence to the contrary for the years covered—the purity of the coinage was not a factor. When coins were exchanged by weight, that is, were treated as stamped round pieces of gold or silver to be weighed on a scale against a known weight, the calculated theoretical weight for any individual piece was not important. Whether the individual coin was heavier or lighter than the theoretical ideal coin made no difference since the total weight was all that mattered. However, if coins were traded by number, as, I will argue, was the case for ʿAbd al-Malik’s all-epigraphic gold dinars, then the theoretical weight standard was critical in comparison with other coins that were traded by number. Trading light gold coins for heavy gold coins by number and not weight meant someone was losing money in every transaction.

I argue that the “triumph” of the all-epigraphic coinage was not due to any legislative act by ʿAbd al-Malik, a campaign by pious members of the Muslim community, or the reasons offered by the great Islamic scholar Ibn Khaldun writing at the end of the fourteenth century:

When ʿAbd al-Malik saw fit to use the mint to protect against fraud the two coins (the gold dinar and the silver dirham) that were current in Muslims transactions, he determined their values as what they had been in the time of the [Caliph] Umar. He used the iron stamp, but engraved words on it, rather than pictures, because eloquent words were obviously more congenial to the Arabs. Moreover, the religious law forbids pictures.4

Instead, my interpretation will be based solely on monetary factors and refers only to the gold dinars. More specifically, I will apply Gresham’s Law, according to which, under certain market conditions, “bad” money drives out “good,” to the gold coinage circulating in the late 70s A.H. (690s). In this case, the new all-epigraphic dinars struck by ʿAbd al-Malik would be the “bad” currency. I will close with some observations on the short- and long-term impact of the shift from a Muslim coinage with images and text to one of text only.

Another theme in this study involves the emergence of a series of pious phrases found on contemporary coinage, milestones, and tombstones, and in the Dome of the Rock, which have been labeled in virtually all the modern literature as the *shahāda* (profession or affirmation of faith). In the twenty-first century, the *shahāda* is *lā ilāha illā Allāh Muḥammad rasūl Allāh* (There is no god except God, Muhammad is the Prophet of God) and using the term *shahāda* for the late seventh century often evokes the modern formulation.5 Therefore, I will use the phrase “affirmation of faith” to make clear that versions different from the one used today were employed at that time. Each time the phrase “affirmation of faith” appears below, a specific wording is given, accompanied by an adjective—“Jerusalem,” “Egyptian,” “Syrian,” “Eastern,” or “short.” “Jerusalem” refers to the fact that the earliest version of that specific wording appeared in the Dome of the Rock in Jerusalem; “Egyptian” because the earliest version was found on a tombstone from Aswan; “Syrian” because it first appeared on coinage from a.h. 77 (697); “Eastern” because the earliest version was recorded on coinage from Iraq and Iran; and “short” because only the words *bism Allāh Muḥammad rasūl Allāh* appeared on certain coinage. Using these adjectives rather than the terms “Zubayrid” and “Marwanid” with the phrase “affirmation of faith” avoids creating the impression that these different versions of the *shahāda* were used only by one or another politico-religious movement.

NUMISMATIC EVIDENCE

My approach to numismatic evidence is based upon a number of assumptions, some of which were set out above. First, when a new coin type was struck as a form of propaganda, its novel elements were meaningful to those who introduced them.6 Second, the highest political authorities were ultimately responsible for what appeared on the coins. This meant that die cutters in the central provinces of Umayyad lands were not going to include images or inscriptions on their...
gold and silver issues that were not approved by the caliph or his governors. Third, since coinage tends to be conservative, many elements of a new “coin type” such as images, inscriptions, script, and layout, are often carried forward in time, even when the reasons for the initial changes are no longer relevant, meaningful, or even remembered. In most cases, memory of the original meanings of the inscriptions, figures, and layout was quickly lost and never recorded in textual narratives.

A corollary to the conservative nature of coin types is that the size, weight, and shape of early Muslim gold and silver issues were determined by the characteristics of the coinage circulating in the Arabian Peninsula, Syria, Iraq, and Iran before their arrival. If the conquering Arab Muslim armies had carried with them a tradition of striking gold and silver coins, then the sizes and weights of this system would have been imposed upon the conquered populace. The reverse was true. At the time of the Prophet Muhammad, there is no record of coins being struck in the Hijaz. When Muslim rulers began to create their own coinage, that is, a coinage that had Arabic inscriptions signaling that it was issued by Muslims, its size, weight, and shape were based upon the coinage of the preceding Byzantine Empire for gold coins and of the Sasanian Empire for silver ones. This observation is important because the size of the coins would restrict how much could be inscribed on them and still be legible.

Returning to my assumptions about the world governed by Muslims, a distinction was made between numismatic issues struck in gold and silver versus copper coins, which were not necessarily subject to the same rules or level of caliphal control. In the case of silver coinage, a wide variety of Muslim drachms were struck throughout former Sasanian lands, but these are not considered in any detail here because they were not the products of ‘Abd al-Malik’s policies in Syria and Iraq. Numismatic scholarship on the period under study demonstrates that the wide range of copper issues, particularly the Arab-Byzantine pieces from Syria, reflected local control rather than a centralized policy set by the caliph. Therefore, unlike most numismatic studies of ‘Abd al-Malik’s coinage, this one will not include data from the copper issues.

Fig. 1. Byzantine solidi with Heraclius, Heraclius Constantine, and Heraclonas. With the permission of the American Numismatic Society, 1925.172.34. (Photo: courtesy of the American Numismatic Society)

BACKGROUND TO ‘ABD AL-MALIK’S COINAGE

The first Muslims had to rely upon the coinage circulating from the two dominant empires, the Byzantine and the Sasanian. Byzantine lands were famous for their gold issues (solidi), which included on the obverse an image of either the emperor alone or with his potential successors, while the reverse had a very clear Christian symbol in the form of a cross on a stepped platform (fig. 1). With inscriptions in Greek, these gold coins were of very high quality and officially weighed 24 Greek carats (approximately 4.55 grams), allowing them to be traded by number. The solidi circulating in Syria tended to weigh less, with a peak of around 4.38 grams. In the Sasanian world, which included most of modern Iraq, Iran, and parts of Central Asia, the dominant coinage was the silver drachm, which had on the obverse an image of the ruling emperor (shahanshah) with an elaborate crown, while the reverse included a fire altar with two attendants (fig. 2). Each shahanshah was portrayed with a unique crown. Inscriptions on the obverse included the name of the shahanshah with the appropriate titles, while the reverse listed the mint name and a regnal date. These inscriptions were written in middle Persian, in Pahlavi script. The Sasanian drachm varied in weight from 3.6 to 4.3 grams, with a mean of around 4.17 grams in the latter years of the dynasty, and would have been traded by weight, not number. For most of the Sasanian era, the drachm had a high silver content.
The first new-style silver drachms with a visual Muslim marker, which are labeled “Arab-Sasanian” by numismatists, were minted during the reign of ʿUthman (r. a.h. 23–35 [644–56]) and inscribed with the year 20 of the Sasanian Yazdgard calendar, that is, a.h. 31 (651). These Muslim drachms were distinguished by the addition in Arabic of the phrase bism Allāh (In the name of God) inscribed on the obverse, the side of the coin with the image of the shāhanshāh, in the second quadrant, that is, between three and six o’clock (fig. 3).

Because the inscription began in the second quadrant, it had to be written in a clockwise direction, with the edge of the coin serving as the base line. If the inscription had been written counterclockwise beginning in the second quadrant, one would have had to turn the coin upside down to read it, and the shāhanshāh’s head would have appeared at the bottom. Until the end of a.h. 77, the marginal legends in Arabic on gold and silver issues were written in a clockwise direction irrespective of where they began, in emulation of the earliest Arab-Sasanian issues. Only when an entirely new coin design was introduced in a.h. 77 and 78—one not derived from earlier pre-Islamic models—was the direction of the inscription in the margin reconsidered. At that point, the rules for the direction of a marginal inscription based upon the direction of the script were applied. If an inscription began at or close to twelve o’clock on a coin and was written in a script that went from right to left, as does Arabic, then the inscription would have been written in a counterclockwise direction.

These first Muslim Arab-Sasanian drachms copied the coinage of Yazdgard III (r. 632–51), but very shortly thereafter Muslim governors shifted to using the better-known coinage of the Sasanian ruler Khusraw II (r. 591–628) as their model. The result was that most Arab-Sasanian drachms from the 20s a.h. (650s) until the 70s a.h. (690s) looked very much alike. Inscriptions included different dates, different mints, and the names of almost fifty Muslim governors, all written in Pahlavi, as well as a limited range of short phrases in Arabic that followed the model of the first Arab-Sasanian issues by beginning in the second quadrant (three o’clock) of the obverse. For those who had used the earlier Sasanian drachm for monetary transactions, the new Arab-Sasanian coinage looked so much like the earlier coinage in terms of size, weight range, and overall appearance, that there would have been no obvious problem in using the new coinage.

It is very likely that for a brief period during the reign of the Sufyanid caliph Muʿawiyah (r. a.h. 41–60 [661–80]), a series of gold, silver, and copper coins were minted in Syria, reflecting bureaucratic developments taking place at that time. Specifically, there is a series of Arab-Byzantine solidi attributed to the reign of Muʿawiyah (fig. 4). Both the obverse and reverse of these solidi imitate well-known Byzantine gold issues, except that all the Christian elements are missing. The crosses on the crowns on the obverse were turned into
sticks, while the cross on a platform with four steps on the reverse became a pole culminating in a “T-bar” on the same type of platform. The inscriptions were written in Greek or Greek-like letters. The crosses are gone, but there is nothing signaling that a Muslim ruler issued them, such as an inscription in Arabic.

It is theoretically possible that Arab-Sasanian style drachms were also minted in Mu’awiyah’s Syria. If they were, they would probably have looked like the Arab-Sasanian drachms circulating in former Sasanian lands because that would have been the only silver coinage those residing in Syria would have known, since the Byzantines struck very few silver issues. Crosses never appeared on Sasanian and Arab-Sasanian drachms, and there is no reason to believe that they would have been included on Syrian-struck drachms, if any were minted at this time.

An eighth-century Christian document known as the Maronite Chronicle records that during his reign Mu’awiyah “also minted gold and silver, but it was not accepted because it had no cross on it.” The Chronicle preserves the memory of a coinage, for which we only have examples in gold, that lacked crosses and is attributed to the first Umayyad caliph. The problem was not just that this series of gold Arab-Byzantine solidi lacked crosses but that there was nothing visually obvious on them that would tie them to Mu’awiyah, any other Muslim ruler, or even to Islam, since they lacked an inscription in Arabic. It is possible that to contemporaries they looked like bad forgeries of Byzantine gold coins and would have been rejected in the market. Mu’awiyah, or those in his court responsible for these pieces, apparently understood what images were inappropriate for a Muslim gold coin, but not which ones would be suitable.

Syria also lacked a pre-Islamic tradition of using silver coinage. If there was an increase in the number of Arab-Sasanian silver issues brought into Syria under Mu’awiyah, there still might have been a reluctance to use them because silver coins were still relatively rare and they had nothing familiar inscribed on them such as a cross.

Our understanding of the circumstances under which Arab-Sasanian drachms were struck by specific governors with new inscriptions in Pahlavi and/or Arabic is still limited. For this study, the most important numismatic innovation took place in Bishapur during the governorship of ʿAbd al-Malik b. ʿAbd Allah (fig. 5). The drachms are dated to a.h. 66 (685) and a.h. 67 (686) and include after bism Allāh the phrase Muhammad rasūl Allāh (Muhammad is the Prophet of God). This was the first time that a reference to the Prophet had been made on coinage. The Arabic inscription, as in other contemporary numismatic examples, was written in a clockwise direction in the second and third quadrants of the obverse. The claim to the caliphate made at this time by Abdullah ibn al-Zubayr (r. a.h. 64–73 [683–92]) as amīr al-muʾminīn (commander of the
In another development important for this study, Arab-Sasanian coins dating to mid-70–mid-71 a.h. (689–90) were inscribed on the obverse outer margin, in the second and third quadrants, with *bism Allāh* followed by *lā ilāha illā Allāh wa/hşdotbelowdahu* (there is no god except God alone) (fig. 6). Continuing a practice dating to the first Arab-Sasanian issues, the inscription was written in a clockwise direction. In this case, the center of the obverse field included the phrase *Muhammad rasūl Allāh* on the right side of the image of Khusraw. Based upon this numismatic evidence, there is a version of the “affirmation of faith,” which I have labeled “Eastern,” that reads “In the name of God, there is no god except God alone, Muhammad is the Prophet of God” (*bism Allāh lā ilāha illā Allāh wahdahu Muhammad rasūl Allāh* [إِسْمَعِیْلُ اللَّهُ أَلَّا إِلَیْهِ شَریعَةُ وَحَدَّهُ وَحَدَّ مُسْلِمُ الرَّسُولُ الله]).

Finally, this coinage is important for another reason: “...the die cutters for the new silver coinage of Damascus in 72 a.h. must have been imported from al-Kufa.” This means that ‘Abd al-Malik had both professional coiners and models in silver when he began to issue his own coinage.

**THE DOME OF THE ROCK AND THE JERUSALEM “AFFIRMATION OF FAITH”**

Before examining ‘Abd al-Malik’s coinage, it is possible to establish other versions of the “affirmation of faith” circulating in parts of Greater Syria and Egypt circa a.h. 72, which I label “Jerusalem” and “Egyptian,” respectively. Evidence for the first can be found in the Dome of the Rock. This commemorative building was constructed in the form of an octagon, with a double ambulatory surrounding an outcropping of the rock on the Noble Sanctuary (al-Haram al-Sharif). Dominating the interior are magnificent mosaics of complex images created specifically for this building. These designs bore “meanings” that were presumably understood by ‘Abd al-Malik, who wanted these messages rendered as images to be included as part of the visual repertoire of the building. Unfortunately, neither ‘Abd al-Malik nor anyone else left a record of what “messages” or “associations” those images were meant to carry. In essence, this Marwanid building included a visual vocabulary whose symbolism appears to have been very short-lived. The images were not repeated in any significant way in other buildings or commented upon in later texts. The second most obvious visual element in the Dome of the Rock is a series of neutral designs, such as geometric patterns, which appear to be purely decorative. Finally, there are the inscriptions that were placed “just below a cornice that supports the ceiling on either side of the octagonal arcade.”

The use of long inscriptions in Arabic on this building signaled a major shift for some Muslims as to what constituted an “Islamic” symbol, in addition to being a means of transmitting messages. There was a long history in the eastern Mediterranean of religious communities using inscriptions written in an alphabet unique to their particular group: they were a way to “sign the community” and were “most frequently placed within the roofed enclosure, on walls, primarily within a position bordering mural representations which were significantly larger in scale.” The placement of these inscriptions in the outer and inner arcade below the ceiling may not have been an innovation but an adoption of a tradition long practiced by Christian and Jewish communities in the region. On the other hand, the...
appearance of an extensive text in Arabic marks a significant break from the first seven decades of Muslim rule, when public inscriptions in Arabic were relatively rare and brief, based upon the existing archaeological remains, material evidence including coinage, and textual references.

Additional observations are in order before analyzing the inscriptions as “affirmations of faith.” The extensive use of inscriptions in Arabic signals that a growing number of individuals recognized the script and associated it with Islam. Since the texts lack both the vowels and the dots needed to indicate certain consonants, they must have served as a mnemonic device for the growing number of Muslims who had memorized pious phrases and the Qurʾan. The incorporation of specific Qurʾanic verses also implies that there were enough individuals who knew them to make their inclusion comprehensible. Finally, the texts aided Muslims by reinforcing what they should believe and how that belief differed from Christianity.

The inscriptions in the outer arcade of the Dome of the Rock can be divided into six segments separated by rosettes, the wording in five of which closely parallels one another. They all begin with the full basmalah: “In the name of God, the Magnificent, the Merciful” (basm Allāh al-raḥmān al-raḥim). The sixth segment is a dedicatory statement, which does not begin with the basmalah and originally referred to ʿAbd al-Malik as patron of the building; it is dated A.H. 72. A visitor who viewed the texts in the outer arcade could have read one segment, quickly recognized that the basmalah was repeated in the next segment, which introduced a text similar to the one just read, and understood that he/she was supposed to move into the interior. In contrast, if the same visitor looked at the inscription in the inner arcade, he/she would discover that the basmalah appears only once and introduces a continuous text, which can only be read by moving in a counterclockwise direction. In this sense, the text aids the visitor in determining in which direction the outcropping in the center of the building should be circumambulated.

Taken together, the parallel texts in the outer arcade create what I label the Jerusalem “affirmation of faith.” All five inscriptions begin with the full basmalah, followed by the phrase lā ilāha illā Allāh wāḥdahu (there is no god except God, alone). Four of them continue with lā sharika lahu (He has no partner). With its implied rejection of the concept of the Trinity, this brief phrase highlighted a fundamental difference between the ruling Muslim elite and the majority of Syria’s population, which was Christian. In two segments, the phrase lā sharika lahu is immediately followed by the words Muhammad rasūl Allāh, while in the other three segments that began with the basmalah the phrase Muhammad rasūl Allāh is separated from lā sharika lahu by additional pious phrases and/or Qurʾanic verses. Therefore, I am defining the Jerusalem “affirmation of faith” as bism Allāh al-raḥmān al-raḥim lā ilāha illā Allāh wāḥdahu lā sharika lahu Muhammad rasūl Allāh (In the name of God the Magnificent, the Merciful, there is no god except God, alone, He has no partner, Muhammad is the Prophet of God).31

A second source for reconstructing the Jerusalem “affirmation of faith” is derived from an examination of the inscriptions on a series of road markers or milestones associated with the major road-building program of ʿAbd al-Malik (fig. 7). The Marwanid caliph undertook to connect Jerusalem with his capital of Damascus as well as to create another road from the Palestinian coast to Jerusalem. The primary evidence for these building activities comes in the form of a series of inscribed slabs of basalt stone, which served as milestones that record some, if not all, of the following: the distance from Jerusalem, the type of work on the road, the name of the person in charge of the project, the caliph, and a date. So far, eight milestones of what must have been many more have been discovered, with dates ranging from Muharram 73 (May–June 692) to Shaʿban 85 (August–September 704).32

Almost every one of the milestones begins with the Jerusalem “affirmation of faith,” that is, exactly the same full formula found on the outer arcades of the Dome of the Rock. The repetitive data on the milestones indicate that a formula had been established and, although the date on each milestone would change, the basic inscriptions did not. The earliest date for the Jerusalem “affirmation of faith,” using the evidence from the milestones, is early A.H. 73, although the discovery of new milestones could push the date earlier. The dating
of the Dome of the Rock is debated by scholars, but whether one argues that the building was begun or completed in A.H. 72, that is still the latest date in which the inscriptions could have been planned.\textsuperscript{33}

One other piece of contemporary evidence, derived from an Egyptian tombstone dated to 14 Dhu 'l-Qa'da 71 (21 April 691) and dedicated to 'Abbasa, the daughter of Jurayj,\textsuperscript{34} indicates that another version of the “affirmation of faith” circulated in Egypt. The first inscribed line contains the full basmala but is separated from the rest of the “affirmation of faith” by nine lines of text, so it is not clear whether the basmala was considered part of the Egyptian “affirmation of faith.” The last three lines read: “There is no god but Allah alone, He has no companion, Muhammad is the messenger of Allah, may Allah bless him and give him peace. Has ordered the repair of the road and the construction of the milestones the servant of Allah, 'Abd al-Malik, the Commander of the Faithful. May Allah’s mercy be on him. From Ilīyā to this milestone (there are) seven miles.”

To put it another way, while all the versions emphasize God’s unity and Muhammad’s mission, there is nothing specifically anti-Trinitarian about the Eastern text. This is not surprising, since Christians were only one of a number of religious populations in Iraq and Iran and there was no reason for anyone ruling the eastern lands where Arab-Sasanian coinage was struck to single them out.\textsuperscript{35} With the all-epigraphic issues, a fourth version of the Muslim “affirmation of faith” will be documented.

\textbf{‘ABD AL-MALIK’S COINAGE, A.H. 72–77}

Although 'Abd al-Malik received the oath of allegiance in A.H. 64 (683) and virtually all future historians date his caliphate from that year, it was not until A.H. 72 that he was able to consolidate his military control over a significant portion of the central Islamic lands.\textsuperscript{37} Therefore, we may say that for the years 64 to 73 (683 to 692), Abdullah ibn al-Zubayr was caliph, in that he was recognized in more lands and controlled the holy cities of Mecca and Medina.\textsuperscript{36} There is also a lack of architectural and numismatic data supporting 'Abd al-Malik’s claims to the caliphate before A.H. 72. Obviously, the earlier one dates the initial building of the Dome of the Rock, the earlier one can argue that 'Abd al-Malik was using it and associated buildings as a sign of sovereignty.

In addition, Syria and Egypt had been part of a Byzantine monetary world in which imperial gold...
circulated for centuries alongside locally manufactured copper. Both coinages carried Christian and imperial images and messages. As noted above, Mu’awiya probably experimented with striking a gold coinage based upon a Byzantine model, but why did ‘Abd al-Malik not have gold or silver coins struck earlier than A.H. 72?

If ‘Abd al-Malik could afford to build the Dome of the Rock, for which he used seven years’ worth of Egypt’s taxes, then acquiring gold for coinage could not have been a problem. Lacking specialists who could cut dies and strike coins was also not insurmountable since, with enough money, die cutters and mint masters could always have been hired. My own guess is that only with the defeat of Abdullah ibn al-Zubayr’s brother Mus‘ab ibn al-Zubayr in Iraq at the end of a.H. 71 (691) was ‘Abd al-Malik willing to use gold and silver coinage as a sign of his claims to the caliphate and the effective end to the first (Zubayrid) challenge to his caliphal authority. The transferring of Zubayrid die makers and mint employees only made the task that much easier.

In the years following the defeat of Zubayrid forces, the Marwanids would face a wide range of new challenges and ‘Abd al-Malik would not be the only political leader who claimed the title of amir al-mu’minin. While opposition to the Marwanids took a variety of political and religious forms, the most important of the latter, particularly in Iraq and parts of western Iran, have been labeled Kharijite and it is the claims of the leaders of these movements that will be critical for understanding most of ‘Abd al-Malik’s coinage from A.H. 72 through 77 as a form of propaganda. Although the third challenge to Marwanid rule, the Byzantine Empire, was always a factor throughout ‘Abd al-Malik’s reign, it only became the highest priority after he and his governor al-Hajjaj neutralized Kharijite rebellions in Iraq in late 77. At that point the all-epigraphic issues of A.H. 77 and 78 reflect how ‘Abd al-Malik’s coinage became a form of propaganda directed against Byzantium.

Muslim solidi and drachms, that is, Arab-Byzantine gold and Arab-Sasanian silver, minted in Syria and Iraq during the caliphate of ‘Abd al-Malik between A.H. 72 and 77, offer a rich range of new images and inscriptions. While the numerous and excellent scholarly contributions of others, particularly the introduction to the Sylloge by Album and Goodwin and the articles by Treadwell, have treated the coinage year by year or mint by mint, this article will focus on a different aspect, seeking to identify what was carried forward from earlier coinage and what was new. In particular, only the first appearance of a new element on the coinage will be analyzed, on the assumption that whatever the context was for the original innovation, it may not have been valid for subsequent years.

Table 1, “Innovations on ‘Abd al-Malik’s Coinage,” summarizes the images and inscriptions in Arabic that appeared on ‘Abd al-Malik’s coinage before the all-epigraphic issues. The metal is either gold (AV) or silver (AR). The words “Eastern” or “Jerusalem” under “affirmation of faith” refer to how the phrase was defined above, while the term “short” means that only the phrase bism Allāh Muḥammad rasūl Allāh (بسم الله مُحمَّد رَسُول اللَّه) was inscribed. The words in bold indicate when an innovation was introduced. Again, although a number of innovations were carried forward on the coinage, only the first appearance is considered critical for this study.

Since Syria was a monetary zone in which gold was the primary precious metal used, it is most likely that the first coins that ‘Abd al-Malik ordered struck were in gold. They were probably minted in Damascus in A.H. 72, although these pieces lack both the name of a mint and a date (fig. 8). These Arab-Byzantine solidi imitate the widely circulating Byzantine solidi, which were illustrated in figure 1 above and included the images of Heraclius (r. 610–14) and his two sons, Heraclius Constantine and Heraclonas, on the obverse. The reverse featured a cross on a four-stepped platform along with other Christian symbols, the mint name Constantinople, in an abbreviated form across the bottom to be read from right to left, and, in the rest of the margin, an imperial title, written in Greek in a clockwise fashion.

The obverse of ‘Abd al-Malik’s new gold coins imitates that of the Byzantine original but without any Christian symbols, while on the reverse the cross on a platform is transformed into a pole with a small globe at the top. The most significant difference between these Marwanid Arab-Byzantine gold coins and those attributed to Mu’awiya discussed above (fig. 4) is that on ‘Abd
al-Malik’s pieces there is an inscription in Arabic in the reverse margin, written in a clockwise direction, which did not appear on the earlier examples of these Arab-Byzantine solidi. It is the Eastern form of the “affirmation of faith.” Here, the inscription was placed on the reverse, while in Arab-Sasanian silver coins inscriptions in Arabic appeared on the obverse. The Arabic inscription on this gold issue is moved backwards so that it now begins at twelve o’clock rather than in the second quadrant, as in earlier Arab-Sasanian issues. This was done to accommodate the phrase Muhammad rasūl Allāh, which is found in the margin at the end of the “affirmation of faith.” The earlier tradition, dating from the first Arab-Sasanian coins, of writing Arabic in the margin clockwise continued on these gold issues. The existence of this new coin type also demonstrates that ‘Abd al-Malik was asserting his right to mint gold coins.

The first ‘Abd al-Malik drachms from Syria were minted in Damascus and Hims and are dated to a.h. 72 (fig. 9). They are clearly imitations of circulating Arab-Sasanian drachms, with their images of Khusraw on the obverse and of the fire altar with attendants on the reverse.

The mint and date appear in Arabic in the center of the reverse surrounding the attendants, although the significance of this innovation is not clear. Another difference is that only bism Allāh Muhammad rasūl Allāh—that is, a shortened form of the “affirmation of faith” (بسم الله محمد رسول الله)—is inscribed on the obverse margin. It is theoretically possible that the die makers
who came from Iraq convinced the caliphal court that the inclusion of \( \text{لا} \text{ إله إلا} \text{ الله} \) (There is no god except God) was too close to the Kharijite formula \( \text{لا} \text{ حكم إلا} \text{ لله} \) (There is no judgment except God’s), particularly given the latter phrase’s association with the Kharijite leader Qatari b. al-Fuja’ (d. a.h. 78 [697]), who will be mentioned below (fig. 10). However, this is only speculation.

By a.h. 73, the Syrian drachms, which were only minted in Damascus from this date, contained the full Eastern form of the “affirmation of faith.” It was inscribed in a clockwise direction on the obverse margin, as had been done the previous year on the reverse of the new-style gold coins (fig. 11).

Again, the inclusion of this particular wording and the direction in which it was inscribed may have carried no particular meaning other than that this was the way it had been done on earlier Arab-Sasanian coins.

Contemporary coins from Basra and the Kufan mint of Aqula are different in that they include on the reverse an orans figure, that is, an image of a person at prayer with arms outstretched (fig. 12). These were struck by order of ‘Abd al-Malik’s brother Bishr b. Marwan, who served as governor. Treadwell makes the critical observation that

[t]he literary record passes over the Orans drachm, as well as the other figural types of this experimental period, in complete silence. The interpretation of the meaning of the image therefore has to rely primarily on numismatic data, beginning with the image itself.42

Treadwell discusses this series in great detail, pointing out the possible symbolic meaning of the standing figure, which may have represented the governor himself, since he put his name under the image in the first series.43 It is also possible that the creation of such a figure and of the
specific obverse marginal legend to be discussed below were done to counter Kharijite claims to leadership of the Muslim community.

COINAGE AND THE KHARIJITE CHALLENGE

In addition to the struggle between Ibn al-Zubayr and ‘Abd al-Malik for the caliphate, supporters of both men had to face increasingly aggressive Muslim movements labeled Kharijite. These religious/military groups controlled parts of the Arabian Peninsula, Iraq, and Iran, particularly around Kirman. By the end of a.h. 69 (689), the leader of the Azraqi Kharijites, the more radical and militarily successful movement, was Qatari ibn al-Fuja’a, who claimed the title caliph. With ‘Abd al-Malik’s defeat of the Zubayrids in Iraq in a.h. 72, responsibility for defending his lands against the military campaigns and propaganda of the Azraqis fell to his governors, including his brother Bishr ibn Marwan, who had the orans-type coins struck as propaganda to counter Qatari’s claims to leadership in the Muslim community. The orans image relates to the right to lead prayers and offer the khutba, which are public signs of legitimacy. In addition, Bishr ibn Marwan’s issues for Kufa (‘Aquila) in a.h. 74 and 75 (693–94) and for Basra in 73, 74, and 75 only include a “short” version of the “affirmation of faith.” For these specific issues, the obverse marginal legend contains only the phrase bism Allāh Muḥammad rasūl Allāh. As noted above, the missing words lā ilāha illā Allāh may have been too close to the Kharijite formula lā ʾḥukm illā li-llāh and easily confused in the small space allocated to it on the margin of the obverse. Following the death of Bishr ibn Marwan in a.h. 75, ‘Abd al-Malik appointed al-Hajjaj governor of Iraq. Al-Hajjaj made defeat of Qatari and the Azraqi forces a high priority and supported his generals with manpower and money. The Azraqi threat to Iraq ended in a.h. 76 (695), although Qatari himself was not killed until a.h. 78, and then by other Kharijites.

Returning to the coinage of the Marwanid capital, another new-style gold coin was first minted in a.h. 74 (fig. 13). While ‘Abd al-Malik’s first gold coins of a.h. 72, even with their full marginal reverse legends in Arabic, imitated Byzantine issues in circulation at that time, the new gold issues from a.h. 74 and carried into a.h. 77 included the image of the caliph himself. He is dressed in Arab garb and carries a sword, with its implied message of military power, to enforce his political position. If this politico-military message was aimed at specific enemies, it is not clear from either the image or the limited text.

In a.h. 75, we observe a change in the reverse of the Arab-Sasanian drachms of Damascus: the earlier Sasanian reverse image of the fire altar with attendants was replaced by that of the armed standing caliph, with inscriptions on either side (fig. 14). Before analyzing the new elements, it is appropriate to look at military and religious developments taking place in the east at this time. The Kharijites under Qatari, who claimed to be caliph, still represented a military and ideological challenge until their defeat in a.h. 76, but then another
Kharijite movement arose, this time in northern Iraq, under the leadership of Salih ibn Musarrih (d. a.H. 76 [695]), who also claimed the title of caliph. Al-Hajjaj was able to gather enough forces to defeat this movement, called the Sufriyya, as well as kill its leader later in a.H. 76. At this point, it may have appeared to ʿAbd al-Malik, and possibly al-Hajjaj, that serious threats to Marwanid control of Iraq had been eliminated. If this was the case, then new political and military priorities could be set and coin types struck to reflect these new directions. However, military priorities and an accompanying new coinage would have to wait, as another Kharijite threat to Marwanid rule in Iraq arose once more in a.H. 76 (696).

The remnants of the Sufriyya Kharijite forces gathered under the leadership of Shabib ibn Yazid al-Shaybani (d. a.H. 77 [697]), who also claimed the title of caliph. His campaigns were more of a guerilla operation involving a few hundred men, but they took advantage of every opportunity to cause chaos, particularly when al-Hajjaj was out of Iraq, and managed to occupy Kufa twice. Al-Hajjaj found it necessary to call upon additional troops from Syria to finally put an end to the revolt of Shabib, a mission that was significantly expedited by Shabib’s death when he fell off a bridge and drowned near the end of a.H. 77.49 At that point, a new coinage reflecting a new set of priorities was at last issued, but it is first necessary to return to the innovations on the silver coinage of Damascus struck in a.H. 75 and 76 and continued into 77.

The new Damascus silver coinage for the year a.H. 75 has a reverse very different from any that had appeared earlier (fig. 14): its dominant image is that of the armed caliph, which had earlier been found on the obverse of ʿAbd al-Malik’s solidi. Secondly, on either side of the reverse image there are inscriptions in Arabic: one reads amīr al-muʾminīn and the other khalīfat Allāh (God’s caliph). The appearance of these two titles on the coinage was a direct result of the Kharijite challenge to Marwanid legitimacy rather than a sudden desire on the part of the Marwanids to assert titles they may have claimed before and after these coins were issued. “The fact it [the title khalīfat Allāh] disappeared from the coinage does not mean that ʿAbd al-Malik repented of having called himself khalīfat Allāh, but that he changed his mind regarding the kind of propaganda he wished the coinage to make.”50

On the other hand, the use of the armed standing caliph on the reverse of the a.H. 75 issue created an unusual situation in that both sides of the coins now had images and the caliphal one was smaller than that of the Sasanian monarch, which had appeared on the obverse of every new Arab-Sasanian drachm. Therefore, a new portrait of the caliph—now in a bust form rather than standing, but still armed—appeared on the silver coinage of Damascus beginning in a.H. 76, this time on the obverse, replacing the Sasanian monarch (fig. 15).51

The new reverse reflects an even more radical change in images. In a classic, highly influential study, Miles described the reverse images as depicting a mihrab.
and ʿanaza (a staff or spear). A half century later, Treadwell’s careful scholarship offered a new and more convincing argument that the image is that of a spear under a sacrum, which had developed out of the Christian sacrum (a protective covering that shelters a cross), with the spear now standing where the cross had in Christian iconography. The inscriptions are also critical in understanding why this coin type might have been issued. Once again, the claims of ʿAbd al-Malik to be amīr al-muʿminīn and khalīfa Allāh are inscribed on the reverse on either side of the sacrum, within which, on the left side of the spear, are the three Arabic letters nūn, sād, and rā’ and, on the right, the word Allāh. Therefore, the inscription inside the sacrum can be read as naṣr Allāh (Victory of God) or naṣara Allāh (May God grant victory). These texts are not aimed at Byzantine or even Christian subjects of Marwanid rule but are meant to counter Kharijite claims. The spear and sacrum serve as visual symbols, reinforcing ʿAbd al-Malik’s message of the superiority of his assertion of authority over the Muslim community.

In summary, for most of the years between a.h. 72 and 77, ʿAbd al-Malik’s caliphate focused on a series of Kharijite revolts threatening Iraq and challenging Marwanid legitimacy. This challenge had to be met on an ideological as well as a military level. Qatari, Salih, and Shabib all claimed to be caliph and leader of the community (amīr al-muʿminīn). When we review the preepigraphic coinage of ʿAbd al-Malik from Syria and Iraq for these same years, in which the main focus of military and ideological attention was the Kharijites, eliminating those images and inscriptions that were carried forward from an earlier coinage, a different interpretation of the new images and inscriptions emerges from that found in other modern studies. The unifying theme is that the new images and texts were aimed to counter Kharijite claims to the caliphate. The caliph with sword and even the spear under the sacrum represent the successful and rightful military leader of the community, while the caliph or his representative giving the Friday sermon as the khaṭīb (preacher) in the orans-style issues proclaims his legitimate right to lead the community in prayer. The references to him as God’s caliph (khalīfat Allāh) and commander of the faithful (amīr al-muʿminīn) are a specific response to Kharijite claims to the caliphate. Finally, the phrase naṣr Allāh (meaning either “victory with God” or “May God grant victory”) challenges the Kharijites’ claims that they were favored by God. It is also possible that those numismatic issues, which only have in their obverse margin the phrase “In the name of God, Muhammad is the Prophet of God” (bism Allāh Muḥammad rasūl Allāh) and lack the words “There is no god except God, alone” (lā ilāha illā Allāh wahuḍātu), dropped this part of the Eastern “affirmation of faith” because it was too easy to mistake it, in the small space allocated, for the Kharijite call “There is no judgment except God’s” (lā ḥukm illā li-llāh).

Very little has been written on the monetary role of ʿAbd al-Malik’s solidi and drachms because there are relatively so few coins and the historical accounts offer no specific data on economic developments in these years. The surviving solidi weigh about 4.37 grams and fall into the same range as those Byzantine soli- 
di by number or by weight there was no advantage or disadvantage in using ʿAbd al-Malik’s Arab-Byzantine gold issues instead of the Byzantine ones. While there were visual clues indicating that ʿAbd al-Malik’s solidi were “different” from Byzantine gold coins, there was no obvious monetary or economic reason to prefer one over the other. The silver issues from Syria and Iraq associated with ʿAbd al-Malik’s reign from a.h. 72 to 77 fall into the same category. Their size was the same as thousands of Arab-Sasanian and Sasanian silver coins minted earlier and their range of weights was as wide as the earlier silver ones, meaning that they had to be exchanged by weight rather than by number. Therefore, there were no market-related reasons to switch to ʿAbd al-Malik’s drachms or solidi versus using earlier circulating pieces.

In most societies where coinage was common, new coin types continued to carry their “new” images, even when those elements were no longer meaningful to those who used them, because the monetary function of currency has a much longer lifespan than the propaganda purposes of the images. In addition, going back to the earliest days of the Rashidun, the size, weight, and degree of fineness of the gold and silver issues were set by market expectations based upon pre-Islamic models. Finally, during this era, there is no written
record of any opposition to the inclusion of human images on the coinage issued. Arguing from the absence of evidence is never safe, but for seven decades Muslims used gold and silver coins with images and there is every reason to assume that this is what Muslims and non-Muslims living under Muslim rule assumed coins should look like.

One important numismatic development that took place from a.h. 72 into 77 was the increasing use of Arabic inscriptions. From their first appearance during the caliphate of ʿUthman as a tiny marker in one quadrant of the obverse of Sasanian-style issues, inscriptions in Arabic became a major marker of Muslim coinage during the reign of ʿAbd al-Malik. Long inscriptions in Arabic appeared on both the obverse and reverse of gold coins and the reverse of Marwanid silver ones minted in Syria and Iraq. However, none of these inscriptions was Qurʾanic.

MUSLIM–BYZANTINE RELATIONS

Late in a.h. 77, a new style of all-epigraphic coinage first appeared. Only gold coins are known for that year. Beginning in a.h. 78, new-style silver pieces were produced in only a few mints but by a.h. 79 almost fifty mints were striking the new-style silver coinage, although a few Arab-Sasanian drachms continued to be minted in eastern parts of the empire. Upon examining the new-style gold and silver coins of a.h. 77 and 78, it immediately becomes apparent that both types included the same basic information, although the full texts could not be inscribed on gold coins because their flans were too small. Therefore, the new gold and silver coins of a.h. 77 and 78 will be treated below as reflecting a unified approach.

Before offering a detailed analysis of the new-style coins, which are labeled dinars (gold) and dirhams (silver) in contrast to the earlier solidi and drachms, a brief overview of Muslim-Byzantine relations is necessary.54 The caliph Muʿawiyah, facing serious internal problems, agreed to a peace with the Byzantine emperor Constantine IV (r. 668–85) according to which the Muslim ruler was obligated to pay a large tribute to Constantinople. During the early years of the reign of ʿAbd al-Malik, Emperor Justinian II (r. 685–95), supported by his general Leontios, undertook military operations against the Marwanids, taking advantage of ʿAbd al-Malik’s own struggles against the Zubayrids. ʿAbd al-Malik had to sue for peace and agreed to renew the earlier agreement with a slightly increased tribute. According to most accounts, the Muslims were now expected to pay a weekly tribute of 1,000 gold coins, one horse, and one slave.

Sometime around a.h. 72 (692), Justinian II instigated a war against ʿAbd al-Malik, whom he felt to be in a weak position. Later in 692 or in 693, Muslim troops responded by attacking Byzantium on two fronts, North Africa and Anatolia. The Marwanid armies were successful at the Battle of Sebastopolis in 693, effectively ending the payment of the Marwanid tribute to the Byzantines. Justinian II blamed Leontios for the Byzantine defeat and had him arrested and imprisoned.

Marwanid armies continued to push against Byzantine positions, particularly in North Africa. Justinian II, fearful of losing Carthage in Tunisia, released Leontios from prison in 695 and called upon him to lead a new army, this time in North Africa, against the Marwanid forces. Leontios promptly seized power in Constantinople, arrested Justinian, had his nose cut off as a sign that he was no longer qualified to be emperor, and sent him into exile in the Crimea. Leontios (r. 695–98) did not undertake military campaigns against the Muslims and Carthage fell. Parties in Constantinople wanting a more aggressive foreign policy reacted by overthrowing Leontios and making Tiberius II (r. 698–705) emperor. However, he, too, was not interested in carrying out military operations against the Marwanids.

ʿAbd al-Malik may have hoped to attack the Byzantines early in his caliphate but his military struggles against the Zubayrids, the Kharijites, and other groups prevented him from committing his best Syrian forces to the Anatolian and North African fronts. It may even be possible that in a.h. 76 (696), following the defeat of the Kharijites Qatari and Salih, ʿAbd al-Malik was in a position to make the Byzantine front his highest priority; indeed, this was a policy that had been inaugurated by the first Umayyad caliph, Muʿawiyah. Consequently, the decision to strike a new-style coinage containing anti-Byzantium propaganda may have been planned in a.h. 76. The failure of al-Hajjaj to crush the revolt of the Kharijite Shabib ibn Yazid that year may then have
delayed the actual striking of the new coinage until the end of a.h. 77.

This last observation is important because there is a medieval Muslim textual tradition that dates the introduction of the all-epigraphic coinage to the year a.h. 76.55 Modern historians, particularly those who include numismatic data in their studies, have ignored the date in the medieval texts because they give greater weight to the date on the earliest coins, that is, a.h. 77. The simplest explanation is that both sources are correct and that a military problem that went on longer than either the caliph or his governor al-Hajjaj anticipated resulted in the new-style issues appearing later than originally planned, in a.h. 77. It is also probable, but again without supporting textual data, that the actual striking of dinars began so late in a.h. 77 (fig. 16) that there was no time to strike silver pieces and so the new-style silver coins did not appear until a.h. 78.

ʿABD AL-MALIK’S ALL-EPIGRAPHIC COINAGE, a.h. 77–78

Virtually everything about the all-epigraphic coins was new, except for the use of the Kufic script and one marginal inscription. Neither the dinars nor dirhams included any of the images associated with the previous coinage struck by ʿAbd al-Malik. Other than a series of small circles called annulets placed on the outer circles of each face of the dirham, there were no geometric or design elements that carried meaning.56 The lack of any images and the use of low-relief inscriptions preclude a definite determination of the obverse and reverse sides of this new coinage. For the purposes of this study, the side with references to God’s oneness will be defined as the obverse (see table 2).

Most scholars writing on this new all-epigraphic coinage refer to the appearance of the Muslim shahāda, but as I shall detail below, while major portions of what constituted the Eastern and Jerusalem forms of the “affirmation of faith” were engraved on the coinage, their arrangement on the dinars and dirhams differed in significant ways from any of the previous “affirmations of faith,” resulting in the creation of a “Syrian” version.

On neither the dirham nor the dinar does the center inscription, where the most important messages were placed, begin with bism Allāh, as found in the Eastern “affirmation of faith,” or the full basmala, as in the longer Jerusalem version. On the obverse center, the first two lines are: lā ilāha illâ Allāh wahdahu (there is no god except God, alone), as was found in the margins on almost all the earlier ʿAbd al-Malik gold and silver issues, where it followed, on the pre-77 coinage, the bism Allāh. But the third line is not Muhammad rasūl Allāh, as had appeared for six years on Marwanid gold and silver coins. Instead, what was inscribed was the phrase lā sharīka lahu. These words, which were associated with an anti-Trinitarian sentiment last recorded by ʿAbd al-Malik on the Dome of the Rock and on milestones from a.h. 72 (692), as well as on an Egyptian tombstone from the same period, were part of the Jerusalem “affirmation of faith.”

It would have been possible to include in the center field the phrase Muhammad rasūl Allāh, either by squeezing four lines into the center of the obverse or by writing the previous phrases in two lines and making the last line Muhammad rasūl Allāh. However, none of this was done. The central and most important message on the obverse was therefore that which emphasized God’s unity and rejected the concept of the Trinity through the inclusion of the phrase lā sharika lahu. But unlike the Dome of the Rock, or even milestones and tombstones, whose potential readership was limited to those who actually visited those sites where that phrase appeared, the messages on gold and silver coins were available to anyone who handled them and therefore, reached a wider audience. In my view, the religious message had an implicitly political aspect; that is, it was as
anti-Byzantine as it was anti-Trinitarian. The need to emphasize 'Abd al-Malik’s legitimacy against Zubayrid and Kharijite claims, which had both religious and political dimensions and had been the common theme on the earlier Marwanid gold and silver coinage, was no longer necessary.

The reverse center inscription hammers home the same anti-Trinitarian, anti-Byzantine message, but in an even more powerful manner. 'Abd al-Malik’s major innovation was to include Qur’anic verses on coinage for the first time. The inscription in the reverse center is from Sura 112, *al-Ikhlās* (Oneness), which had also been used in the outer arcade of the Dome of the Rock. The sura speaks of God’s unity and specifically rejects the concept of the Trinity. The fuller version of the sura is found on the all-epigraphic dirhams. The dinar was not big enough to include all of it; however, anyone who knew the Qur'an could complete that part of the text not found on the dinar. This was neither the only *āya* that rejects the Christian concept of the Trinity nor the only one that 'Abd al-Malik could have used, since he employed other Qur’anic verses in the arcades of the Dome of the Rock. The advantage of using Sura *al-Ikhlās* is that it is short, clear, and easily memorized. In fact, Sura *al-Ikhlās* is one of the first Qur’anic chapters that Muslims memorize, so even those with a limited knowledge of the Qur’an would have been familiar with this verse and could have completed it upon hearing or reading the first part.

In the arcades of the Dome of the Rock, 'Abd al-Malik used verses from eleven different suras. This means that by A.H. 72 at the latest the caliph assumed that a growing number of Muslims would know the Qur’an well enough that the appearance of specific verses or partial segments thereof would resonate with these viewers. For many, catching a few key words or a phrase in the inscription would be enough to fill in the rest of the text. 'Abd al-Malik’s inscriptions in the Dome of the Rock were aimed at an elite Muslim audience who had memorized the Qur’an and were confident in their knowledge of it. While the inscriptions in the outer and inner arcades stress slightly different elements of Islam’s understanding of Christianity, particularly the inner arcade’s continuous text, in which Jesus is recognized as a prophet, there are no conciliatory messages on the all-epigraphic coinage. The Qur’anic message in the center of the reverse of the coinage was reinforced by another Qur’anic *āya* that speaks of the Muslims’ triumph over
the mushrikūn, a term that will be discussed further below. Therefore, the use of Sura al-Ikhlās in a.h. 77 was more anti-Byzantine than when it was used in the Dome of the Rock in a.h. 72, due to different political and military conditions.

Turning to either side of the all-epigraphic coin, the holder of the coin might experience another shock reading the legend in the margin: the inscription was not written in a clockwise direction, as had been the case for virtually all marginal legends in Arabic since a.h. 20 (644), but had to be read counterclockwise. As noted above, this is the logical way in which a script that is read from right to left and begins at the top of a coin should be written, although it had not appeared in this fashion on any gold or silver Muslim coin up to that time. With the direction of the marginal inscription reversed, a potential reader could no longer assume that he knew what was inscribed based upon the conventions of earlier Muslim coinage. The viewer was forced to read it or have it explained to him if he wished to know what was inscribed.58

The obverse margin on the dinar (fig. 16) and the reverse margin on the dirham (table 2) begin with the phrase Muḥammad rasūl Allāh but then include a part of the Qur’an hitherto unknown in inscriptions. It is traditionally assigned to Sura 9:33 but is found two other verses in the Qur’an (48:28 and 61:9). It was therefore highly probable that one who knew the Qur’an would be familiar with the verse.59 After the reference to Muhammad’s prophethood on both the gold and silver coins, it continues: Arsalahu bi-l-hudā wa-dīn al-ḥaqq li-yuẓhirahu ‘alā ‘l-dīn kullihī (Who sent him [Muhammad] with guidance and the religion of truth so that he may proclaim it above all religions).

The Qur’anic verse is not complete on the gold issue because there was not enough room on the margin. Those who knew the Qur’an would be aware that the rest of the verse is wa-law kariha al-mushrikūn (even though the mushrikūn may detest it). Therefore, the fuller version of the Qur’anic āya, along with the reference to Muhammad’s Prophethood, is on the all-epigraphic dirham, which has a larger diameter and thus a circumference greater than that of the dinar, and reads: Muḥammad rasūl Allāh arsalahu bi-l-hudā wa-dīn al-ḥaqq li-yuẓhirahu ‘alā ‘l-dīn kullihī wa-law kariha al-mushrikūn (Muhammad is the Prophet of God, Who

sent him [Muhammad] with guidance and the religion of truth so that he may proclaim it above all religions, even though the mushrikūn may detest it.

Mohammad Rasul Allah arsalah al-mushrikūn (Muhammad sent the [prophet] to the mushrikūn). Virtually every modern English version of the Qur’an translates the Arabic term mushrikūn as “pagans” or “polytheists,” but in the context of this coin and the earlier use on the coinage of the root sh-r-k in the phrase lā sharika lahu, mushrikūn can only refer to Christians, whether they were living in Muslim or Byzantine lands.60 Therefore, ‘Abd al-Malik’s use of Sura 9:33 (or 48:28 or 61:9, which have the same wording) was not a whim but a deliberate choice meant to reinforce the messages in the center inscription.

The counterclockwise marginal inscription on the reverse of the dinar begins with bism Allāh and gives the hijra year in which the coin was struck, while the version on the dirham, with its additional space, includes in most cases the name of the mint as well as the date. This inscription was not new, as it had already appeared on the reverse margin of ‘Abd al-Malik’s pre-epigraphic coinage, but it was now written in a counterclockwise direction.

The dinars and dirhams treated above are regarded as reflecting a single policy pursued by ‘Abd al-Malik, his governor al-Hajjaj, and possibly others, with the earliest all-epigraphic dirhams dated to a.h. 78.61 A careful study of the dirhams for that year demonstrates that there were two major variations, whose differences depended on which side the marginal legends described above were placed.62 Beginning with the dirhams struck in a.h. 79 and in all later Umayyad dirhams, the marginal legends are laid out in the reverse position to that found on the dinars.

There is another implication of having the location of the marginal legends on the dirham the reverse of those on the dinar, namely, that one can not assume that the center and marginal texts are to be read as a single message. Both the earlier Jerusalem “affirmation of faith” as found in the Dome of the Rock and the Eastern version, which was used on coinage from a.h. 72 on, were changed. There is no bism Allāh in the beginning and the phrase Muḥammad rasūl Allāh is not connected to the rest of the words as a single text. If these separate phrases constituted a single “affirmation of faith,” it would be read as lā ilāha illā Allāh waḥdahu
lā sharīka lahu Muḥammad rasūl Allāh (There is no god except God, Alone, He has no partner, Muhammad is the Prophet of God [إِلاَّ إِنَّهُ الَّذِي وَلَدَ النَّارَ وَعَلَى الْجِبَالِ رَكَابُهُ (الله) *]). While most scholars refer to this combination of separate phrases as constituting the Muslim *shahāda*, they have been labeled for this essay the Syrian “affirmation of faith.” Therefore, it is not clear from the existing numismatic and architectural data which phrases constituted the *shahāda* in the 70s.

ʿAbd al-Malik changed the nature of the messages on the new Marwanid coinage in many ways. No longer was the caliph the focus in script or figure. He disappeared in both title and image. Neither his power as ruler nor his role as God’s agent appeared on the new coinage. In addition, the inscriptions in which Jesus is recognized as a prophet, as in the interior arcade of the Dome of the Rock, were gone. Even the role of Muhammad as Prophet was marginalized; it would not be inscribed in the center of Muslim coinage until the Abbasids came to power, when it was part of their ideological position to identify themselves as descendants of the family of the Prophet, the *ahl al-bayt*. For ʿAbd al-Malik, the Kharijite rivals were also no longer the focus of these numismatic messages.

I have argued that new developments on the coinage occurred within specific religious, political, and military contexts, moving from competition with the Kharijites to competition with Byzantium, and were not part of a search for a universal Islamic identity. The all-epigraphic coins asserted in words the superiority of Islam over Christianity, which in political terms meant Byzantium. But in making this point, there was nothing obvious that happened in A.H. 77 or possibly 78 that would hint at the subsequent transformation of this new-style coinage into the iconic coinage it would become. In theory, the new all-epigraphic coinage could have gone the way of previous coin types from the Rashidun to the Marwanid eras that, issued under specific political conditions, continued to be minted even after their original meanings had been forgotten—because that is the conservative nature of currency. They would then be replaced by new coin types intended to meet new political, military, or religious conditions. In the case of the new coinage of A.H. 77 and 78, this did not happen and the reason why can be found in a study of the methodology of the gold coinage.

**GRESHAM’S LAW AND THE TRIUMPH OF THE DINAR**

The triumph of the all-epigraphic coinage is an epic turning point in monetary history, as this new style would have a direct impact on the coins issued by Muslim rulers for over 1,300 years, during which time the use of Arabic script and the absence of human and most other images would become characteristic of numismatic material from Spain and Morocco to Indonesia. The appearance of the script would be identified with a religion and designated as Islamic, while virtually all other coinages are known by geographic labels such as Chinese, English, and so forth. The analysis that follows offers a monetary reason for the immediate success of the all-epigraphic dinars and then postulates a theory as to how the coinage became “Islamic,” whereas the previous coinage issued by Muslims was not. The existing narrative sources do not answer these questions.

“Bad money drives out good money” is a popular saying among monetary historians. This is known as Gresham’s Law, although there is no evidence that Sir Thomas Gresham (d. 1579) had anything to do with it. However, the actual “law” is more complex. It states that “bad” money drives out “good” money only if two conditions are met: first, the “bad” money must be overvalued in relation to the “good” money and, second, there must be enough “bad” money in circulation to make a significant difference in the market.

By applying Gresham’s Law to the case of ʿAbd al-Malik’s new all-epigraphic dinars, we see that this gold coinage was both overvalued in relation to the earlier gold coinages and appears to have been struck in large enough quantities so that it acted like “bad currency,” effectively driving the “good” Byzantine and Arab-Byzantine solidi from the market. Gresham’s Law did not apply in the case of the new silver coinage because the all-epigraphic dirhams were not overvalued in relation to the earlier Sasanian and Arab-Sasanian drachms. My interpretation is based solely on numismatic evidence, specifically coin hoards.

In using this sort of evidence, the key is in determining which coins were saved together, because it implies that the coins in the hoard were interchangeable as far as their use in the market was concerned. In the case of silver issues, Sasanian drachms,
Arab-Sasanian drachms, and all-epigraphic dirhams are found together. Differentiating Sasanian drachms from Arab-Sasanian drachms can be difficult because one has to look carefully for the Arabic in the obverse margin. However, separating drachms from dirhams is easy, since they are visually so distinct. This means that if all three types of silver coins were saved together, then they were exchanged as though they were of equal value.

A study of the weights of Sasanian and Arab-Sasanian drachms demonstrates that they were never minted according to a strict weight standard and always had to be traded by weight rather than by number. Existing specimens range from slightly under 3 grams to slightly over 4 grams. Muslim historians write that ʿAbd al-Malik’s new dirhams were to weigh seven-tenths of the new dinar weight standard, that is, seven-tenths of the Syrian mithqal (a unit of mass) standard of 4.25 grams. In theory, this meant that the new dirham was to weigh 2.975 grams. Most did not, which suggests that it made no difference in the market if one used Sasanian drachms, Arab-Sasanian drachms, or all-epigraphic dirhams when paying in silver, since they were all treated as stamped silver bullion with the same degree of fineness. Evidence for this comes from hoards of silver coins dated to after a.h. 78, including an Abbasid hoard of silver coins dated to a.h. 200 (815), that is, over 120 years after the introduction of the new-style silver issues, which still included a significant number of Sasanian and Arab-Sasanian coins.

We should also consider that the monetary zone in which the silver coins circulated was enormous, covering Syria, Iraq, Iran, and parts of Central Asia. To have expected the markets in all these lands, where the power of the ruling elite was limited and the bureaucracy supporting it small, to suddenly and immediately change to using only the new-all-epigraphic style coins would have been unrealistic, although beginning in a.h. 79 almost fifty Muslim mints in the east began striking the new-style dirhams. More importantly, there was no monetary advantage in having the old-style drachms melted and restruck as new-style dirhams, which would have also involved a small fee. Neither the old Sasanian/Arab-Sasanian drachms nor the all-epigraphic dirhams were better or worse (“good” versus “bad”) than the other in terms of exchange rates. Therefore, Gresham’s Law does not apply to the history of the new dirham.

A study of hoards of early Muslim gold coins reflects a different pattern. Both the new-style and older circulating gold coins appear to have been of the same high degree of fineness, but Byzantine and Arab-Byzantine gold solidi were not mixed in hoards with the new-style dinars. If the gold coins were exchanged by weight, then it would have made no difference which style coin was thrown on the scale. But since the solidi and dinars were saved separately and not mixed, this meant that they were not treated as struck gold bullion but were traded by number. Under these conditions, if a lighter gold coin was treated as equal in value to a heavier one, then the lighter one was overvalued, or “bad,” in relation to the heavier one. This is precisely what happened in the case of the all-epigraphic dinars.

When ʿAbd al-Malik ordered the minting of his all-epigraphic dinars in a.h. 77, he made one other fundamental change, which was first analyzed a half century ago by Grierson. The new dinars were based on a weight standard of 4.25 grams. Grierson noted that 4.25 grams was the equivalent of 20 carats of a Syrian weight standard, making it an easily divisible number. In contrast, circulating Byzantine solidi and Arab-Byzantine solidi weighed around 4.37 or 4.38 grams, based upon an earlier Greek mithqal weight standard of 4.55 grams. The surviving textual tradition does not tell us why ʿAbd al-Malik authorized this change in the weight standard for gold coins. One reason could be that it fit into the existing weight standards of the Bilād al-Shām, the heart of his empire, but it is also possible that his goal had more to do with making his gold resources go further. We normally call this act of deliberately lowering the weight standard debasing the coinage. It allows the ruler to produce more coins from the same amount of metal as previously, while claiming that the value of the new, lighter coin is equal to that of the earlier, heavier issue.

By paying by number, rather than weight, with his new coinage, ʿAbd al-Malik made a profit of between three and seven per cent, if calculated against the weight of Arab-Byzantine and Byzantine gold coins found in Syria (4.38 grams) or the theoretical weight of a full Byzantine solidi based on a Byzantine standard
(4.55 grams). Once merchants, administrators, and military leaders were paid by number in the new, “lighter” money, they would want the lighter coins to pay their bills, assuming again that they paid by number and not by weight. To do so, they had to either use the gold dinars circulated by ‘Abd al-Malik or go to the mint, have their old gold coins weighed as if they were bullion, and receive in return new-style coins. This way, they would get more new dinars than the number of older solidi they handed in to be weighed.

The demand by the caliph and then everyone else for the new light-weight dinars would have resulted in the market being flooded with the all-epigraphic coins. This is what I speculate happened, although the only evidence for the number of coins in circulation is that the number of different dies used to strike the new all-epigraphic dinars increased in comparison with the number used to mint the older Arab-Byzantine pieces. The number of dies does not prove that the actual number of coins in circulation increased, but in relative terms it is highly probable. Therefore, both conditions for Gresham’s Law to be operative were in place—one coin was overvalued in relation to the other and relatively large numbers of the former were circulating. The result was the triumph of the new all-epigraphic dinar.

Again, when ‘Abd al-Malik and his court began paying with the new dinars, anyone who held gold—the merchant, the religious leader, the military commander, and others—would immediately want to use the new-style dinars because every time they used the old gold solidi and paid by number, they lost money in the exchange. Within Muslim lands where gold was used, which must have meant Syria and possibly Egypt, the new dinars quickly dominated the market as they drove out the older solidi. It is also likely that in Byzantine lands, rulers and merchants demanded that payment in gold coins be either by weight or in their own style of currency and not by number, since the new Muslim dinars weighed less, in addition to looking different. While gold coins had circulated freely in the Eastern Mediterranean for centuries, now the Islamic and Byzantine worlds had separate monetary zones, the gold issues of which had totally different iconographies and were based upon two distinct weight standards.

We will never know if ‘Abd al-Malik and his advisers had any idea of what the impact of issuing dinars at a lower weight standard would be, but the rapid success of the new all-epigraphic issues quickly transformed the gold coinage from being another piece of monetary propaganda into a currency that everyone who used gold coins wanted. No edict had to be issued, no caliphal statement had to be made, and no religious ruling about human or non-human representation on coins had to be promulgated. The market alone transformed the symbolic role of the coinage. Once market forces were at work, the all-epigraphic dinars were successful, but how, in the world of ‘Abd al-Malik, could one explain the immediate dominance of a light-weight gold coin over a heavier, different-style issue that had been circulating in the region for decades, if not centuries?

The new all-epigraphic gold coinage was both overvalued and produced in adequate quantities so that it acted as “bad” money and effectively drove the “good” Byzantine and Arab-Byzantine solidi from the market. ‘Abd al-Malik and those with whom he consulted must have believed that the success of the coinage could only be understood in religious terms. What made the dinars different was that they carried God’s word in the form of Qur’anic verses. There was nothing visual that linked them to any older coinage. Therefore, in their view, the dinar was successful because this was the type of coin Muslims should mint. The old-style coins may have served their particular purpose, but they never triumphed over all their competitors because they were not “Islamic” enough, although they, too, included inscriptions in Arabic and even pious phrases. Therefore, the success of the all-epigraphic dinars created the expectation that all future issues would be like them; that is, the coinage of the Islamic world would lack the type of imagery found on issues from Byzantine and Sasanian lands.

Gresham’s Law did not apply to the case of the new silver coinage, but the sudden and successful triumph of the all-epigraphic gold coins in A.H. 77 and 78 created a demand that all subsequent coinage should look like the new-style gold coinage. Orders went out with the proper dies to mint all Marwanid silver coins as all-epigraphic dirhams. Within a year or two at most, all-epigraphic coinage became the symbol of Islam because only the inclusion of God’s words on the new coins could explain why they had succeeded where earlier drachms
and solidi had not. As a result of the success of the new coinage, Muslim rulers, with rare exception, would not, or felt they could not, return to the older models. Since the exchanges with silver took place by weight and not by number, old-style Sasanian and Arab-Sasanian drachms had a monetary value equal to their weight and could still be used in the market.  

SHORT-TERM RESPONSES

One of the themes of this essay has been the absence of negative responses by identifiable individuals to numismatic developments, including the appearance of human images, up to a.h. 77. While there may have been opposition to some of these developments, there were no objections serious enough to be recorded by later historians.  

‘Abd al-Malik’s introduction of the all-epigraphic coinage did break the earlier pattern and, for once, we have specific evidence of some learned members of the ulama commenting on this, though we cannot determine exactly how soon they acted after the introduction of the new dinars and dirhams during ‘Abd al-Malik’s caliphate. In light of the dominant medieval and modern tradition that Muslims welcomed the new all-epigraphic coinage because it lacked human figures and therefore reflected “real” Muslim values, it comes as a surprise to learn that the earliest commentators were opposed to it.

‘Abd al-Malik not only struck a coinage without images but for the first time inscribed Qur’anic verses on it. The caliph was using the Muslim sacred text to legitimize his message of the triumph of Islam but in a far more public way than he had done in the Dome of the Rock. Anyone who held the new all-epigraphic coinage and wished to know what was inscribed would learn that they were holding God’s word as revealed in Arabic to the Prophet Muhammad. For some pious-minded Muslims, particularly in Medina, the issue of ritual purity in handling the Qur’an and, by extension, verses from the Qur’an, was an important one. Now these same sacred texts were inscribed on pieces of metal that could and would be held by anyone and carried anywhere, including unclean venues such as lavatories.

There are variant accounts of the opposition to the all-epigraphic coinage in the Arab sources, but the following passage by al-Maqrizi (d. a.h. 845 [1441]) captures the tone of the arguments, while also revealing some of the individuals involved:

Al-Hajjaj struck white dirhams and engraved on them “Say: he is God the One.” To this the Qur’an readers said, “May God fight him! What evil has he afflicted the people with? [This coin] is now handled by impure [persons] and menstruating women!” Before then, the legend on the dirhams was engraved in Old Persian. Some of the Qur’an readers abhorred touching the [new] dirhams whenever they were in a state of impurity. Accordingly, these [dirhams] came to be known as al-makrūhah [the reprobate ones], an expression that came to stigmatize and identify them.

Malik [ibn Anas] (d. 179/795) was asked about changing the legend on the dinars and the dirhams, because it contained excerpts from the Qur’an...He answered “Though it has reached me that Ibn Sirin (d. 110/730) [who was a contemporary of Malik ibn Anas and knew him, ed.] abhorred using these (coins) in buying and selling, people continued to use them and I have not seen anyone who has prohibited them here [i.e., Medina].”

‘Abd al-Malik was told: “These white dirhams contain excerpts from the Qur’an and are handled by Jews, Christians, impure [persons], and menstruating women. It will be advisable for you to erase [the inscription].” He answered: “Do you wish [other] nations to allege against us that we have erased our [belief in the unity] of God and the name of our Prophet?”

The Marwanids recognized that the protests from some members of the ulama were more than a complaint about the inclusion of Qur’anic verses on the coinage—they were a direct challenge to caliphal authority. Giving in on this issue would have laid the ground for the ulama to challenge all legislative acts by any caliph. The call by Ibn Sirin and others to remove the Qur’anic verses was thus rejected for more fundamental reasons than that recorded by al-Maqrizi. Memory of that early opposition can also be found in the work of al-Mawardi (d. a.h. 450 [1058]), who, in his section on tribute and land tax, included the following comment on the new all-epigraphic coinage:

Those dirhams were nicknamed “the hateful,” but there is disagreement on the reason for calling them so. Some say that the jurists hated them for bearing words from the Qur’an while they could be carried by the ritually impure. Others claim that foreigners hated their reduced weight.
Ironically, al-Mawardi’s explanation is valid on both accounts, as some members of the ulama rejected the new coinage because it included God’s word, while merchants who had relied on gold coins based upon a Byzantine standard would have been angry because they were being paid by number in the lighter-weight dinars, thereby losing significant sums of income. Memory of the rejection of the all-epigraphic coinage also appears in the work of Imam al-Nawawi (d. a.h. 671 [1272]): in a section of his Etiquette with the Qur’an (al-Tībān fi ādāb hamalat al-Qur’ān) entitled “Touching Books Containing the Qur’an,” he writes:

The sound opinion is that it is permissible for someone in the state of minor or major ritual impurity or menstruation to touch or carry the following since they are not considered to be a mushaf: (1) a book of fiqh or some other field of knowledge that contains verses from the Quran; (2) a garment embroidered with Quran; (3) a gold or silver coin; (4) luggage whose contents include a mushaf; and (5) a wall, pastry or bread engraved with it. There is also an opinion that this is unlawful.81

As indicated above, no narratives attributed to the period before a.h. 77 (697) mention any opposition to gold and silver Muslim coinage that included human representation. On the other hand, there is evidence that the Marwanids saw the appearance of the Qur’anic verses on the all-epigraphic dinars and dirhams as a marker of their identity as Muslim rulers and as testaments to their belief. At a date unknown but probably during the reign of either ‘Abd al-Malik or his son al-Walid (r. a.h. 86–96 [705–15]), large copper plates with inscriptions in Kufic were installed above the doors of the Dome of the Rock. The ones on the northern and eastern doors were still in situ when van Berchem recorded their texts at the beginning of the twentieth century. From examining the inscriptions, it is apparent that the bottom sections of both plaques were cut where the date and name of the patron would have been found and replaced by a new inscription in a later Abbasid script. The inscription on the northern door is important for this study because it contains all the pious phrases and Qur’anic verses (Sura 9:33 and Sura 112) found on the all-epigraphic coinage from a.h. 77. By placing the plaque on the northern door, the Marwanid caliph wanted to ensure that all who entered the Dome of the Rock saw this inscription, in contrast to the almost invisible, earlier inscriptions in the outer and inner arcades of the interior of the Dome of the Rock.

Evidence for how the inscriptions associated with the all-epigraphic issues was used can be found in the earliest, fully bilingual protocol on Arabic papyri, which dates from the reign of al-Walid. It, too, contains Sura 9:33 and Sura 112, as well as the same pious phrases.82 In both of these cases, the totality of the inscriptions demonstrates how what was originally a piece of propaganda related to a specific historical situation became a marker for the Marwanid caliphs and then a general symbol of Islam. The success of the all-epigraphic coinage in Syria quickly transformed the messages inscribed, which were the product of a particular historical setting, into generalized statements of caliphal and Muslim belief and authority.83

LONG-TERM IMPACT

Coinages successful in the market tend to be conservative in terms of avoiding radical changes, and the triumph of the dinar meant that future coins struck by Muslim rulers would draw upon ‘Abd al-Malik’s model.84 The Syrian mithqal, the weight standard first used by ‘Abd al-Malik for the dinar, became canonical for all Muslims and the use of Arabic script on coinage struck by Muslim rulers became the norm. Many of the phrases found on the coins of a.h. 77 and 78 were also carried forward, even though, for those who used those coins, the Qur’anic verses had become formulaic. For example, the Abbasids continued to inscribe on their coins everything found on ‘Abd al-Malik’s coinage, with the exception of Sura al-Ikhlās, which was replaced by the phrase Muhammad rasūl Allāh in order to emphasize their biological tie to the Prophet.

In another example of the conservative nature of most coinage and the impact of ‘Abd al-Malik’s use of specific Qur’anic verses, we see that references to Sura 9:33 continued to appear on dinars and dirhams for centuries. The Bahri and early Circassian Mamluks placed the full āya on the reverse of their large-flan dinars. Later, when Mamluk dinars were struck on a smaller flan, reference to the same verse persisted but was now limited to the word arsalahu (He sent him),
which appeared on the top of the obverse (see the dinar in fig. 17). During the reign of the last effective Mamluk sultan, al-Qansuh al-Ghawri (r. a.h. 906–22 [1501–17]), someone examining his currency had to know in advance that the wavy line at the top was salahu, from arsalahu, and should be read after Muhammad rasūl Allāh in the third line. Here are Muslim dinars minted over eight hundred years after ʿAbd al-Malik’s reign that are directly linked to his all-epigraphic coinage. 85

CONCLUSIONS

Coinage is one among many important sources available to scholars for reconstructing the past. For the first century of Islamic history, the information that can be derived from numismatics is particularly valuable, since coins are one of the only sources that can be identified by time and place. Still, the conservative nature of coins must always be kept in mind. We must recognize the necessity of identifying when a new coin type was first issued, as images and inscriptions were often carried forward even when they no longer retained the meaning they had when they were first incorporated into the coinage. In studying the variant forms of what has been labeled by scholars as the shahāda, there is evidence for one version that circulated in Egypt and Syria in the early 70s a.h., which I have labeled the Jerusalem “affirmation of faith.” A second variant, based upon numismatic developments in the East, was placed upon the Syrian coins minted for six years of ʿAbd al-Malik’s caliphate, that is, from a.h. 72 into 77, which I label the Eastern “affirmation of faith.” With the all-epigraphic coinage of a.h. 77 and 78, it is even possible to reconstruct a third version, which lacks the opening bism Allāh and is labeled the Syrian “affirmation of faith.” All of these titles were created to demonstrate that different “affirmations of faith” circulated in Muslim lands in the late first/seventh century. Ultimately, other sources, such as monumental inscriptions, historical and religious texts, and other coinage, including copper pieces, will be needed to reconstruct when the version of the shahāda familiar to us today came to be widely accepted.

Context is key to interpreting each of the new coin types issued during ʿAbd al-Malik’s caliphate. It is important to understand why certain images or texts first appeared with each new coin type. These new elements were incorporated in order to transmit specific messages. The first issues of a.h. 72, in gold and silver from Syria, demonstrate ʿAbd al-Malik’s right as caliph to strike coins, while their images and inscriptions owe almost everything to previously circulating Arab-Sasanian drachms and Byzantine solidi. The succeeding innovations on the solidi and drachms reflect responses to Kharijite challenges. The images on the coins illustrate the caliph, or possibly his brother, as the legitimate leader of the Muslim community, with the ability to exert military force. The ever-increasing use of Arabic text was again a response to specific historical challenges, and the new phrases emphasized the role of ʿAbd al-Malik as the religious and political leader whom God favored. Finally, in facing the challenge of Byzantium, ʿAbd al-Malik turned to Qurʾanic verses to emphasize the eventual triumph of Islam and the Muslim rejection of the Christian concept of the Trinity. In the confrontation with Byzantium, text rather than imagery was the most effective way of distinguishing the two cultures and religious communities.

One of ʿAbd al-Malik’s greatest innovations was his use of Qurʾanic verses, first in the Dome of the Rock and later on his coinage. The creative use of specific verses, sometimes slightly different from those found in the modern Egyptian Qurʾan edition, reflected the key decision makers’ thorough knowledge of the Holy Book, particularly those sections that would be appropriate for these very specific contexts. In addition, the
appearance of these verses on the coinage implies that there were Muslims who knew the Qur’an well enough both to recognize and understand the significance of using God’s word in this new context. Far more than inscribing political titles or pious phrases on coinage, the incorporation of Qur’anic verses reflected the growing centrality of the Qur’an as a source of authority and for a Muslim’s sense of identity. The appearance of Qur’anic verses on the all-epigraphic coinage was opposed by some members of the ulama, particularly one Muhammad ibn Sirin and his supporters in Medina, because “unclean” people were handling God’s word. Their opposition may have focused on this specific issue, but underlying it was their resistance to the power of the caliph to determine Islamic practice, which they saw as a form of Marwanid absolutism. Therefore, contrary to the story created later, the only datable and attributable opposition to early Islamic coinage was not against those issues that included human images, but against the all-epigraphic gold and silver coinage, because these dinars and dirhams were inscribed with Qur’anic verses.

Finally, the creation of the all-epigraphic coinage, which was probably planned in a.h. 76, and then executed in gold in a.h. 77 and in silver in a.h. 78, reflected ‘Abd al-Malik’s imperial goal of confronting Rome, that is, the Byzantine Empire. Had the Marwanid dinars been based on the same weight standard as that of the earlier currencies, they may have eventually won wide acceptance or, possibly, the more conservative ulama could have forced the removal of the Qur’anic verses, even if the coinage continued to be epigraphic. But ‘Abd al-Malik debased his new gold coinage by issuing it on a new, lighter-weight standard and, in relative terms, flooded the market with dinars by paying by number and not by weight. This self-serving act had an unexpected result. The market immediately demanded that all transactions with gold coins be done with the new, lighter, all-epigraphic dinars, as anyone using the circulating Byzantine and Arab-Byzantine gold coins lost money. But how could one explain the immediate and total domination of the market by a coinage that included no images, as had every Muslim coin for the previous eight decades, and, for the first time, included verses from the Holy Book itself? The easiest answer was that this was proper Muslim coinage and all future Muslim coinage should look like it.

Department of History, University of Washington Seattle, Wash.

NOTES

Author’s note: Valuable comments were made upon earlier drafts of this paper by Sherif Anwar, Michael Bates, Irene Bierman-McKinney, Chase Robinson, Stuart Sears, and an anonymous reviewer. My own work on this topic was significantly advanced in 2007, when I held a Robinson Fellowship in the Department of Coins and Medals of the British Museum, and I wish to thank Joe Cribb, Vesta Curtis, and the other department members for their support and encouragement. As I was completing this article, Luke Treadwell and Stefan Heidemann each graciously shared with me their articles, which were then in press: see Luke Treadwell, “‘Abd al-Malik’s Coinage Reforms: The Role of the Damascus Mint,” Revue Numismatique 165 (2009): 357–82, and Stefan Heidemann, “The Development of the Representation of the Early Islamic Empire and Its Religion on Coin Imagery,” in The Qur’an in Context: Historical and Literary Investigations into the Qur’anic Milieu, ed. Angelika Neuwirth, Nicolai Sinai, and Michael Marx, Texts and Studies on the Qur’an 6 (Leiden, 2010), 149–95. Both of these works are important contributions and have valuable bibliographies in addition to their extensive footnotes.


3. Those who claimed to be caliph strongly believed that the holder of the title acted as God’s agent and had, in relative terms at least, universal authority: Patricia Crone and Martin Hinds, God’s Caliph: Religious Authority in the First Centuries of Islam (Cambridge: Cambridge University Press, 1986); Chase F. Robinson, “The Ideological Uses of Early Islam,” Past and Present 203, 1 (May 2009): 205–28. This study accepts the basic premises of Crane and Hinds, and Robinson, but argues that any new wording and/or image on the coinage reflected specific historical circumstances, not a general principle.


5. Very valuable observations on the different versions of the “affirmation of faith” can be found in Sears, “Before Caliphal Coins,” 80–83.


7. Stuart Sears, Encyclopaedia of the Qur’an (Leiden: Brill, 2001–6), s.v. “Money,” Muhammad Aslam Haneef and Emad Rafaq Barakat, “Must Money Be Limited to Only Gold and Silver?: A Survey of Islamic and Western Opinions and Some Implications,” Journal of King Abdul Aziz University: Islamic Economics 19, 1 (2006): 21–34. This distinction between central control over gold and silver issues versus local control over copper coins is a fundamental assumption in a recent work on coins from Egypt and Greater Syria for the years that the present study covers: Foss, Arab-Byzantine Coins: An Introduction.

8. In addition to Album and Goodwin, Pre-Reform Coinage of the Early Islamic Period, see Stuart D. Sears, “A Monetary History of Iraq and Iran, ca. CE 500 to 750” (PhD diss., University of Chicago, 1997). The terms drahm and drachm both appear in the literature. This essay will use the latter.


10. This is also true of Heidemann, “Representation of the Early Islamic Empire and Its Religion on Coin Imagery,” and Treadwell, “Abd al-Malik’s Coinage Reforms.”


14. Descriptions of these issues can be found in Album and Goodwin, Pre-Reform Coinage of the Early Islamic Period, 1–4, as well as a number of works specializing in Sasanian numismatics. See also Nikolaus Schindel, Encyclopaedia Iranica, s.v. “Sasanian Coinage”; accessed December 17, 2009, at http://wwwiranica.com/newsite/articles/unicode/ot_grp9/ot_sascoin_20030831.html.


16. During the reigns of the first Muslim caliphs, the circulating silver coinage was that of Yazdagird III (r. 632–51). The first Muslim issues continued this style of coinage and even the dating system of Yazdagird III. The inscriptions were written in middle Persian in Pahlavi script. Some modern numismatists have argued, based upon errors in the inscriptions, that earlier, during the reign of the caliph ‘Umar (r. 634–44), Muslim governors minted Yazdagird III-style coins without any Arabic. Therefore, there is nothing inscribed on them that signals that they were struck by order of a Muslim ruler rather than a Sasanian one. If holders of the coins did note the errors in the Pahlavi script, they more likely feared that they were bad forgeries rather than that they were products of the mint of the new Muslim governors. Aleksandr Nikitin and Gunter Roth, “The Earliest Arab-Sasanian Coins,” Numismatic Chronicle 155 (1995): 131–37. Michael Bates writes: “The chronological marker is precisely 651, the year of the death of Yazdagird. Before that time, there was no
indication of Arab rule, even if the coin’s date indicates that it was minted after the Arab conquest of the place. After that time, all official coins have Arabic. Private minters (who ‘must have been’ Persians, not Arabs) might well have made imitations of Sasanian coins without any Arabic.” Personal communication, 17 April 2009. An overview of the early Arab-Sasanian issues can be found in Album and Goodwin, Pre-Reform Coinage of the Early Islamic Period, 5–6; the labeling of the coins struck before a.h. 77 is discussed by Album on p. 1.

17. This observation was first made to me by Bernard O’Kane. Personal communication, 1 April 2009.

18. Michael Bates writes: “I think it needs to be emphasized that ‘Arab-Sasanian coinage’ is a modern terminology for a phenomenon that was not named by contemporaries in the seventh century and didn’t need a name. There is no indication in the texts that the coins with Arabic inscriptions were regarded as a ‘new coinage’ separate from the earlier coinage.” Personal communication, 17 April 2009.


21. Album mentions the first appearance, in A.H. 66, of the phrase Muhammad rasūl Allāh on drachms from Bishapur: Album and Goodwin, Pre-Reform Coinage of the Early Islamic Period, 22. An overview of the various interpretations can be found in Heidemann, “Representation of the Early Islamic Empire and Its Religion on Coin Imagery.”

22. Album and Goodwin, Pre-Reform Coinage of the Early Islamic Period, 15.


26. For recent scholarship on the Dome of the Rock and an extensive bibliography, see Gülru Necipoğlu, “The Dome of the Rock as Palimpsest: ‘Abd al-Malik’s Grand Narrative and Sultan Süleyman’s Glosses,” Maghānas 25 (2008): 19–105. Islamic art historians have written more about the Dome of the Rock than about any other single building; similarly, more has been written on Muslim coinage struck before the all-epigraphic issues of a.h. 77 and 78 than on any other Islamic numismatic topic. The lack of contemporary historical narratives, as well as the importance of both topics for the subsequent history of Muslim-sponsored material culture, may be the primary reason for this intensive scholarly interest.


30. Ibid., 28.

31. The inscription in the inner arcade begins with the Jerusalem ‘affirmation of faith’ through là sharika lāhū. The specific phrase Muhammad rasūl Allāh does not appear in the extended text, although references to his Prophethood and mission do. Most of the interior text relates to Muslim beliefs about the role of Jesus as a prophet.


35. A more detailed analysis of the wording on this tombstone will be found in Jere L. Bacharach and Sherif Sayed Anwar, “An Aswan Tombstone of 71 A.H. and the Shahada,” Papers of the 2010 Aswan Conference on Islamic Tombstones (Cairo: German Archaeological Institute, forthcoming).


larger context of the changing nature of the Muslim community.


42. Treadwell, “‘Orans’ Drachms,” 245.

43. Ibid., 247–49.


47. Once again Treadwell’s careful scholarship is an important guide for our understanding of this issue: Treadwell, “Mihrab and ‘Anaza’ or ‘Sacrum and Spear?’” 1–28. See also Miles, “Earliest Arab Gold Coinage,” 205–29.

48. According to Treadwell, it is not clear whether the specific figure, traditionally labeled in modern literature as the standing caliph, copied a Byzantine model associated with the coinage of Justinian II or was just an example of the caliph wishing to represent himself as Byzantine coinage had represented the emperor. Following Treadwell, I do not use the term “standing caliph” in reference to a specific coin type but only consider it one sub-group of images of an armed caliph. Treadwell, “Abd al-Malik’s Coinage Reforms.”


50. Crone and Hinds, God’s Caliph, 11 n. 11.


52. George C. Miles, “Mihrab and ‘Anazah: A Study in Early Islamic Iconography,” in Archaeologia Orientalis in Memo-


58. Blair made the additional observation that “having the marginal inscribed in a counterclockwise direction highlights the message in the coin’s center because your eye is drawn to the center which is another way in which the political and religious nature of the center inscriptions is re-enforced.” Sheila Blair, Islamic Calligraphy (Cairo: American University of Cairo Press, 2006), 88.

59. The text can be found in Sura 9 (al-Tawba [The Repentance]) or al-Barâ’a [The Immunity]:33, which is usually cited, since it is the first one in terms of the organization of the Qur’an. The other two references are Sura 48 (al-Fath [The Victory]):28, and Sura 61 (al-Saff [The Rowl]):9.


61. The basic reference for Umayyad dirhams is now Michel G. Klat, Catalogue of the Post-Reform Dirhams: The Umayyad Dynasty (London: Spink & Son, Ltd., 2002).

62. The dirhams of A.H. 78 issued at Adhbarbayjan (Azerbaijan) and Irminia (Armenia), then under the control of the caliph ‘Abd al-Malik’s brother Muhammad, as well as dirhams minted in al-Kufâ, governed by al-Hajjaj, and one dirham without a mint name, which may have been struck in Damascus, all have the same basic layout as the dinar of A.H. 77 except that the obverse margin completes Sura 9:33
and the reverse center completes Sura 112. In both cases, the additional space on the dirham, as compared with the size of the dinar, is the simplest explanation for these changes.

On the dirhams from a.h. 78 struck elsewhere, including those from the mints of al-Rayy and Shaqq al-Tamarra, the marginal inscriptions are reversed, that is, Sura 9:33 was now inscribed on the reverse margin and the mint-date formula on the obverse margin. I suspect that this change was done to prevent counterfeiters from taking new-style dirhams, giving them a gold plating, and passing them off as dinars, since the layout of the inscriptions would have been exactly the same. However, this is only speculation as there is no record in the texts of why the marginal legends were reversed between the two coinages. There is a dirham for a.h. 79 without a mint name, which, on the basis of a detailed analysis of style and calligraphy, has been identified as having been struck in Damascus.

63. Treadwell, “Abd al-Malik’s Coinage Reforms,” offers an excellent summary of the earlier arguments of Blair, Bates, and Grabar, as well as his own interpretation, in which he stresses that the all-epigraphic issues were the final and successful solution to creating a coinage comprehensible and acceptable to the new Islamic world built upon its Byzantine and Sasanian heritage.

64. Gresham’s Law was proposed by Henry D. MacLeod, a nineteenth-century economist. Raymond de Roover, Gresham on Foreign Exchange (Cambridge, Mass.: Harvard University Press, 1949), 91.

65. Stefan Heidemann, “The Merger of Two Currency Zones in Early Islam: The Byzantine and Sasanian Impact on the Circulation in Former Byzantine Syria and Northern Meso-

potamia,” Iran 36 (1998): 95–97, is the first work that I know of to raise the issue of the application of Gresham’s Law to this situation.

A modern example may make it clearer how Gresham’s Law works. During the 1990s, United States currency was worth more than Canadian currency, and if a Canadian came into the U.S. and tried to spend Canadian dollar bills, he/she often received only a percentage of the U.S. dollar, for example, 80 U.S. cents per Canadian dollar. Therefore, it made no economic difference if one used Canadian or U.S. dollars in a shop in the United States, because neither currency was overvalued in relation to the other. The same was not true for coins since the two nations’ coins are harder to distinguish than are their respective paper monies. If a Canadian quarter was worth 20 U.S. cents and could be passed off as an American quarter, the owner of the Canadian quarter could make a profit on each transaction; that is, the Canadian quarter was “bad” in relation to the American “good” coin. However, for a Canadian or anyone else to make a significant profit, large quantities of Canadian quarters had to be transferred across the border. When U.S. merchants along the Canadian border began to find themselves flooded with the overvalued (“bad”) Canadian money, they stopped accepting any Canadian currency and checked the coins carefully to make certain they were not Canadian. Therefore, in this case, the second condition of Gresham’s Law, requiring large quantities of overvalued coins, was not met, and “bad” Canadian money did not drive out “good” American coinage.

66. Here is a theoretical example of how evidence derived from hoards can be interpreted. If a person in Europe is using two-euro coins to buy goods, the euros are all traded as equal, irrespective of which country in the European Union minted the pieces. In saving these two-euro coins, that is, creating a hoard, one does not care about their country of origin and the result is a mixed hoard in terms of the countries that struck them. If the European goes to Egypt, that person quickly discovers a one-pound Egyptian coin in circulation. The Egyptian coin resembles the two-euro coin in its silver rim and copper-colored center, but is valued at approximately one-fifteenth the value of a two-euro coin. Therefore, each time a European mistakenly pays a bill in Egypt using a two-euro piece where an Egyptian one-pound coin would do, the European loses money.

Now the same European saving his/her money in Egypt, that is, creating a hoard, would probably quickly separate the Egyptian pound coins from the two-euro ones in order to prevent them from being spent in the wrong monetary zone. If, hundreds of years from now, archaeologists found hoards in which large numbers of both two-euro and one-pound Egyptian pieces were mixed, they might assume that the two sets of coins were worth the same in the market. If the coins were found in separate hoards of European versus Egyptian issues, the same scholars would conclude that the two sets of coins were traded at different rates, but, without additional data, they would not know which was considered the better coin at the time of their circulation.

67. Album and Goodwin, Pre-Reform Coinage of the Early Islamic Period, 39.

68. Heidemann, “Merger of Two Currency Zones,” is the first serious study of the incorporation of gold and silver into a single Muslim monetary zone. Since Sasanian and Arab-Sasanian drachms were not struck in Syria until the years 72 to 77 a.h., and then in relatively small quantities, it is not surprising to find only dirham hoards from Syria for the Umayyad period. On the estimated number of dies struck for the Syrian drachm, see Treadwell, “Abd al-Malik’s Coinage Reforms.”

69. Treadwell, “Abd al-Malik’s Coinage Reforms,” also argues that they were traded by number (tale).


71. Gathering circulating coins, weighing the resulting pure metal, and then striking new coins was one method by which rulers made a profit. There is a reference to al-Hajjaj following such a policy: Ahmad ibn Jabir al-Baladurī, The Origins of the Islamic State, Being a Translation from the Arabic of the Kitāb Futūḥatul-buldān, trans. Francis Clark Murgotten (New York: Columbia University Press, 1924), 266.


76. In one of the accounts of the origins of the all-epigraphic coinage, it is recorded that ʿAbd al-Malik was advised to mint his own style coins on which we would write ‘On one side the names of God and the Prophet, and on one side your own name.’ The Muslims, objecting to it, used to say that it was bad, improper and impossible to carry out, and the religious authorities always forbade it.” Milstein’s statement that the opposition refers to the Muslim coinage with images than any other Qur’anic verse. Only with the publication of the planned database of inscriptions will it be possible to identify when this verse was first used on a tombstone, but it is clear that up to the Fatimid era it was more popular than any other Qur’anic verse. ʿAbd ar-Rahman M. ʿAbd al-Tawwab, *Stèles islamiques de la nécropole d’Assouan* (Cairo: Institut français d’archéologie orientale, 1977–), vol 1.

77. The long-term impact of the all-epigraphic coinage is discussed in David J. Wasserstein, “Coins as Agents of Cultural Definition in Islam,” *Poetics Today* 14, 2 (Summer 1993): 303–22.

78. We also have western examples of how phrases might continue to appear on coinage long after they had lost their original meaning and most users of the money had forgotten why they were there. In 1521, Pope Leo X awarded King Henry VIII (d. 1547) of England the title *Fidei defensor* (Defender of the Faith) for the text published in his name defending Catholicism against Protestantism. Henry VIII responded by adding *Fid def* to his coinage. Although Henry VIII left the Catholic Church, the phrase continued to be used on British coinage, sometimes only in the form of the letters FD, as it does today on the coinage of Queen Elizabeth II, almost five centuries after Henry first had it inscribed on his coinage.


83. Additional evidence for the use of Sura 9:33 after the appearance of the new dinars and dirhams can be found in a study of Muslim tombstones from Aswan. Out of 150 steles analyzed by ʿAbd al-Tawwab covering the years a.H. 102 (721) to 257 (870), this sura was inscribed on forty of them, more than any other Qur’anic verse. Only with the publication of the planned database of inscriptions will it be possible to identify when this verse was first used on a tombstone, but it is clear that up to the Fatimid era it was more popular than any other Qur’anic verse. ʿAbd al-Rahman M. ʿAbd al-Tawwab, *Stèles islamiques de la nécropole d’Assouan* (Cairo: Institut français d’archéologie orientale, 1977–), vol 1.

84. The long-term impact of the all-epigraphic coinage is discussed in David J. Wasserstein, “Coins as Agents of Cultural Definition in Islam,” *Poetics Today* 14, 2 (Summer 1993): 303–22.
RINA AVNER

THE DOME OF THE ROCK IN LIGHT OF THE DEVELOPMENT OF CONCENTRIC MARTYRIA IN JERUSALEM: ARCHITECTURE AND ARCHITECTURAL ICONOGRAPHY

The subject of the architecture of the Islamic Dome of the Rock in Jerusalem has a long pedigree in scholarly literature. In a recent article, Muhammed Anwarul Islam and Fauzi Zaid al-Hamad concluded that the Dome of the Rock...did not have much in common with either of the two monuments in Jerusalem [i.e., the Anastasis (Resurrection) Rotunda in the Church of the Holy Sepulcher and the Church of the Ascension] as they existed at the time...Yet, there is no record of any other important building built with an octagonal shape anywhere in the Islamic world during this period of a thousand years. This confirms the view presented in this article that the Dome of the Rock needed to be octagonal to reflect the unique religious scenario that was believed to be happening only in the location where it was being built and will not be repeated anywhere else.

The first part of my article is a response to this conclusion and the second part is a by-product of my ongoing research on the beginning of the cult of Mary Theotokos (God Bearer) in Jerusalem, in which the Church of the Kathisma (Seat of Mary) played a major and influential role in connection with Marian feasts in Jerusalem and abroad, as well as of my encounter with the studies of Mary Cunningham on eighth-century Marian homilies. Inspired by the workshop on the Theotokos that was organized by Cunningham and Leslie Brubaker at Oxford University in 2006, I undertook an adventurous methodological experiment regarding the architectural iconography of the Dome of the Rock, the results of which, as detailed in the latter part of this article, complement and support my argument in the first part. A prelude to the present article was unintentionally provided by Amikam Elad when he pointed out that Islam and al-Hamad were incorrect in asserting that “there is no record of any other important building built with an octagonal shape anywhere in the Islamic world during this period of a thousand years.” Indeed, Elad’s observation that the architecture of Qubbat al-Sulaybiyya at Samarra (dated to the ninth century) shares typological similarities with the architectural plan of the Dome of the Rock had already been proposed in 1911 by Friedrich Sarre and Ernst Herzfeld.

About twenty years ago, in her seminal monograph on the early Islamic complex on top of the Temple Mount, Miriam Rosen-Ayalon described the presumed uniqueness of the architecture of the Dome of the Rock when she wrote: The Dome of the Rock is undoubtedly one of the most extensively studied of medieval buildings...The construction of a complete picture of this unique monument is further hindered by the fact that no contemporary building in any of the neighboring cultures offers a comparison with the Dome of the Rock. Various buildings have been cited as possible sources of inspiration or forerunners, but these parallels have always been only partial at best.

More recently Oleg Grabar agreed with Rosen-Ayalon, as well as Islam and al-Hamad, when he noted that there is “no immediate model for the Dome of the Rock.” Grabar is renowned for placing the Dome of the Rock in the forefront of the studies of Islamic art, promoting discussion of the structure’s meaning. His seminal paper, “The Umayyad Dome of the Rock,” published in 1959, is an important milestone that remains relevant today, in spite of alternative interpretive proposals that have accumulated in abundance in the years since. Even today, this study continues to buttress relevant and
valid conclusions. However, the discussions in his two books on the architectural origins of the Dome of the Rock are less cautious—sometimes the information is inaccurate and certain observations are imprecise. Thus, his conclusions remain too general. For example, in The Shape of the Holy: Early Islamic Jerusalem, published in 1996, Grabar wrote that

> there is little doubt that the model for the Dome of the Rock was a fairly common type in Late Antique and Early Christian or early Byzantine architecture. Originating in the mostly funerary architecture of the late Roman empire…it became a common form for baptisteries all over the Christian world….12

However, in Malka Ben-Pechat’s inventory of baptisteries, and according to my own up-to-date knowledge of the recently excavated baptisteries in Israel, none of those in the Holy Land are octagonal, or in fact polygonal, in shape.13

Grabar further states that “the plan of the Dome of the Rock is distinguishable from the plans of most comparable buildings by its inordinate size….‖14 This statement, however, contradicts the data on the measurements of the rotunda of the Anastasis provided by Richard Krautheimer15 and also published in two geometrical analyses by the architect Doron Chen.16 Previously, in his doctoral dissertation, Chen had compared the Dome of the Rock with the rotunda of the Anastasis and the octagonal Church of the Ascension on the Mount of Olives.17 This latter church, however, is dated to the Crusader period18 and therefore could not have been an architectural source for the Dome of the Rock.

According to Grabar,

> [i]n terms of size, the churches of San Vitale and Aachen, the possible martyrrium [a memorial monument; in the Christian context, it is a place of witnessing commemorating an occurrence of theophany] in Caesarea, and the two sanctuaries of Jerusalem are the only ones that are close to the Dome of the Rock, and in both the Church of the Ascension and San Vitale, the circle circumscribing the building has the same diameter as the Dome of the Rock.19

Indeed, a comparison of the sizes of these five monuments (i.e., the churches of San Vitale, Aachen, Caesarea, and the Ascension, and the Dome of the Rock) does demonstrate the technical capability of the architects and engineers of these buildings, but does not necessarily relate to their architectural models. Moreover, Grabar is inaccurate in his assertion that “only the Church of the Ascension and the church at Caesarea are symmetrical on several axes and appear to lack an apse for an altar.”20 Each one of these churches did have marked altars in the east, although, admittedly, they did not protrude beyond the exterior contours of the buildings.21

In The Dome of the Rock, published in 2006, Grabar’s mishandling of the geometrical data led him to some imprecise conclusions. He confines his architectural parallels to four concentric churches in the Holy Land, reports on all of which have been published by their respective excavators. The remains of a round, early Byzantine church were uncovered below the octagonal Church of the Ascension on the Mount of Olives,22 and an octagonal church was revealed in Capernaum.23 In addition to various preliminary reports and articles, a final paper on the excavations of the octagonal church in Caesarea Maritima was recently published, in which the structure was identified as St. Cornelius’s martyrrium. I myself have proposed an alternative identification of the monument as the martyrrium of Philip.24 The last of Grabar’s church plans is his drawing of the Church of the Kathisma on the Jerusalem–Bethlehem road, which I excavated on behalf of the Israel Antiquities Authority.25

Three of Grabar’s church plans are inaccurate and sometimes completely wrong. Firstly, his “schematic reconstructed plan of the church of the Ascension”26 depicts two concentric octagons, but we know from the architectural finds revealed in Virgilio Corbo’s excavation that the early Byzantine Church of the Ascension on the Mount of Olives was round.27 In addition, Corbo’s archaeological finds are in accordance with the description of this church provided by the pilgrim Arculf, who visited the Holy Land between 679 and 688.28

Secondly, Grabar’s “schematic plan of the octagonal building in Caesarea”29 depicts a thick exterior octagonal wall surrounding an intermediate, colonnaded circle, at the center of which is an unclear element that is round on its exterior face and octagonal towards the center of the building.30 However, according to the plan
published by the excavator, Ken Holm, the exterior of this church was square. It had a square unit framing two concentric octagons, which were separated from one another by octagonal corner piers (the horizontal section of each pier forming one of the 135-degree angles of an octagon). Thus, the piers defined both the octagonal shape of the inner space of the church and the inner face of the octagonal ambulatory. The ambulatory in Grabar’s plan has a round contour facing the center of the building—not an octagonal one, as the archaeological finds convincingly prove. In addition, Grabar’s plan disregards the apse, which Holm excavated and published in his reports.

Thirdly, the plan that Grabar provides for the Kathisma Church is problematic. It incorporates and amalgamates archaeological architectural features from several different strata with modern ones. The proportions are inaccurate in that Grabar miscalculated the diameter of the inner octagon in the Kathisma and also reached incorrect conclusions concerning the size relationship of the Kathisma in comparison with the other concentric martyria in Jerusalem.30

Evidently, in antiquity buildings that were intended to be copies of existing monuments did not always resemble their models precisely. This was demonstrated by Richard Krautheimer, who discussed a group of churches dating to the Middle Ages, based on historical documents that indicated that the designers and constructors intended to copy the Church of the Holy Sepulcher in Jerusalem.31 However, their typological divergence was clear and none of them has a similar plan, nor do any of those church plans look like that of the Church of the Holy Sepulcher. This diversity is so great that modern scholarship has not been able to deduce from the architectural plans whether these churches are all copies of one and the same church model. In spite of Krautheimer’s somewhat discouraging observation that we cannot identify which buildings are copies except when historical documents refer to them as such, it is, in fact, sometimes possible to determine by observation the architectural model on which a building was based. First, though, it is imperative to clarify what an architectural model is.

An architectural model should be defined as a structure’s primary and basic geometrical scheme, that is, a composition of a few large-scale major geometrical shapes that comprise the plan from which architects design the details and final plan of the projected building. With this definition at hand, it will be possible to analyze the architectural plans of the buildings under study, recognize the model of each building, and draw comparisons among them. Because he did not search for the major shapes that comprised the plans of the Holy Land’s martyria, Oleg Grabar was unable to recognize any architectural model; his comparisons between the churches of the Holy Land and San Vitale or Aachen relate to the size of the buildings rather than to their architectural model.

Typology was only one of several criteria adopted by André Grabar to investigate the many churches and monuments analyzed in his seminal work, Martyrium: Recherches sur le culte des reliques et l’art chrétien antique, of which vol. 1, L’architecture, was published in Paris in 1946. He also examined each monument in its broader contexts, such as provenance, chronology, culture, and function—especially liturgical function and iconography. This deep and broad investigation enabled him to identify models and copies of martyria and regular churches. In an observation relevant to this article, he noted that the uniqueness of the martyria in the Holy Land was due to the special status of Palestine in Christianity and that the architecture developed to meet the multifunctional roles these buildings were expected to fill:

Il n’y avait que la Palestine—pays des martyria théophaniques—pour pouvoir prendre l’initiative de transférer ainsi sur des églises de culte normal dédiées au Christ et à la Vierge les caractéristiques des monuments commémoratifs. Mais l’exemple était tentant, et la pratique des sanctuaires de Terre Sainte a dû contribuer à répandre cet usage.32

Twenty years after the publication of André Grabar’s book, in the face of the criticism leveled by John Bryan Ward-Perkins,33 who gave primacy to the typological comparisons while discarding the other criteria that Grabar had relied upon, André Grabar defended his methodology and conclusions, as well as his multifaceted methodological approach.34

John Wilkinson’s work on the architectural procedures followed in the planning of octagonal churches
in the Holy Land paved the way for a comparative architectural study of the Kathisma Church, which became a chapter of my doctoral dissertation. Wilkinson’s analysis helped me to recognize a local typological architectural model for the concentric martyria in Jerusalem, as well as to trace the development of this model in order to observe how it was implemented in the various architectural plans of the martyria under examination. This cumulative data facilitated the expansion of my research for this article, enabling me to pinpoint direct and specific architectural sources for the Dome of the Rock. Tracing these sources raised some questions that led to the second part of this essay, dealing with the iconographical interpretation of the architectural design and exterior shape of the Dome of the Rock.

An archaeological and architectural survey of the buildings in the Holy Land, from the prehistoric period to the early Byzantine, shows that the first concentric buildings constructed in the Holy Land, excluding Gaza with the round Roman temple dedicated to Maranas, were the commemoration churches initiated by the emperor Constantine the Great (r. 306–37).

It has been established that the Dome of the Rock is a commemorative monument. Oleg Grabar referred to it as “a sort of a martyrium” and a “place of commemoration.” Therefore, it seems that the Dome of the Rock deserves to be studied according to a methodology similar to the one André Grabar used in his book on the martyria. The scheme of the second part of this article, dealing with iconography, is inspired by that of Richard Ettinghausen, who, in trying to decipher the meaning of the Dome of the Rock, wrote that it appeal[ed] to the new converts who understood it in its pre-Islamic setting and who tried to place it in its new context... But the decorative repertory, restricted though it was, was also sure to conjure up certain associations. In particular, its most unusual feature within an otherwise formal display... must have evoked connotations that such designs had in a Christian environment.

The same methodology was successfully used by Ettinghausen in a study on the hall in Khirbat al-Mafjar, as well as by Rosen-Ayalon in her analysis of the wall mosaics of the Dome of the Rock.

Ettinghausen’s observations about the meaning of the mosaics in the Dome of the Rock and the big hall in Khirbat al-Mafjar generated the following questions: Where can one find a church in Jerusalem that has an exterior shape similar to the Dome of the Rock—and what would Christians make of that association? Where can one find a church whose interior space is divided in a manner similar to that of the Dome of the Rock—and what possible association would that have in Christian eyes? What church had a dome that is similar to the Dome of the Rock—and what message could that association convey to Christian visitors? Finally, in relation to Oleg Grabar’s work, but with the insights of Ettinghausen’s iconographical scholarship, I have tried to decipher the “visual words” of the architecture of the Dome of the Rock, which might have been “read” by the Christians in Jerusalem during the seventh century, in the context of their meaning in their original (Christian) environment. In other words, how did the designer of the Dome of the Rock use Christian “visual words and modes of expression” in a new “syntax” in order to convey his message?

But first it is necessary to present the material evidence and to gather and analyze the historical information embedded in the material finds. Our discourse begins with a typological comparative study of the Dome of the Rock with the other early Byzantine concentric martyria in Jerusalem, with respect to the modifications made to the plans of the martyria due to liturgical developments and changes over time.

The methodological approach proposed here is primarily intended to contextualize the Dome of the Rock in terms of the history of architecture in Jerusalem and its environs, in order to see whether, in light of new data, it fits into the development of the concentric buildings that preceded it. Furthermore, a survey of related monuments needs to be more scrupulously conducted vis-à-vis the chronology of the changes introduced in them. I will argue that the architectural plan of the Dome of the Rock is not an Umayyad invention, but rather organically belongs to a local family of early Byzantine concentric memorial shrines. Similar to the other buildings of this group, the Dome of the Rock reflects local Jerusalemite architectural features, in some manner adjusted to meet the functional demands of its Umayyad patrons, just as the model was previously adapted in church building plans, as required by the
growing number of pilgrims, the increase of relics and icons, and the development of secondary cults within the monumental memorial churches.

The survey is supplemented by a cultural and historical review of Umayyad Jerusalem, with special attention to Muslim–Christian cultural relations between the seventh and the ninth centuries, including the dispute between the two communities over the ownership of existing holy places, specifically the Church of the Kathisma, and the theological wrangling over the role of the Virgin Mary as the “God Bearer.” This broader historical approach provides a key to a better understanding of, and a new perspective on, the decisions made by those who planned the Dome of the Rock on the deserted site of the Jewish Temple, while selecting features of the rotunda of the Anastasis as well as of the Church of the Kathisma as immediate and direct sources for the new structure’s architecture.

AN ARCHITECTURAL SURVEY

I begin by surveying the octagonal architectural unit built over the cave of the Nativity in Bethlehem in the time of Constantine the Great and dated to ca. 333.

The eastern octagon was accessed through the basilica, which terminated in the east with stairs leading into the octagon (fig. 1). In this early phase of the monument of the Nativity, the basilica and octagon formed a tight conglomerate, comprising one building.

The next monument to be considered is the Rotunda of the Anastasis, built over the Tomb of Christ, within the city walls (fig. 2). Here, the rotunda is part of the larger architectural complex of the Church of the Holy Sepulcher. In light of Erik Wistrand’s studies and Corbo’s archaeological excavations, as well as the architectural analysis by Charles Coüasnon, it is now commonly accepted that the Rotunda of the Anastasis dates to around 348, during the rule of the emperor Constantius (r. 337–61), son of Constantine the Great.

![Fig. 1. Plan of the Church of the Nativity in Bethlehem. (After John Wilkinson, Jerusalem Pilgrims Before the Crusades [Jerusalem, 1977], 152, fig. 1)](image1)

![Fig. 2. Plan of the Church of the Holy Sepulcher in Jerusalem. (After Virgilio C. Corbo, Il Santo Sepolcro di Gerusalemme: Aspetti archeologici dalle origini al periodo crociato, 3 vols., Studium Biblicum Franciscanum: Collectio Maior 29 [Jerusalem, 1981–82], vol. 2, pl. 3)](image2)
The entire complex of the Church of the Holy Sepulcher consisted basically, from east to west, of an atrium, a basilica, and an inner courtyard around the rotunda. It should be noted that, apart from the area between the rotunda and the basilica, to this day the rotunda itself has never been able to accommodate the mass of worshippers and pilgrims visiting the Holy Sepulcher during feast days.

With due consideration to the problems posed by the increasing numbers of pilgrims, a third monument to be reviewed here is the large, concentric, early Byzantine Church of Christ’s Ascension on the Mount of Olives. Its vast interior could accommodate large numbers of visitors. As noted earlier, Corbo’s archaeological excavations proved that Arculf’s description of this church as a round structure was correct (figs. 3 and 4). Corbo thereby refuted Abel and Vincent’s proposal to restore the form of the Byzantine Church of the Ascension, located underneath the later octagonal structure built on the site by the Crusaders, as an octagonal building. Unfortunately, other scholars have reached erroneous conclusions based on Abel and Vincent’s idea. See, for instance, Creswell’s discussions concerning the potential architectural origins of the Dome of the Rock.

The Byzantine Church of the Ascension originally had two concentric ambulatories that circumscribed a central round space. This locus sanctus, from which Christ allegedly ascended to heaven, was located in the center of the building. It was surrounded and protected by a metal screen. The church had no apse but in its stead an altar was located to the east of the locus sanctus. Architecturally, the Church of the Ascension was an independent concentric structure, unattached to a basilica, although André Grabar claimed that in the performance of the liturgy, the Church of the Ascension remained connected to the adjacent basilica of the Eleona. It is commonly held that the Church of the Ascension was consecrated in 384 and should be associated with a Roman lady named Poemenia. An earlier date was argued for by André Grabar, who attributed the building to Constantine the Great.

It should, then, be stressed that the architectural feature of two concentric ambulatories was introduced in Jerusalem as early as the fourth century (in the Ascension Church on the Mount of Olives) and later modified...
in the fifth century (in the Kathisma); it was not a unique invention of the architects of the Dome of the Rock. This was no doubt an architectural solution that enabled a large number of worshippers to visit the shrine and circumambulate the locus sanctus. Moreover, it should be noted that the Ascension is very close to the site of the Dome of the Rock; in fact, the two monuments are mutually visible. Hence, the feature of double, concentric ambulatories was certainly known to the planners of the Dome of the Rock.

Furthermore, we need to recall that in the fifth century the Ascension went through a phase of architectural change, when around 438 Melania the Younger installed a shrine in it, “a place of prayer” (euktērion) for St. Stephanos. In her biography, we are told that the euktērion was built inside the church in the outer portico. Corbo’s excavation in this church revealed an apse below the walls dated to the Crusader period and above and between two concentric, round Byzantine walls (fig. 4). The parallel round walls were identified as the remains of the Poemenian church, while the apse between the rounded walls was identified by Corbo as the remains of the Byzantine euktērion of St. Stephanos built by Melania the Younger. It is possible to date the installment of the euktērion quite accurately, since its inauguration ceremony was held during the first imperial visit to the Holy Land, circa 438, of Eudocia, wife of Theodosius II (ca. 408–50).

The shrine located within the Church of the Ascension, defined by Milik as a chapel with an apse between the walls of the external ambulatory (fig. 5), was basically the architectural forerunner of the plan developed and incorporated eighteen years later in the Church of the Kathisma.

On behalf of the Israel Antiquities Authority, I undertook the excavation of the site of the Kathisma (fig. 6), on the outskirts of Jerusalem, along the Jerusalem–Bethlehem road. The church was built circa 456, when Saint Theodosius joined the monastery of the Kathisma. It was constructed over and around a hallowed rock traditionally identified as the alleged seat upon which the pregnant Virgin sat to rest on her journey to Bethlehem, as related in the Protoevangelium of St. James 17:2–3. The octagonal plan of the church uncovered appears to have been inspired by the shape of the Constantinian octagonal structure raised over the cave of the Nativity of Christ in Bethlehem. This architectural unit was still standing at the time of the construction of the Church of the Kathisma. Indeed, in my opinion, the octagon was chosen as the basic shape for the Kathisma because of its continuous connection with the sequence of events leading to the birth of Christ, according to the tradition preserved in the Protoevangelium. Namely, on the road to Bethlehem, Mary felt the baby Jesus pressing to be born and had a vision of two people, one wailing and the other rejoicing at the event of Christ’s birth. Hence, it seems logical that since the place of Christ’s birth, the cave of the Nativity, was marked by an octagonal structure, the form of the church built above the rock where the Virgin sat during the throes of childbirth and when having her vision was associated with and inspired by a similar form, the octagon.

The discovery of the Church of the Kathisma as a large, independent concentric building, with an octagonal plan and double ambulatories, including side chapels installed within the outer ambulatory, suggests the influence of the Church of the Ascension, since both buildings were designed to satisfy pilgrimage requirements or, rather, expectations. The need to provide a large pilgrimage church over and around the rock of…

---

**Fig. 5.** The Church of the Ascension with the shrine of St. Stephen, as proposed by Milik. (After Józef Tadeusz Milik, “Notes d’épigraphie et de topographie palestiniennes,” *Revue Biblique* 67 [1960]: 558, fig. 2)
the Virgin’s seat, together with the growing demand for secondary shrines within the church (possibly containing relics or icons of the Virgin), yielded the complex plan of the Kathisma, with its “built-in” chapels. This feature was purposely planned and executed in the first phase of the building.

The architectural similarities between the Church of the Kathisma and the Dome of the Rock appear in the following features (figs. 6 and 7): both are octagonal in their exteriors, their plans each consist of a central space with a hallowed rock, and both have two octagonal concentric belts around that central space.

As can be expected, some changes were introduced in the plans in order to meet the specific functional needs of worshippers in the Kathisma Church (e.g., the chapels and main apse) as well as in the Dome of the Rock (where there was no need for an apse or chapels). Taking into account that the architectural concept of the interior of the Kathisma Church had its origin in the Ascension Church on the Mount of Olives, this indicates that the exterior octagon should be perceived as an exterior ambulatory, divided by partition walls. The exterior ambulatory in the Church of the Ascension underwent a minor change with the installment of the shrine of St. Stephen, which, according to Corbo’s finds, was similar in plan and location to each of the chapels in the Kathisma. Because of the growth in demand for these secondary shrines within the big monumental martyria, the exterior ambulatory was divided into chapels and entrance rooms, which were connected by small corner rooms. These enabled worshippers to pass from each entrance room to an adjacent chapel. From this we must conclude that the exterior octagonal unit in the Kathisma is actually an ambulatorium, at least in its architectural origins and shape, even though it was divided into rooms and thus ceased to function as an ambulatory in the strictest sense. This development may not have been noticed in the past and may still be overlooked by scholars who are unaware of the architectural procedures of the designers of both ground plans, as well as by those not familiar with the architectural sources of the Kathisma. When the Dome of the Rock
was built, the partition walls were omitted from the plan and thus the exterior octagon was restored to its original shape and function.

In accordance with André Grabar’s observation (cited above) that the Holy Land martyria operated as multifunctional churches, similarly the Church of the Kathisma both served as a regular house of worship dedicated to Christ and also functioned as a “place of witnessing” commemorating an event that had occurred at the site, to be visited and revered by pilgrims as well as by the monks of the attached monastery. The Kathisma was built in the middle of the fifth century, at which time a developed sanctuary, one with a presbyterium and an apse, was already a dominant architectural feature of the plan of a concentric memorial church, occupying the eastern zone of the building. Hence, the Kathisma had no entrance room on its eastern side connecting the exterior with the interior of the church. Instead, a main apse projected eastward, beyond the imaginary exterior outline of the octagonal building. There was obviously no need for an apse or a presbyterium in the Dome of the Rock, so the geometrical octagonal outline of the building was restored, with an entrance in the middle of the eastern external wall. The Kathisma, like the Dome of the Rock, had entrances that permitted access to the building from the exterior through the middle of the northern, southern, and western walls.

The main difference between the two monuments lies in the shape of their inner spaces and roofs. Furthermore, in the Kathisma the central space was octagonal and the diameter measured between the southeastern and the northeastern corner piers is 18.3 meters, whereas the innermost diameter of the central space of the Dome of the Rock is slightly longer than 20 meters and is covered by a round dome. Scholars have noted this similarity in diameter in the past, and have also compared the Dome of the Rock’s round cupola with the round dome of the nearby Rotunda of the Anastasis.

To conclude, the Dome of the Rock belongs to the “three-shell” type of concentric martyrium. This model is unique to the Holy Land and the majority of examples are found in Jerusalem. Of course, each church building is a variant of this model, influenced by its architectural forerunners. Adaptations were made in each martyrium in order to “update” the architectural model to meet the specific functional requirements of the newer monument. Thus, their ground plans were created from the common model over a period of time. But the composition of the “three-shell” type is easily detectable in the plan of each memorial building, including the Dome of the Rock.

HISTORICAL CONTEXT

A comparison of the two round domes that decorate the skyline of the Old City of Jerusalem had already been made in 985, by the uncle of the geographer al-Muqaddasi, who argued that the Dome of the Rock was built to prevent Muslims from being dazzled by and marveling at the churches of Jerusalem. According to this source, the Dome of the Rock was meant to compete with and surpass the churches of Jerusalem in beauty, especially with respect to the overwhelming size of the dome of the Anastasis. It is difficult to say whether al-Muqaddasi’s uncle’s words referred to the dome that he saw for himself over the Anastasis, which was renovated by Thomas, the patriarch of Jerusalem between 969 and 978, or to the seventh-century dome built by Modestus, the patriarch between 634 and 638. But anyone familiar with the topography of Jerusalem is aware of the inferiority of the location of the Church of the Holy Sepulcher in comparison with the Temple Mount. Even if the dome renovated by Thomas was higher than that of Modestus, this would not have affected the ultimate superiority of the Dome of the Rock in the skyline of the Old City of Jerusalem.

In the seventh century, at the time the Dome of the Rock was being built, circa 691–92, the only octagonal structure in the environs of Jerusalem was the Church of the Kathisma, situated just three miles away. The Constantinian octagon erected over the cave of the Nativity had already been replaced, during the reign of Justinian (r. 525–65), by a trilobed, apsidal construction, and the Crusader octagonal church at the site of the Ascension had yet to be built. Furthermore, as mentioned above, to this day the domes of the Anastasis and the Dome of the Rock stand out in the skyline of the Old City. By contrast, the Kathisma and the Dome of the Rock were not visible to each other, since the three-
mile distance between them and the hilly nature of the terrain excluded any possibility of direct visual comparison.

By the eleventh century, the Kathisma had been dismantled and razed to the ground by Muslim villagers living in its vicinity. Thus its very presence sank into oblivion. Until the recent archaeological excavation of the site, therefore, historians of architecture were oblivious to the similarities between the Dome of the Rock and the ancient Church of the Kathisma.

Even so, to understand more fully the meaning underlying the connection between the two structures, we first need to consider the importance and significance of the Church of the Kathisma and its cult for the general population of Jerusalem up to the seventh century. We might thus gain a better and deeper understanding of the possible associations that the Church’s octagonal plan—which was also reflected in the shape of the Dome of the Rock—may have evoked in the minds and hearts of visitors to, and inhabitants of, Jerusalem in the seventh and eighth centuries. Somewhat speculative, this methodological approach is based upon Oleg Grabar’s advice “to locate the building [i.e., the Dome of the Rock] within a visual language and then try to understand what that language is trying to say in this particular case.”75 Similar methods were adopted by Richard Ettinghausen in his iconographical study of the hall in the palace at Khirbat al-Mafjar near Jericho:

An interpretation of the other mosaics is less certain, primarily because they are abstract and their specific meaning is thus ambiguous. Special pains have therefore been taken to understand their iconographic function apart from that as mere decoration and to consider them as far as possible within the conceptual context of the structure and of Umayyad and Sasanian art in general. In this way we hope to avoid the projection of notions that would have been foreign to the period.76

It seems worthwhile to remember that architecture deals with forms of buildings, and as such, they are bearers of human spiritual meaning and content. In an effort to understand more meaningfully the borrowing and sharing of certain formal architectural features, I propose to examine the historical background of the period and the environment in which the Dome of the Rock was built.

Going back in time, it is useful to note that the Kathisma was the earliest church in Jerusalem dedicated to Mary Theotokos. In fact, it was the earliest Marian church in the Holy Land and one of the first dedicated to the Theotokos in the Byzantine empire.77 This assertion is supported by the studies of Jugie, Honigmann, Johnson, and other scholars, who all agreed that the sources relating to a fifth-century Marian church in Gethsemane were fabricated after the third quarter of the sixth century.78

The Armenian Lectionary, reflecting the liturgy of Jerusalem and dated by Renoux to between 417 and 438,79 does not mention a feast for Mary’s Assumption, but it does refer to a “feast of the Theotokos” celebrated in the Kathisma on the fifteenth of August.80 This, then, was the earliest strictly Marian feast that was described as distinct from and not shared with the figure of Christ,81 unlike the Hypapante, the feast of Christ’s Presentation in the Temple, which was already celebrated in the fourth century, in honor of Christ and Mary.82 According to the Georgian calendar,83 which reflects the liturgy in Jerusalem from the end of the fifth century up to the seventh or eighth century,84 the date of the Theotokos feast was fixed two days earlier and celebrated on the thirteenth of August, while the Feast of the Assumption of Mary was celebrated on the fifteenth of that month.85

As mentioned above, according to Theodorus of Petra and Cyril of Scythopolis, the Kathisma Church was constructed when Saint Theodosius joined the monastery of the Kathisma.86 Both church and monastery were erected in the days of Juvenal, the bishop of Jerusalem officiating during the Ecumenical Councils held in Ephesus in 431 and in Chalcedon in 451, at which the title of Mary as “Theotokos” was, respectively, approved and reapproved.

The readings for the “Theotokos feast” included Psalm 132, Isaiah 7 and 10, and the Epistle to the Galatians 3:29, terminating with the narrative of the Nativity according to the second chapter of Luke.87 These selections from the Holy Scriptures were followed by interpretive homilies.88

Two fifth-century homilies composed for the Theotokos feast by two Jerusalemite churchmen are known to us. The earlier work, which was written by the renowned preacher Hesychius of Jerusalem (d. after
Aubineau and Capelle concluded that the purpose of these two homilies was to praise Mary and her virginal motherhood and elaborate on her virtues as the “Mother of God.” Neither Hesychius nor Chrysippus refers to the story of Mary’s rest on the journey to Bethlehem and its relation to the legend that sanctified and hallowed the site of the Kathisma, but they did include images of the Virgin that connect her with the Jewish Temple: for example, the motif of Mary as the Throne of God and Temple, a cathedra that is not inferior to the cathedra of the Cherubim in the Holy of Holies. These images appear at the beginning and end of Hesychius’s homily.90 Chrysippus draws a parallel between the Virgin Mary and the mountain from which the stone, untouched by man, was quarried for building the foundations of the Temple.91

Mary Cunningham has described how images connecting Mary with the Jewish Temple multiplied and changed from the fifth to the eighth century.92 Some of these were embedded in earlier Jewish traditions relating to the Old Testament and were accepted and appropriated as Christian scripture.93 The dependence of Muslim traditions on Jewish sources concerning the Temple Mount, including the holy rock in the Dome of the Rock, called in Hebrew Even ha-Shetiyya (the Foundation Rock, upon which, according to Jewish tradition, the world was founded)94 has also been studied by Hirschberg and Livneh-Kafri, as well as by Elad and others.95

In view of the fact that the majority of the population in seventh-century Jerusalem was Christian, it is reasonable to assume that at least some of the traditions and legends connected with Mary and the Temple Mount that appear in the Muslim sources were transmitted by Christian mediation, including stories related to Mary’s childhood in the Temple. For example, both Muslim and Christian sources say that she received her food through divine intervention—directly from God, according to the Koran 3:32,96 and by the hand of an angel, according to the Protoevangelium of St. James 8:1.97

Some of these stories might have been drawn from the images attached to Mary as the Temple Mount or the Temple, the Holy of Holies, and other legends regarding the holy rock of the Shetiyya. Furthermore, images of Mary derived from the Jewish Temple continued to appear in Christian exegeses that circulated in Jerusalem as early as the fifth century and up to the eighth century and later.

Returning to the material aspect of the Kathisma, during the archaeological excavations three phases were distinguished and dated to, respectively, the fifth, sixth, and the first half of the eighth century. In the last phase, a niche was installed in the southern part of the ambulatory (fig. 8). Its southern orientation and date enable us to interpret this as a Muslim prayer niche, or a mihrab.98

Nevertheless, a Christian inscription in a mosaic floor, decorated with a cross, was found in one of the annexes. The inscription, deciphered and dated to the
nineth century by Leah Di Segni, is in accordance with the date of the pottery retrieved from within the plaster foundation of this mosaic floor. This indicates that the Christian presence in the Kathisma continued between the seventh and ninth centuries, even after the installment of a mosque inside the church. On this account, we may infer either that Christians and Muslims prayed side by side in the same building or that these were Christian converts to Islam who were apparently reluctant to abandon previous beliefs and attachments.

Chronologically, the third phase in the building of the Kathisma coincides with the period in which Muslims are known to have adopted sacred places of the Christian and Jewish communities in the Holy Land. Ibn al-Murajja (ca. 1030–40), who is renowned for having preserved and transmitted various traditions dated to the Umayyad and early Abbasid periods (the seventh to ninth centuries), located the birthplace of Jesus in three different sites: Jerusalem, Bethlehem, and the “Valley of Bethlehem.” Another tradition, transmitted by Ibn ʿAbd Rabbih (d. 940), locates the nativity of Jesus three miles from the mosque (of Jerusalem). The latter tradition, as well as the one about the Valley of Bethlehem, could refer to the Kathisma for two reasons: firstly, the Kathisma is located at a junction on the main ancient road between Jerusalem and Bethlehem, and was probably chosen for topographical convenience; secondly, the story of the Nativity in the Koran merges the birth of Christ with the labor pains Mary experienced before childbirth, since, according to the Koran, the two events happened in one and the same place. The relevant text appears in the Sura of Mary (Koran 19:23–26):

And throes [of childbirth] compelled her to betake herself to the trunk of a palm-tree. She said: Oh, would that I had died before this, and had been a thing quite forgotten. Then [a voice] called out to her from beneath her: Grieve not, surely your Lord has made a stream to flow beneath you: And shake towards you the trunk of the palm-tree, it will drop on you ripe dates: So eat and drink and refresh the eye...104

Around 913, Ibn ʿAbd Rabbih indicated the distance between Jerusalem and the birthplace of Jesus as “three miles away from the mosque [of Jerusalem].” This is the exact distance between Jerusalem and the Kathisma given by most Christian sources. As a result, Abbot Daniel, who visited the Holy Land around 1007–8, identified the site of the Kathisma, at the third mile on the road from Jerusalem to Bethlehem, as the site of Mary’s vision, in accordance with the account in the Protoevangelium.

Furthermore, a beautiful floor mosaic featuring three palm trees, laid out in the Umayyad phase of the church, was uncovered in the southeastern corner room, next to the inserted niche (fig. 9). Interpreted iconographically, the palm trees may obliquely refer to Mary’s birth pangs as described in the Koran and to her salvation by God, who provided the miraculous palm tree. The non-figurative manner in which the story is artistically presented coheres with the policy in early Islamic religious works of art of avoiding depictions of human figures. In a similar vein, follow Rosen-Ayalon’s proposal to interpret the crowned motifs in the Dome of the Rock as angels.

Also, the presence of Muslim worshippers in the Church of the Nativity in Bethlehem is reported in historical sources, primarily the writings of Eutychius, the bishop of Alexandria. He complained that in his day (before 939, according to Wilkinson112) the Muslims broke the status quo by holding public prayers in the southern apse of the Church of the Nativity, as well as by decorating it with an inscription in Arabic.

After the Muslim occupation of the Holy Land, the local, circulating palm tree legend was united with the story of the birth of Jesus. Indeed, it was the Muslims who reported the veneration of a specific, miraculous tree as the birthplace of Jesus. Around 951, al-Istakhri mentions a relic of the palm tree from which Mary had eaten, and circa 985 al-Muqaddasi identified the palm tree under which Jesus was born in Bethlehem. From Ibn al-ʿArabi of Seville (d. 1148), who visited the Holy Land shortly before the victory of the Crusaders, we learn that the palm tree from which Mary ate was in a cave in Bethlehem and that by December 1098 the tree had rotted and collapsed. According to Ibn al-ʿArabi, no relic of it had survived, due to the pilgrims’ custom of picking little pieces from it to take with them as souvenirs, in the belief that those pieces bestowed blessings (eulogia). These historical details indicate that the Muslim and Christian communities were well aware of and informed...
about local hallowing practices, and shared legends and beliefs that developed in and around the Christian holy places, including those relating to the sites of the Kathisma and the Church of the Nativity in Bethlehem, three miles apart. On the whole, one can deduce that the two communities shared not only aspects of material culture but also religious lore and experiences, as well as attachments to holy places that they were reluctant to abandon.

In fact, Wensinck and Johnstone have already commented that “[t]he undoubted parallels between the Kur’anic account and the material found in the apocryphal gospels do not, however, indicate direct dependence, but are more indicative of folklore aspects of religion.” Oleg Grabar recently remarked that parallels in decorative designs may relate the Kathisma and the Dome of the Rock, due to the particular importance of Mary in the Koranic message cited in the inscription on the wall mosaic of the Dome of the Rock.

This has already been pointed out in the preliminary archaeological report on the Kathisma. Detailed analyses of the Jewish origins of this motif were published by Kister, and the Judeo-Christo-Islamic manifestations of the motif and tradition of a prostrating tree, especially a palm tree, have been discussed in depth by Shoemaker and myself.

According to some sources, two men supervised the construction of the Dome of the Rock. One of them was Raja’ ibn Haywa from Beth-Shean, a renowned Muslim theologian and scholar, who also served as a political consultant to the Umayyad caliphs, from the reign of ’Abd al-Malik (r. 685–705) to that of his son Hisham (r. 724–47). Raja’ was an acknowledged authority on the loci sancti in the Holy Land. The other appointed supervisor was Yazid ibn Salim, who was a mawlâ (a Christian slave belonging to the caliph) and lived in Jerusalem while carrying out the task of building the Dome of the Rock. As residents of Jerusalem, both men
were familiar with the major churches of the city, particularly the concentric martyria. It is therefore not surprising that the plan they chose for the Dome of the Rock derives from the architecture of two accessible major churches in the area, viz., the Anastasis within the city and the Kathisma only three miles away. Evidently, they were not inhibited by any reluctance to borrow and adapt local architectural ideas from Christian sources for the new Muslim edifice they erected on the ruined site of the Jewish Temple, an act surely repugnant to the Christian Church in Jerusalem, and therefore a statement promoting Islam.

**CONCLUSIONS**

The architectural sources of the Dome of the Rock are to be found in the locally accessible innovations of Christian shrines at the time, specifically derived from the two most ancient and holiest churches, dedicated, on the one hand, to Christ and, on the other, to Mary as the Theotokos (“God Bearer,” surely a title not accepted in Islam)—the figure that in Christian exegeses was often envisaged in images drawn from the actual site on which the Dome of the Rock was being built, namely, the ancient Jewish Temple and the Holy of Holies.\(^\text{127}\)

This study of the historic and cultural background of Jerusalem and the cult of Mary in the Byzantine and Umayyad periods elucidates the intentions of the builders of the Dome of the Rock, who drew from local Christian material sources and spiritual means to construct a monument that transmitted an anti-Christian statement. For the Dome of the Rock was designed to surpass in beauty the shrines from which both its plan and architecture derives. Furthermore, it was meant to express the emergence of a new faith that rejects a basic tenet of Christian belief—the divinity of Christ—as well as the veneration of his mother, Mary, as the “God Bearer.”\(^\text{128}\) Indeed, it has been pointed out before\(^\text{129}\) that this message is expressed in the original inscription of the wall mosaic inside the Dome of the Rock and in the inscriptions on the bronze plaques that were taken down in the 1960s from above its north, east, and west entrances.\(^\text{130}\) The dispute over the divinity of Christ and the rejection of Mary as the Theotokos were, after all, two of the main areas of discord that separated Christianity from Islam as the new faith first reached the Holy Land. This was a time when Christian holy places could still be shared and their lore and beliefs carried over into Islam.

**Israel Antiquities Authority**

**Jerusalem, Israel**

**NOTES**

3. Ibid., 126.
6. I would like to thank Hilel Geva for the reference to the article by Islam and al-Hamad, and Mattia Guidetti for encouraging me to submit my paper to *Muqarnas*.
7. Personal communication, April 2007. I thank Prof. Elad for sharing his thoughts with me.
19. O. Grabar, *Shape of the Holy*, 109. I concluded that Grabar was referring to the octagonal Crusaders’ Church of the Ascension on the Mount of Olives, since he also related it to the octagonal form in Grabar, *Dome of the Rock*, 99, 101, fig. 34.
25. O. Grabar, *Dome of the Rock*, 101, fig. 34 (Church of the Ascension); 101, fig. 35 (Capernaum Church); 103, fig. 36 (Caesarea Maritima); 105, fig. 37 (Church of the Kathisma).
26. O. Grabar, *Dome of the Rock*, 101, fig. 34.
29. O. Grabar, *Dome of the Rock*, 103, fig. 36.
which was roofed by a dome. Perhaps this was the prototype of the Christian concentric martyria of the Holy Land?


42. O. Grabar, Dome of the Rock, 97.


44. Erik Wistrand, Konstantins Kirche am Heiligen Grab in Jerusalem nach den ältesten literarischen Zeugnissen (Göteborg, 1952).


52. Creswell, Origin of the Plan of the Dome of the Rock, 107–9, fig. 41.


55. Wilkinson, Jerusalem Pilgrims, 166, with references in footnotes.


67. Creswell, Early Muslim Architecture, 70, fig. 21.
68. Ibid.
69. The name of the type derives from Krautheimer’s dubbing—the “two-shell” church-type. Richard Krautheimer, Early Christian and Byzantine Architecture, 2nd ed. (New York, 1965), 53.
74. Wilkinson, Jerusalem Pilgrims, 152, fig. 2; Ernest Tatham Richmond, “The Church of the Nativity, the Plan of the Constantinian Building,” Quarterly of the Department of Archaeology of Palestine 6 (1938): 72, fig. 1; William Harvey, Structural Survey of the Church of the Nativity, Bethlehem (Oxford, 1935), plan B.
75. O. Grabar, Dome of the Rock, 97.
76. Ettinghausen, From Byzantium to Sassanian Iran and the Islamic World, 36.
83. Garitte, Le calendrier, 301.


92. Cunningham, “*Typology of Mary Theotokos.***” 52–62.


98. For descriptions of the archaeological evidence, see n. 30 above.


101. Ibid.


103. Ibid., 671 n. 9.


117. Ibid., 108.

118. Wensinck–[Johnstone], *EI2*, s.v. “Maryam.”


123. Ibid., 19.


125. P. Crone, *EI2*, s.v. “*Mawlawī.*”


127. Building the Dome of the Rock on the Temple Mount was to be understood as a contradiction of Christ’s prophecy in


For many historians, the story of Italy’s relation to the Dome of the Rock (fig. 1) only begins in the late fifteenth century, with the printing of illustrated guidebooks. In particular, the eyewitness representation of the Dome of the Rock—labeled the Temple of Solomon (Templum Salamonis) in Erhard Reuwich’s panoramic woodcut illustrating Bernhard von Breydenbach’s Peregrinatio in Terram Sanctam (Mainz, 1486)—is singled out as the starting point for a new realism in relation to the architecture of Jerusalem (fig. 2).1 In an oft-cited article of 1970 on representations of the Temple of Jerusalem in European painting before 1500, Carol Krinsky argued that before such pictorial realism in Northern Renaissance art there had not been any representations of the Dome of the Rock in Europe.2 Some dissenters have since recognized that the pervasive association of the Dome of the Rock with the Temple of Solomon may have caused Italian painters to depict the Temple as a polygonal centralized building,3 as in Duccio di Buoninsegna’s fourteenth-century depiction of the Entry into Jerusalem (fig. 3), or Pietro Perugino’s fifteenth-century Consignment of the Keys to St. Peter (fig. 4)—both of which predate the publication of Breydenbach’s Peregrinatio.4 But the overwhelming majority of scholars have followed Krinsky’s lead in maintaining that the Dome of the Rock with the Temple of Solomon may have caused Italian painters to depict the Temple as a polygonal centralized building,5 as in Raphael’s Marriage of the Virgin (fig. 5).5

Curiously, Richard Krautheimer’s famous theory of the conceptual rather than optical imitation of architectural form, first established in 1942 in his “Introduction to an ‘Iconography of Medieval Architecture,’” played no role in Krinsky’s theory.6 Krautheimer’s iconography, formulated in reference to the Anastasis (Resurrection) Rotunda of the Holy Sepulcher in Jerusalem (figs. 6–8) but easily extended to any famous building in the medieval period, might have explained how these pictorial representations of the Temple as a polygonal building could refer to the Dome of the Rock without immediately resembling it.

Krinsky and Krautheimer nonetheless agreed upon one important point: descriptions of the buildings of Jerusalem found in pilgrimage accounts evinced a level of imprecision and confusion typical of the lack of mimetic realism that pervaded all media in the medieval period—text, pictorial representations, and built architecture. Krinsky took this idea of medieval confusion to the extreme, arguing that pilgrimage accounts were so unclear that artists could not have learned anything from them.7 She characterized the European relation to the Dome of the Rock in this period in terms of uncertainty and misunderstanding vis-à-vis the true religious and historical identity of the Islamic monument. Krinsky’s insistence that the Dome of the Rock was never represented in European painting before the realism of Northern Renaissance art, combined with Krautheimer’s focus on the centralized Anastasis Rotunda as the preeminent architectural model in medieval Europe, has obscured the possibility of references to the Dome of the Rock in post-Crusade Italian visual culture.8 Illustrations of both the Dome of the Rock and the Holy Sepulcher appear in the Libro d’Oltramare (literally Book of Beyond the Sea, published in translation as A Voyage Beyond the Seas), the Holy Land guidebook of Niccolò da Poggibonsi, who made his journey between 1346 and 1350 (figs. 9–12).9 Modern scholars, including Krautheimer and Krinsky, have been unaware of these
Fig. 1. The Dome of the Rock, Jerusalem. (Photo: Kathryn Blair Moore)

Fig. 2. Erhard Reuwich, *Jerusalem* (detail). From Bernhard von Breydenbach, *Peregrinatio in Terram Sanctam* (Mainz, 1486). (Photo: courtesy of The Jewish National and University Library and The Hebrew University of Jerusalem, Dept. of Geography, Historic Cities Research Project)
Fig. 3. Duccio di Buoninsegna, *Entry into Jerusalem*. Panel from the back of the *Maestà*. Museo dell’Opera Metropolitana, Siena. (Photo: Scala/Art Resource, N.Y.)

Fig. 4. Pietro Perugino, *Consignment of the Keys to St. Peter*. The Sistine Chapel, Vatican. (Photo: courtesy of the Vatican Museums)
like the majority of Europeans, had knowledge of the appearance of the Holy Land primarily through a combination of verbal descriptions and pictorial precedents. Pilgrims like Niccolò da Poggibonsi described the architectural features of the Dome of the Rock—referred to as the *Templum Domini*—in connection with the Biblical events associated with the building, including Christ’s entry into Jerusalem and the Virgin’s marriage to Joseph. These were the scenes that Italian artists like Duccio (fig. 3) and Raphael (fig. 5) depicted in narrative painting.

In addition to exploring how Italians knew about the appearance of the Dome of the Rock before the publication of Breydenbach’s *Peregrinatio*, I would also like to suggest that the Italian reception of the image of the Dome of the Rock in this period was significantly informed by the politics of the Crusades. By the beginning of the eleventh century, many Christian pilgrims believed that the Dome of the Rock had been built by either Solomon or a Byzantine emperor rather than by an Umayyad caliph, ʿAbd al-Malik (r. 685–705), in the seventh century. But the idea that the Dome of the Rock and the Aqsa Mosque on the Temple Mount in Jerusalem were Christian buildings...
that had been perversely transgressed by Muslim idolaters only became prevalent in the late eleventh century, as a result of the propaganda campaign leading up to the First Crusade. At the sermon of Clermont in 1095, Pope Urban II described how Muslims had desecrated the Lord’s sanctuary in Jerusalem by erecting images of their gods in the Templum Domini. During the occupation of Jerusalem from 1099 to 1187, the Christian Crusaders claimed the Dome of the Rock as one of the preeminent churches of the Latin Kingdom of Jerusalem, and chroniclers celebrated the slaughter of the idol-worshipers who had defiled the Templum Domini. The image of the Dome of the Rock entered the Italian architectural imagination through this lens, and the use of the image continued to be entangled with the politics of the possession of Jerusalem through the Counter-Reformation period.

Undoubtedly, politics and mimesis go hand-in-hand throughout the history of the Dome of the Rock. This story could easily be extended back to the building’s initial construction at the end of the seventh century, and the religiously and politically charged appropriation of the most recognizable features of the nearby Anastasis Rotunda of the Holy Sepulcher by the Muslim con-
The story could likewise be applied to the twentieth century, and the use of the image of the Dome of the Rock in Palestinian textiles, on Israeli postcards, and in mosques in contemporary Germany. To presume that in the premodern period a lack of technological sophistication or accuracy of representation corresponded to a general state of medieval confusion fails to account for the sophistication with which Western Christians first appropriated the Dome of the Rock in the period of the Latin Kingdom of Jerusalem (1099–1187). During this time, an altar covered the rock, paintings of Christ and the Virgin—anathema to Muslims—were hung inside, and Latin inscriptions were affixed inside and out, perhaps even literally masking the original Arabic inscriptions. The actions of the Christian Crusaders suggest a politically motivated project to suppress signs of the Islamic identity of the building. The physical transformation of the Dome of the Rock into a Latin Christian church was the first stage in an ongoing process of translation that would ultimately culminate in the pictorial representations of the building as a Sienese-style Temple on the back of the Maestà (fig. 3) or a Roman-style Temple in the Sistine Chapel (fig. 4). Rather than reading the history of the Dome of the Rock’s relation to Italy in terms of failure (i.e., confusion, misidentification) until the suc-

Fig. 9. The Temple of Solomon. From Niccolò da Poggibonsi, *Libro d’Oltramare*. Florence, Biblioteca Nazionale Centrale, Ms. II. IV. 101, fol. 20v. By kind permission of the Ministero per i Beni e le Attività Culturali della Repubblica Italiana/Biblioteca Nazionale Centrale di Firenze. (Photo: courtesy of the Biblioteca Nazionale Centrale di Firenze)

Fig. 10. The Temple of Solomon. From Niccolò da Poggibonsi, *Libro d’Oltramare*. Florence, Biblioteca Nazionale Centrale, Ms. Panciatichi 78, fol. 31v. By kind permission of the Ministero per i Beni e le Attività Culturali della Repubblica Italiana/Biblioteca Nazionale Centrale di Firenze. (Photo: courtesy of the Biblioteca Nazionale Centrale di Firenze)
The post-crusade image of the Dome of the Rock in Italy 57

After the reconquest in 1187. From chroniclers we learn that by 1114–15 Augustinian canons had covered and enclosed the Rock with an altar. Contemporary Muslims in Jerusalem recorded the offending presence of images of holy figures like Christ and Mary in the Temple Domini, as well as a cross above the dome.22 The Dome of the Rock was formally dedicated as a church in 1141, and it was probably at this time that the inscriptions—as well as the ironwork screen encircling the Rock—were added.23 The inscriptions, consisting of Biblical passages and liturgical readings, asserted the Christian identity of the Temple Domini and were apparently found on both the interior and exterior of the building. Two contemporaries, John of Würzburg

cess of realistic images in Northern art, as in Breydenbach’s Peregrinatio (fig. 2), we might instead consider with what success the myth of the Christian identity of the building persisted in Italy through the sixteenth century.21

FROM JERUSALEM TO ITALY: THE DOME OF THE ROCK IN CRUSADER CHRONICLES AND PILGRIMAGE ACCOUNTS

Chronicles written by Crusaders in Jerusalem during the period of the Latin Kingdom are the only records of the many changes made to the appearance of the Dome of the Rock, which were entirely eradicated by Saladin

Fig. 11. The Temple of Solomon. From Niccolò da Poggibonsi, Libro d’Oltramare. Florence, Biblioteca Nazionale Centrale, Ms. Panciatichi 79, fol. 35r. By kind permission of the Ministero per i Beni e le Attività Culturali della Repubblica Italiana/Biblioteca Nazionale Centrale di Firenze. (Photo: courtesy of the Biblioteca Nazionale Centrale di Firenze)

Fig. 12. The Temple of Solomon. From Niccolò da Poggibonsi, Libro d’Oltramare. The Spencer Collection, The New York Public Library, Astor, Lenox and Tilden Foundations, Ms. Spencer 62, fol. 42r. (Photo: courtesy of The New York Public Library)
and Theoderich—both writing in the 1170s—recorded their content, including, for instance, “This is the house of God solidly built,” and “Well founded is the house of God above the firm rock” (Matthew 7:25), perhaps chosen to allude to the Rock itself.24

Theoderich’s account of the Templum Domini also included an extensive description of the major architectural features of the Dome of the Rock. He explained how the building was situated on an upper court above a lower court, and could be accessed by steps leading up from the Porta Aurea (Golden Gate) (fig. 6):

The temple itself is shown to be an octagon (octogonum) in the lower part; the lower part is ornamented until the middle with most noble marble and from the middle up to the top, on which the roof rests, is most beautifully decorated with mosaic work... The upper wall, however, encloses a narrower circle (angustiori circulo), sustained inside by supports, which, holding up a lead roof, at the top has a great ball and, above that, a gilded cross. The building is entered and exited through four doors, each door looking out to one of the four corners of the world. The church, moreover, rests upon eight square piers, [and] sixteen columns, and its walls and ceilings are nobly decorated by mosaic work. The circuit of the choir has four piers, or pillars, and eight columns, which hold up the inner wall, with its own lofty, vaulted roof.25

Theoderich’s Latin description of the Templum Domini was one of the first texts through which an Italian audience would have learned about the unique architectural features of the Dome of the Rock. Famous accounts, such as that of Theoderich, were copied many times throughout Europe.26

Pilgrims who described the buildings of Jerusalem in the thirteenth and fourteenth centuries, after the city had returned to Muslim control, similarly characterized the Templum Domini in the most essentializing terms, focusing on the octagonal shape of the building, the prominent dome, the orientation towards the cardinal points, and the two-storied elevation.27 Such pilgrimage accounts were written in Latin and, if illustrated, included only schematic maps of entire geographic regions. The first known Holy Land guidebook to be written in the Italian vernacular was created in the mid-fourteenth century by the Franciscan pilgrim Niccolò da Poggibonsi. Four previously unknown illustrated manuscript copies of this guidebook provide new evidence of how Italians might have imagined or remembered the appearance of the Holy Land, and the Dome of the Rock in particular, through the aid of such textual descriptions (figs. 9–12).

Niccolò da Poggibonsi began his pilgrimage in 1346, and over the course of four years he carefully recorded his experiences in Palestine, Syria, and Egypt on gypsum tablets that he carried with him.28 His description of the Templum Domini, like many aspects of his unique guidebook, was idiosyncratic: the building was characterized as possessing a round, hat-like dome above a larger substructure.29 In all four of the illustrated manuscript copies, the Templum Domini is represented as a domed, two-storied, centralized temple adjacent to—or perhaps in front of—a small, rectangular building and tower, representing the Aqsa Mosque. This seventh-century building, located near the Dome of the Rock on the Temple Mount in Jerusalem (fig. 6), was identified by Niccolò da Poggibonsi and most contemporary pilgrims as the Templum Salamonis. According to Niccolò, the Templum Domini, the Templum Salamonis, and the surrounding “piazza” comprised the area of the original Tempio di Salamone.30

Niccolò da Poggibonsi’s descriptions of the buildings of Jerusalem were copied many times in the fourteenth, fifteenth, and sixteenth centuries in unillustrated manuscripts, but at least one modern scholar hypothesized that the original version may have contained drawings.31 The oldest of the newly found illustrated manuscript copies, Ms. II. IV. 101 of the Biblioteca Nazionale Centrale of Florence (fig. 9), could be the manuscript made by Niccolò da Poggibonsi himself after his return to Italy in 1350, or an immediate copy of the otherwise lost original. Another of the illustrated copies, Ms. Panc. 78 of the Biblioteca Nazionale Centrale of Florence (fig. 10), which the scribe tells us was made from “the original itself,” was produced in 1453 in Florence.32 Either the latter or Ms. II. IV. 101 was copied in Florence in 1481—Ms. Panc. 79 (fig. 11)—and the other surviving illustrated copy, Ms. Spencer 62 of the New York Public Library (fig. 12), was made some time in the second half of the fifteenth century, perhaps in Fiesole.

The drawings of the Templum Salamonis and Templum Domini in the manuscript versions of Niccolò da
The post-Crusade image of the Dome of the Rock in Italy

Poggibonsi’s guidebook were the basis of the woodcut illustration of the same buildings in the first printed version, published anonymously in Bologna in 1500 by Iustiniano da Rubiera as the Viazo da Venesia... (fig. 13). The woodcut illustration of the Templum Domini in the 1500 Viazo da Venesia exemplifies the type of representation that has been marginalized in studies of the Temple of Jerusalem in European art because of its lack of mimetic accuracy in relation to the real Dome of the Rock. Unlike its manuscript precedents, the 1500 Viazo da Venesia is well known to modern scholars, but its illustrations have been regarded as fanciful creations with no historical value because of their lack of topographic accuracy vis-à-vis the real architecture of Jerusalem. The drawings of the earlier manuscript versions of the same guidebook indicate that the woodcuts of the 1500 Viazo da Venesia were not based on the actual topography of Jerusalem; rather, they were a continuation of a tradition of representing the buildings of the Holy Land as they were known through the original account of a pilgrim, Niccolò da Poggibonsi. Like Duccio’s or Perugino’s depictions of the Temple, these illustrations were not the result of an artist’s eyewitness experience of Jerusalem, but instead emerged from the textual culture of Holy Land pilgrimage.

TRANSFORMATIONS WITHIN ITALY: THE TEMPLE DOMINI IN NARRATIVE PAINTING

In the illustrated versions of Niccolò da Poggibonsi’s Holy Land guidebook, drawings of the buildings of the Holy Land are integrated into the text, leaving us no doubts about the identity of each architectural image. In contemporary narrative painting, artists illustrated the city of Jerusalem as the backdrop for events in the lives of Christ, Mary, and other saints, but which specific buildings—if any—artists might have intended to represent is seldom agreed upon. The most interesting example of a pictorial representation of a building in Jerusalem whose identity remains unresolved is perhaps also the most controversial. The possible meaning of the polygonal temple found in Duccio’s Entry into Jerusalem on the back of the Maestà (fig. 3), installed on the high altar of the cathedral of Siena in 1311, has been debated for decades. Rather than being a background “pavilion” with no symbolic meaning, I would suggest that Duccio’s Temple resembled well-known textual descriptions of the Templum Domini, repeatedly identified by pilgrims as part of Christ’s entry into Jerusalem.

Several years ago, Hayden Maginnis observed that there are three remarkable features in Duccio’s Entry into Jerusalem, which have no known precedent in other depictions of that scene. The first was the almost free-standing doorway to the right of Christ (the Gate of...
Jehoshaphat), the second the spiny, dead tree behind Christ (the tree cursed by Christ in Matthew 21:17–19), and the third the steep incline, which Christ is shown to be climbing (from the Valley of Jehoshaphat). Maginnis argued that the source for these unusual elements was not previous visual depictions of the scene, but instead textual descriptions of Christ’s Jerusalem, composed by pilgrims in the thirteenth and fourteenth centuries. These observations led Maginnis to suggest that the source for the polygonal Temple to the left of the Porta Aurea in Duccio’s scene was descriptions of the Dome of the Rock in the same pilgrimage reports. Maginnis came to the conclusion that Duccio “must have consulted someone who, either in person or in the reading of pilgrims’ accounts, knew the topography of the Holy Land.”

There is yet another detail in Duccio’s version of the scene that I would also suggest could have derived from accounts of Jerusalem—whether known through written texts or the first-hand reportage of pilgrims returned to Italy. Some pilgrimage guides specified that there were trees between the Porta Aurea and the Tempio Domini, from which boys pulled down branches when Christ entered Jerusalem (fig. 6). This is precisely the moment that Duccio depicted in the panel on the back of the Maestà. I would further suggest that other similar depictions of a polygonal Temple near the Golden Gate in fourteenth- and fifteenth-century Italian painting might have also ultimately derived from an awareness of how pilgrims described Jerusalem. Some closely related examples are to be found in the frescoes of the Lower Church of San Francesco in Assisi (1320s), in the Baroncelli Chapel of Santa Croce in Flor-
ence (1330s), and in the predella of a triptych made by Taddeo di Bartolo for the cathedral of Montepulciano (ca. 1401). The association of the polygonal building behind the Porta Aurea with the Dome of the Rock in depictions of Christ’s entry into Jerusalem was finally made explicit in one late sixteenth-century print (fig. 14), in which Christ is shown approaching the Porta Aurea and behind the identity of the polygonal Temple is indicated by an inscription immediately below the building: quivi fu il Tempio di Salamone (here was the Temple of Solomon).

DOME OF THE ROCK OR HOLY SEPULCHER?

Although there are many similar representations of an octagonal Temple adjacent to the Golden Gate in fourteenth-century Italian paintings of Jerusalem, I have chosen that of the Templum Domini in Duccio’s Entry into Jerusalem (fig. 3) not only because it is the earliest, but also to highlight the problematic nature of attempting to account for manifestations of the Dome of the Rock in Italian art. The default assumption among scholars of Italian painting is that a centralized building in a depiction of Jerusalem most likely alludes to the Anastasis Rotunda of the Church of the Holy Sepulcher, the round chapel surrounding the site of Christ’s burial, first built by the emperor Constantine (r. 306–37) in the fourth century.

This common assumption ultimately results from the uncritical reduction of Krautheimer’s famous theory that the Anastasis Rotunda was frequently “copied” in medieval Europe. For instance, in his classic survey of art and architecture in Italy from 1250 to 1400, first published in 1966, John White asserted that the “temple-baptistery,” as he called it, from the Maestà reflected “an iconographically significant reference to the centralized church of the Holy Sepulcher in Jerusalem.” White’s description of the Temple as a baptistery indicated that his statement was based on Krautheimer’s theory that Italian baptisteries were patterned after the Anastasis Rotunda of the Church of the Holy Sepulcher in Jerusalem because of their association with the death and resurrection of Christ.

If we turn to pilgrimage accounts of the twelfth through fourteenth centuries, we find that the entry into Jerusalem was never mentioned in connection with the Church of the Holy Sepulcher (this building, after all, did not exist during the life of Christ). Instead, the entry into Jerusalem was repeatedly described as occurring at the Porta Aurea, immediately adjacent to the Templum Domini. For instance, the early twelfth-century account of Saewulf refers to the Porta Aurea, through which Christ entered Jerusalem on Palm Sunday, as being located on the east side of the Templum Domini. Likewise, in every illustrated version of Niccolò da Pogibonsi’s guidebook—in both manuscript and print form—the illustration of the Templum Domini immediately follows that of the Porta Aurea (figs. 15–17).

In pilgrimage accounts from the twelfth century onward, the most important association of the Rotunda of the Holy Sepulcher was as the site of the tomb of Christ and of His Resurrection (anastasis meaning resurrection in Greek). The most common term used to describe the form of the building was rotundus. Like many Latin terms, this was a flexible one, whose meaning could vary from “circular” to “round” to “centralized.” Indeed, many descriptions of the Templum Domini included references to the forms of that building as both rotundus and possessing eight faces or exterior angles. In contrast, the Anastasis Rotunda was never described as having many sides, but only simply as rotundus. In order to account for why many buildings that apparently copied the Anastasis Rotunda in Europe were polygonal rather than circular, Krautheimer had argued that the circle and polygon were interchangeable in the medieval mind. This assumption of a lack of geometric precision among medieval writers is typical of how the mechanisms governing the transmission of knowledge about buildings like the Anastasis Rotunda and the Dome of the Rock have been glossed over in discussions of architectural “prototypes” and “copies.”

If we turn to Niccolò da Pogibonsi’s guidebook, we have an opportunity to reconsider how knowledge of the appearance of the Anastasis Rotunda, and of the Church of the Holy Sepulcher in general, was transmitted to Italy. In contrast to the single illustration and description of the Templum Domini in the same guidebook, the description of the various elements of the Church of the Holy Sepulcher spans several folios and includes a series of separate illustrations, best preserved in Ms. II. IV. 101, Ms. Spencer 62, and the printed...
version of 1500. \(^{49}\) First we see an illustration of the “green stone” (pietra verde) marking the place where Christ was anointed and embalmed, which would have been found in the courtyard in front of the eastern façade. This is immediately followed by an exterior view of that façade, with its two portals below and three vaults above (fig. 18). \(^{50}\) Inside, the “round chapel” (cappella rotunda) and the Aedicule (the structure enclosing the Tomb of Christ) are illustrated separately. \(^{51}\) These are followed by pictures of other chapels, including those marking Mount Calvary, Golgotha, the four columns bewailing the passion of Christ, and the Holy Fire, and then by a drawing of the tower (campanile) of the church.

As depicted by Niccolò da Poggibonsi in the mid-fourteenth century, the Holy Sepulcher was a complex amalgamation of a series of holy sites, each marked by a different vault. \(^{52}\) At one point, Niccolò remarks that, “[v]erily the Church of Jerusalem can hardly be described or represented as it is (non si potrebbe scrivere, ne figurare), for so great is the structure, that he who has not seen it, cannot picture it in his mind…” \(^{53}\) Indeed, the many illustrations and lengthy descriptions of the different parts of the church indicate the lack of a clear image of the architecture associated with the sepulcher of Christ.

Due to the overwhelming intricacy of the surrounding church complex, the Anastasis Rotunda never possessed the iconic presence within Jerusalem that the Dome of
the symbolic and spiritual connections between the two key ritual spaces of the Latin Kingdom of Jerusalem.\textsuperscript{55}

None of this is to say that the idea of the Holy Sepulcher, and in particular the Aedicule, was not important to Italian visual culture in the period of pilgrimage.\textsuperscript{56} But in the decades since Krautheimer first published his famous study, scholars have been suggesting revisions for his theory of medieval architectural iconography, varying from subtle modifications to complete rejection.\textsuperscript{57} It has been proposed that some of the centralized buildings that Krautheimer identified as exclusively copying the Anastasis Rotunda may have instead had a more multivalent symbolic meaning, possibly alluding to more than one building, or type of building, at the same time.\textsuperscript{58} This would allow for the possibility that a centralized building—or a representation of one—could simultaneously recall both the Anastasis Rotunda and the Templum Domini, as could have perhaps been the case with Pisa’s baptistery, for example.\textsuperscript{59}

In reference to the enigmatic polygonal building on the back of the Maestà (fig. 3), we might consider that instead of regarding the building as representing only the Templum Domini or only the Anastasis Rotunda, contemporaries could have interpreted it in a variety of ways. First, there would have been a general recognition of the building’s similarity to local Tuscan baptisteries, as well as of other contemporary Tuscan elements of the cityscape in the panel.\textsuperscript{60} Second, certain viewers would have realized that the city depicted was Christ’s Jerusalem, a distant place to which many pilgrims had traveled, and some might have also remembered that the most significant sites associated with the life of Christ—including the Templum Domini and the Anastasis Rotunda—were centralized buildings. More literate viewers might have known that Christ’s entry into Jerusalem was often described as occurring at the Porta Aurea near the Templum Domini. We should also keep in mind that the viewer’s interpretation may have differed from the artist’s original intention, which may have itself been specific or composite. In other words, while Krautheimer argued that a variable set of architectural features may all refer to a single building, it is important to consider the possibility that a single architectural feature may have been mediated by differing associative memories, in different contexts, and for different viewers.

the Rock has always retained. Although Christian access to the interior of the Dome of the Rock was limited after the loss of Jerusalem to Saladin in 1187, the building continued to dominate the skyline, with its seemingly immutable forms elevated within a vast piazza visible from great distances. In contrast, the complex of the Holy Sepulcher lacked a clear form within the cityscape. Moreover, the building often changed, having first been begun by Constantine in 326, destroyed by the Fatimid caliph Hakim in 1009, rebuilt by the Byzantine emperor Constantine IX Monomachus in 1048, and further modified during the Latin Kingdom of Jerusalem, when the domed crossing and double portal were added around 1144.\textsuperscript{54} This new dome challenged the iconographic centrality of the Rotunda. It has also been suggested that the forms of the crossing were created in reference to the Templum Domini (and the double portal in reference to the Golden Gate) to emphasize

Fig. 17. The Golden Gate, Jerusalem. (Photo: Kathryn Blair Moore)
of the Dome of the Rock in Italy. For the most part, any possible allusion to the Dome of the Rock within the field of Italian architecture tends to be treated as an unintended consequence resulting from the misidentification of that building by pilgrims as the Temple of Solomon. By contrast, in other regions of European art, the Dome of the Rock is often considered a possible architectural model due to its Solomonic fame, in relation to, for instance, Charlemagne’s Palatine Chapel at Aachen and Templar churches in England, France, and Spain (although such interpretations are nonetheless controversial).

One possible example of an attempt to mimic the forms of the Dome of the Rock in Italy can be found in a sixteenth-century project to reconstruct the Temple of Solomon at the Sacro Monte di Varallo as an octagonal church. Rather than being an immediate copy of the Dome of the Rock, I would argue that the reference to the Jerusalemic building was instead indirect, having been mediated by previous pictorial representations of the Temple as an octagonal building—such as those of Duccio, Perugino, Taddeo di Bartolo, and others. The reconstruction of the Temple of Solomon at the Sacro Monte di Varallo was part of a larger plan to reproduce Christ’s Jerusalem in its entirety in the Piedmont region of Italy. The Franciscan Bernardino Caimi had initiated the project at the end of the fifteenth century, after personally witnessing the growing difficulty of pilgrimage to the Holy Land. The Franciscan idea to reconstruct Jerusalem on Italian soil is an interesting counterpart to the Franciscan Niccolò da Poggibonsi’s book project. Each was a response to the increasing obstacles to pilgrimage, and an attempt to create a comprehensive set of representations of the architecture of the Holy Land that would be accessible to Italians—one in built architecture, the other in written format.

By the mid-sixteenth century, this ambitious project was still incomplete, and an architect—apparently Galeazzo Alessi—was commissioned to create a design plan for the rest of the holy sites. The proposals were presented in a manuscript entitled Libro dei Misteri (Book of Mysteries), comprising a series of ground-plans, elevations, perspectival views, and commentary dating from 1565 to 1569. In an inscription within the
octagonal groundplan of the Temple of Solomon (fig. 19), the architect explained:

I decided to make the present plan with an oblong shape in order to get as close as I possibly could to the description of the Temple of Solomon (Tempio di Salamone) in the sacred scripture; I wanted then to make the outer part an octagonal shape (figura ottangola), to accommodate the impression that many have, who have very often seen in various places the said temple depicted with an octagonal shape. And to please one and the other, I made the plan of the said temple as you see it.66

The Temple, had it been built, would have been based upon a set of previous pictorial and textual representations, rather than copying a building the architect had seen himself. This proposal for the Temple of Solomon is a rare written record of how, throughout the sixteenth century, representations of the Templum Domini (or Tempio di Salamone, as it came to be called in the vernacular by the sixteenth century) were mediated by previous representations, rather than by direct visual knowledge of the building in Jerusalem.67

The architect’s commentary indicates that the idea of the Temple’s octagonality was not directly connected to the real topography of Jerusalem. Instead, the idea emerged from what had become, by the sixteenth century, a long tradition of representing the Templum Domini in Italian narrative painting and pilgrimage guidebooks, since the time of Duccio. When the architect imagined the scene of the entry into Jerusalem in the Libro dei Misteri—conflating the historical Jerusalem with the project for its reconstruction at the Sacro Monte di Varallo—the Temple of Solomon was represented as a two-storied octagonal building, just as in Duccio’s version of the scene over two hundred years earlier (fig. 20).

Neither the Temple in the entry into Jerusalem from the Libro dei Misteri nor the Temple on the back of the Maestà in Siena immediately resembles the Dome of the Rock in Jerusalem. Nonetheless, both images are ultimately linked to the original as representations of representations, connected by a schematic, Euclidean ideal that was easily transferred across various media—whether text, pictorial image, or built architecture. In the proposal for the Temple of Solomon at the Sacro Monte di Varallo, the primary symbolic features of the building were reduced to ideal forms—as the octagon and rectangle in the groundplan—and the same forms were conceptualized in the textual commentary inscribed within. The immediate juxtaposition of this inscription with the schematic groundplan suggests how what was originally a textual model for the buildings of the Holy Land could shift from written form to image to building and back, while still retaining its meaningfulness within the context of pilgrimage culture. If we consider that textual descriptions were originally the primary sources for Holy Land architecture, that pictorial representations first drew upon this body of

![Fig. 19. Galeazzo Alessi, Plan for the Temple of Solomon at the Sacro Monte di Varallo. (After Galeazzo Alessi, Libro dei Misteri: Progetto di pianificazione urbanistica, architettonica e figurativa del Sacro Monte di Varallo in Valsesia (1565–1569), ed. Stefania Stefani Perrone, 2 vols. [Bologna, 1974], 2:117)](image)
knowledge, and that later pictorial and built representations drew on a combination of such sources—then perhaps these complex modes of transmission across media can account for what Krautheimer perceived as a cultural disregard for precision in architectural mimesis.

In the end, Alessi’s project for the Temple of Solomon at the Sacro Monte di Varallo was never realized. The Temple was redesigned as a basilical church by a new architect, perhaps Pellegrino Pellegrini, in the period of Carlo Borromeo’s involvement in the administration of the Sacro Monte immediately preceding his death in 1584. Alessi’s project had been an attempt to resolve the tradition of depicting the Templum Domini as an octagonal building in paintings with the new Counter-Reformation emphasis on the text of the Bible as the primary source for reconstructing the Temple of Solomon. Had it been built, the exterior would have been octagonal but the interior would have been a rectangular hall with the proportions described in the Bible. Borromeo, a cardinal of the Catholic Church and the most aggressive proponent of reform to combat Protestantism, had argued that centralized churches were inappropriate due to their connections with pagan antiquity. He must, then, have disapproved of Alessi’s imaginatively hybrid plan.

Borromeo’s involvement in the demise of Alessi’s plan for an octagonal Temple at the Sacro Monte di Varallo should perhaps be taken as an indication of the broader effects of Counter-Reformation politics on the image of the Temple of Solomon in Italy. In Holy Land guidebooks published in Rome from the mid-sixteenth century onward, authors consistently made the argument that the Dome of the Rock could not be the Temple of Solomon described in the Bible. For instance, in 1610 Bernardino Amico argued that the current Temple (fig. 21), which appeared spherical inside and octagonal outside, could not be the Temple of Solomon, because that building was “long and narrow” (lungo e stretto). In Venice, on the other hand, the image of the Temple of Solomon as an octagonal building nonetheless continued to proliferate, especially in the sixteenth- and seventeenth-century editions of Niccolò da Poggibonsi’s guidebook, published anonymously as the Viaggio da Venetia al Sancto Sepolchro… (fig. 22), as well as in the Mishneh Torah and Haggadah, also printed in Venice in the same period. Indeed, the Venetian Republic’s unique connections to the Ottoman Empire, support of its Jewish populations, and resistance to Papal and Jesuit control may have provided a political motivation for the promotion of that image. In contrast to the notion that the image of a centralized Temple of Solomon disappeared by the end of the sixteenth century as a result of a new archaeological awareness, the same image of the octagonal Temple was replicated in over sixty editions of the Viaggio da Venetia al Sancto Sepolchro… published in the Veneto until the final edition of 1800.
Despite its prominent place in the imagination of Italian pilgrims, the possible connections of the Dome of the Rock to Italian art and architecture of the fourteenth through sixteenth centuries have traditionally been dismissed as historically insignificant. Just as in Krinsky’s article of 1970, which established confusion and misunderstanding as the basis of the European relation to the Dome of the Rock, Helen Rosenau’s 1979 book *Vision of the Temple: The Image of the Temple in Judaism and Christianity* assumed that many Italian depictions of the Temple of Jerusalem as polygonal did not relate to the Dome of the Rock for the simple reason that they do not immediately resemble that building. In both studies, Italian depictions of the Temple of Jerusalem were overshadowed by Northern versions, whose accuracy in portraying the Dome of the Rock, as in the Eyckian *Three Marys at the Tomb* or in Breydenbach’s *Peregrinatio*...
(fig. 2), is more impressive, according to modern standards of photographic verisimilitude. Indeed, many of the Italian representations of the Temple of Jerusalem, as in narrative paintings by Duccio and Perugino (figs. 3 and 4) or in illustrations of pilgrimage guidebooks like the Viazo da Venesia al Sancto Iherusalem... (fig. 13), do not fit into the story of the development of European pictorial arts, regarded as one of progress towards the objective mirroring of the visible world.

In contrast to the study of representations of architecture in European painting, the study of built architecture has moved away from the idea of mimesis as an exact copying of the visual appearance of another building. Paul Crossley has observed that architecture is a "non-representational art which permits no straightforward connection between 'form' and 'content.'" Vittorio Ugo has similarly suggested that the object of reference in architectural "copying" is not the visible, perceptible phenomenon, but something intellectual, "something very close to 'text': "One can thus speak of mimesis not only in relation to a perspective, a 'view' or a three-dimensional model, but also for the plan, section, or sketch, which normally does not have any corresponding point in 'natural' visual perception." Ugo’s observations apply to Alessi’s explanation for the symbolism of the octagonal groundplan of the Temple of Solomon at the Sacro Monte di Varallo (fig. 19). The architect’s commentary in the Libro dei Misteri indicates that what linked the project of the Temple of Solomon with the idea of an octagonal Temple based upon the Dome of the Rock was not a visible correspondence but an intellectual one.

Perhaps this textual modality of architectural mimesis is not unique to the relationship of buildings among themselves, but may also extend into the field of pictorial representations of architecture. I would argue that before the advent of the illustrated printed book in the late fifteenth century, when distant buildings of great fame were often never seen but nonetheless well known through the verbal accounts of pilgrims, architectural models were not generated by reference to the visual appearance of a building as it was known to the painter, the architect, or the viewer. The idea that visual representations of Holy Land architecture, and the Templum Domini in particular, emerged from the textual culture of pilgrimage seems best supported by the illustrations accompanying such pilgrimage accounts—as we have seen in copies of Niccolò da Poggibonsi’s guidebook (figs. 9–12), which were not known to Krinsky, Rosenau, or Krautheimer.

In many ways it was Krautheimer’s iconography of medieval architecture that established the possibility of one building referring to another, not through an immediate visual resemblance, but instead through some conceptual correspondence recognized by the viewer. Textual descriptions of the Holy Sepulchre found in medieval pilgrimage accounts were also central to Krautheimer’s iconography, but only in as much as they seemed to demonstrate a pervasive imprecision vis-à-vis geometrical shapes and architectural forms in the medieval period. Perhaps Krautheimer’s idea of the creation of architectural symbolism through the non-optical imitation of forms can accommodate the idea of a more active role for texts in the transmission process. Pilgrimage accounts can explain how a set of formal features became linked to key events in the lives of Christ and Mary. The architectural attributes of both the Anastasis Rotunda and the Dome of the Rock were described together with a list of the major holy events associated with each building. Krautheimer had argued that the centralized plan, conical roof, and internal pattern of piers and columns of the Anastasis Rotunda became symbols of the death and resurrection of Christ. In the case of the Dome of the Rock, its most prominent features—a polygonal groundplan and dome—would connect it to the Solomonic history of the site (as Alessi’s commentary indicates, fig. 19), to events in the life of Christ, such as the entry into Jerusalem (fig. 3), or to events in the life of the Virgin, such as her marriage to Joseph (fig. 5).

Despite the many insights and nuances found in Krautheimer’s theory, his idea of architectural copying has often been oversimplified and misapplied, resulting in persistent misunderstandings about the symbolism of centralized buildings in Italy. We have already seen evidence of this in assumptions commonly made about centralized buildings in pictorial representations, such as Duccio’s Entry into Jerusalem. With respect to built architecture, the scope of Krautheimer’s idea of architectural copying was greatly magnified by Günter Bandmann, in the 1951 Mittelalterliche Architektur als
Bedeutungsträger (first translated into English in 2005 as Early Medieval Architecture as Bearer of Meaning). Bandmann sought to establish Krautheimer’s idea of architectural copying as the primary modus operandi of medieval architects, arguing that the creation of architectural form in the medieval period depended on copying a prototype, especially in order to invoke its associations with holy events. According to Bandmann, “[t]he prototype is broken down into its typical parts… and these parts are regrouped in new ways, in the copy.” The passive voice in this statement is telling. Bandmann never explained how this process of decomposition of the prototype occurred. In many ways, Bandmann’s theory represents the most extreme exaggeration of Krautheimer’s ideas, and in doing so reveals its most problematic assumptions and lacunae. Most importantly, Bandmann’s ideas highlight Krautheimer’s failure to address the question of transmission and the corresponding assumption that any differences between a copy and its prototype were due to the medieval disregard for precision in the mimetic process. I would suggest that the breaking down of a building into a set of schematic features could have resulted from the process of verbal transmission—during which the spatial relation and scale of those features would be lost.

Although Krautheimer’s famous idea of schematic copying has dominated interpretations of architectural mimesis in Italy, the idea of the verbal transmission of architecture has been well established in the field of Islamic architecture since Jonathan Bloom published his seminal article “On the Transmission of Designs in Early Islamic Architecture” in 1993. Bloom’s inquiry began with a very simple observation:

Historians of architecture often speak of how one building “influenced” or was “modeled” on another, but these easy phrases often conceal an imprecise understanding of the mechanisms by which the transfer of ideas and forms was effected.

His primary examples were Umayyad mosques, whose major features can be expressed verbally, but whose visual similarities cannot be established as easily through comparisons of photographic images of the same buildings. Bloom’s conclusion was that words, rather than images, were used to express and transmit the essential characteristics of famous buildings in the early periods of Islamic architecture.

Along the same lines, Finbarr Barry Flood has argued that some Mamluk buildings copied the most famous Umayyad monuments as they were known through verbal descriptions. His examples included the thirteenth-century Tomb of Qala’un in Cairo, whose octagonal format, ambulatory, and dome referred to the most famous features of the Dome of the Rock, even as its decoration alluded to the best-known characteristics of the Great Mosque of Damascus. More recently, in studies of Islamic architecture in India, Flood has emphasized a poststructuralist framework for understanding the relation of copy and original in architecture. Flood has deliberately turned away from Krautheimer’s assumption of a self-evident system of prototypes and copies and, through the lens of translation theory, argued that the copy is not a reproduction but a recreation of the original. Flood has emphasized that in studies of architectural mimesis our search for the source—i.e., the prototype—imposes an artificially direct system of relations between two geographically distant buildings. From this perspective, none of the representations considered here of the building we call the Dome of the Rock are truly “copies” or “reproductions” of that building. Instead, each translation of the original into a different medium is innovative and transformative, and, perhaps most importantly, informed by previous representations, which could in turn momentarily function as the original or source.

I would also suggest that a matrix of representations could constitute the source for the copy, rather than the three-dimensional building itself. This may better account for the imprecise relation between prototype and copy that Krautheimer identified. Although his approach to copies of the Holy Sepulcher may at times appear to have been one-dimensional, it is important to remember that Krautheimer presented his observations as an introduction to an iconography of medieval architecture—as a starting point, rather than a final and definitive statement on the subject. His theory of the symbolic relations of medieval buildings can easily sustain the addition of another variable, the Dome of the Rock, and the expanded multidimensionality of a system, in which the various representational media—text,
pictorial image, and building—overlap and interact. In fact, Krautheimer himself hinted at a more complex system than is usually implied in references to his theory:

Usually, however, the interrelations between the symbolical significance of a geometrical pattern and the ground plan of a building are not so plain. The process is of a much more intricate nature; probably the relation between pattern and symbolical meaning could be better described as being determined by a network of reciprocal half-distinct connotations.86

We might more thoroughly explain this “network of reciprocal half-distinct connotations” as a system of representations whose relations are interdependent, but rarely overtly stated. The indication of the interrelation of textual, pictorial, and built representations of the Temple of Solomon from the *Libro dei Misteri* seems particularly significant in this context, as the architect’s commentary suggests that the representational content of certain architectural forms in a new project may be based not upon reference to a single known building, but upon a network of representations in different media—including, as he tells us, various pictorial images of an octagonal Temple of Solomon as well as the description of the Temple in the Bible.

**CONCLUSION**

In the period before the illustrated printed guidebook, the holy sites of Jerusalem had a reality within the textual realm that was independent of an immediate visual experience. From this perspective, there are no representations of the Dome of the Rock *per se* in Italy in the fourteenth or fifteenth centuries, but only images emerging from an awareness of that building in pilgrimage accounts, where it was identified variously as the *Templum Domini* or *Tempio di Salamone*. It would be easy to discount the significance of the attempts to visualize that building, as in Niccolò da Poggibonsi’s guidebook, Duccio’s *Entry into Jerusalem*, or Perugino’s fresco in the Sistine Chapel. But even after the advent of the illustrated printed book at the end of the fifteenth century, this indirect visibility based in the textual culture of Holy Land pilgrimage accounts continued to affect the formation of images relating to Jerusalem-mic architecture, as in the woodcut illustration of the *Templum Domini* in the 1500 *Viazo da Venesia* or in Galeazzo Alessi’s project to reconstruct the Temple of Solomon in Italy. To discount these various pictorial and built representations of the Dome of the Rock as either visually unsophisticated vis-à-vis the standards of photographic realism or historically misguided in relation to the real identity of the ultimate prototype would fail to account for the sophistication with which text, image, and building interfaced in the genesis of architectural meaning.

*Institute of Fine Arts, New York*

**NOTES**

*Author’s note:* The materials in this article were first presented in papers delivered at two conferences in 2008: the annual conference of the College Art Association (“The Politics of Architectural Mimesis in Italy and the Islamic World: The Case of the Dome of the Rock”) and the annual meeting of the Society of Architectural Historians (“Dome of the Rock or Holy Sepulcher: The Problem of Identifying the Primary Referents of Centralized Buildings in Medieval Italy”). The suggestions of the session organizers, Stefano Carboni, Alan Chong, and Areli Marina, as well as of the discussants and participants—especially Gülru Necipoğlu and Alick McLean—helped immensely. At the Institute of Fine Arts, Priscilla Soucek first suggested the topic, and my two advisers, Marvin Trachtenberg and Barry Flood, have both suggested new sources and perspectives. This article will be a chapter in my forthcoming dissertation, “Italian Copies of Holy Land Architecture: The Illustrated Versions of Niccolò da Poggibonsi’s *Libro d’Oltramare*.” All funding for the research involved in this project was provided by a generous six-year fellowship from the Graduate Scholarship Program of the Jack Kent Cooke Foundation.


3. A centralized building is characterized by a predominantly circular or polygonal disposition of walls radiating around a central point. See Staale Sinding-Larsen, “Some Functional and Iconographic Aspects of the Centralized Church in the

4. Hayden Maginnis, "Places Beyond the Seas: Trecento Images of Jerusalem," *Source: Notes in the History of Art* 13, 2 (Winter 1994): 1–8, esp. 7 n. 8, where Maginnis observes that: “[t]he octagonal shape of the Temple in Duccio’s and Pietro’s images may resemble that of Italian baptisteries, but, I contend, its source lay in the octagonal form of the Dome of the Rock that pilgrims mistakenly but persistently confused with the Temple of the Lord, the Temple of Jerusalem. The question of Western depictions of the Temple is discussed by C. H. Krinsky….Krinsky, however, fails to note these two examples that are among the earliest Italian painted evidence of that confusion and foundation stones in the road that would lead to Perugino’s *Giving of the Keys to Saint Peter.*” Maginnis’s examples are the Temples in the *Entry* scene on the *Maesta* and in the frescoes of San Francesco in Assisi (see below). See also Juan Antonio Ramírez, "Evocar, reconstruir, tal vez soñar: Sobre el Templo de Jerusalén en el arte medievoitaliano," *Anuario del Departamento de Historia y Teoría del Arte* 2 (1990): 131–50. Sinding-Larsen made the argument that the Dome of the Rock was a significant architectural model in the Italian Renaissance due to its associations with the Virgin Mary. He argued that this affected not just pictorial representations of the Temple of Solomon—as in depictions of the Virgin’s marriage by Perugino and Raphael—but also the conception of churches dedicated to the Virgin. Sinding-Larsen, "Functional and Iconographic Aspects of the Centralized Church," 203–52.


7. “We have seen that the Bible and ancient Jewish texts offered descriptions of the Temples, and that medieval pilgrims and travelers offered conflicting ones—descriptions, in fact, of Moslem buildings. What is perhaps most remarkable is the fact that seldom did a medieval or Renaissance artist take any of these written descriptions into account. The discrepancies among the various reports might have prompted artists to ignore them all, but that is not a satisfactory reason. The explanation has to do with the artists’ reliance on pictorial, not written sources. They depended not upon historical truth or contemporary opinion but upon conventions for representing buildings that were passed along in the workshops.” Krinsky, “Representations of the Temple of Jerusalem,” 7.

8. The only Italian pictorial representations of the Temple of Solomon that are universally agreed to include significant references to the Dome of the Rock are found in the sixteenth-century works of Vittore Carpaccio. These images were based upon Reuwich’s panoramic view of Jerusalem. See David Marshall, “Carpaccio, Saint Stephen, and the Topography of Jerusalem,” *The Art Bulletin* 66, 4 (Dec., 1984): 610–20.


11. Perugino’s 1481 depiction of the Temple of Solomon in the Sistine Chapel closely relates to his later painting of the Temple in the *Marriage of the Virgin*, begun around 1500 for the cathedral of Perugia: see Pietro Scarpellini, *Perugino* (Milan, 1984), 254. Raphael’s famous depiction of the same scene was undoubtedly related to Perugino’s version. For his discussion of Perugino’s, Raphael’s, and Carpaccio’s depictions of the Temple of Solomon in the context of the Renaissance “ideal temple,” see Marshall, “Carpaccio, Saint Stephen, and the Topography of Jerusalem,” 610–11. The commission for the *Marriage of the Virgin* at Perugia’s cathedral had initially been given to Pinturicchio, who was also probably involved in the painting of Perugino’s Sistine frescoes. In 1501, Pinturicchio executed a series of frescoes for the *Cappella Bella* of Santa Maria Maggiore in Spello, including a depiction of Christ disputing among the doctors in front of the Temple of Jerusalem, rendered as an octagonal domed building. This was yet another Biblical event that pilgrims believed had occurred in the Dome of the Rock. See Giordana Benazzi, ed., *Pintoricchio a Spello: La Cappella Baglioni in Santa Maria Maggiore* (Milan, 2000), 13.

Until the Crusader conquest of Jerusalem in 1099, Christian access to both the Dome of the Rock and the Aqsa Mosque was limited, and the Biblical events once associated with the Temple Mount were celebrated in the Church of the Holy Sepulcher (first constructed by Constantine in the fourth century), only to shift to the Templum Domini and Templum Salamonis once they were in Christian possession. See Sylvia Schein, “Between Mount Moriah and the Holy Sepulchre: The Changing Traditions of the Temple Mount in the Central Middle Ages,” Traditio 40 (1984): 175–96. On the associations of the Church of the Holy Sepulcher with the idea of the Temple of Jerusalem before the Crusader conquest of 1099, see Robert Ousterhout, “The Temple, the Sepulchre, and the Martyrion of the Savior,” Gesta 29, 1 (1990): 44–53. Carole Hillenbrand has likewise argued that the Dome of the Rock only became truly famous throughout Syria and Egypt as a result of both Nur al-Din’s and Saladin’s propaganda campaigns, which were intended to rouse popular support for reclaiming Jerusalem from the Christian Crusaders. See Carole Hillenbrand, The Crusades: Islamic Perspectives (Chicago, 1999), 150–60.


Even if pilgrims had differing ideas about who constructed the Dome of the Rock, the Rock was consistently believed to have been a part of the original Temple of Solomon. For instance, the pilgrim Fetellus, who made his journey around 1130, indicates that opinions on the precise date of the Dome of the Rock’s construction varied: “Some say that the [destroyed Temple of Solomon] was rebuilt by Saint Helen at the time of Emperor Constantine; others say that [it was rebuilt] by Emperor Justinian, others by a certain sultan of Memphis, in Egypt, in honor of Allah, that is, the highest God, as the inscription in the Saracen language evidently shows. In fact, at the arrival of the Franks one did not see painted in [the Templum Domini] anything of the Law [i.e., Mosaic dispensation] or in Greek. The current Temple can be called the fourth. In the penultimate, Jesus was circumcised.” De Sandoli, Itinera Hierosolimitana, 2:100–101. (My translation from the Latin.) For an example of a much later pilgrim who made similar arguments—in this case that the Dome of the Rock had been built in the reign of Saladin—see the account of Pietro Casola, who journeyed to the Holy Land in 1494. M. Margaret Newett, Canon Pietro Casola’s Pilgrimage to Jerusalem in the Year 1494 (Manchester, 1907), 252–53: “It appears to me that there are no vestiges remaining of the said Temple [of Solomon], and that this Mosque was built according to the will of the Moors after the Christians had lost Jerusalem, which was in the reign of Saladin, Lord of Babylon, and they have never been able to recover it since.”


See, for instance, Shelagh Weir, Palestinian Costume (Austin, Tex., 1989). See also Tim Jon Sommerling, Israeli and Palestinian Postcards: Presentations of National Self (Austin, Tex., 2004). Regarding contemporary European mosques, see that of Gelsenkirchen, pictured in “Germany’s Turkish Minority: Two Un amalgamated Worlds,” The Economist (3 April 2008). For imitations of the Dome of the Rock in the United States, see, for example, the Islamic Center of America in Dearborn, Michigan, and the Islamic Cultural Center in Tempe, Arizona, both catalogued in Omar Khalidi and David Donnellon, Moscheen in den USA und Kanada (Frankfurt, 2006).

Deborah Howard reached a similar conclusion at the end of her study of the relation of Venetian architecture to Islamic architecture in the medieval period: “Forms were rarely copied, not only because of the mutations resulting from the imperfect transmission of information, but also because the recipient culture had to impose authority on the image…rather than mere imitation of the prototype…” Deborah Howard, Venice and the East: The Impact of the Islamic World on Venetian Architecture, 1100–1500 (New Haven, 2000), 218.

See Samer Akkach, “The Poetics of Concealment: Al-Nabulusi’s Encounter with the Dome of the Rock,” Muqarnas 22 (2005): 110–27. Akkach discusses a seventeenth-century Muslim who believed that the Dome of Rock had been built by the Crusaders during the Latin Kingdom of Jerusalem—an interesting counterpart to the fifteenth-century Casola’s belief that the Dome had been built by Saladin. See Newett, Canon Pietro Casola’s Pilgrimage, 252–53.

Al-Harawi writes: “As for the Dome of the Rock, the Franks had built it on a church and an altar….They had adorned it with pictures and statues and they had appointed in it places for monks and a place for the Gospel….They put in it over the place of the [Prophet’s] foot a small gilded dome with raised marble pillars and they said it was the place of the Messiah’s foot….In it were pictures of grazing animals fixed in marble and I saw amongst those depictions the likenesses of pigs.” As quoted in Peters, Jerusalem: The Holy City, 349–50. Al-Harawi also described images of Biblical
figures that he identified as Solomon, David, and, above one of the doorways, the Presentation of Christ (p. 318).

23. Peters, Jerusalem: The Holy City, 291–317. After the Templars were founded in 1120, the canons gave them a place to conduct their services in the Templum Domini. It is well known that the Templars used the image of the Templum Domini, rendered as a colonnaded, centralized building with a bulbous dome on a drum, on their thirteenth-century seals. See Daniel H. Weiss, “Hic est Domus Domini firmiter edificata: The Image of the Temple in Crusader Art,” in The Real and Ideal Jerusalem in Jewish, Christian, and Islamic Art: Studies in Honor of Bezalel Narkiss on the Occasion of his Seventieth Birthday, ed. Bianca Kühnel (Jerusalem, 1998), 210–17.

24. Folda, Art of the Crusaders. 252.


27. One of the earliest examples of such a description is given in the account of Peter the Deacon, writing in 1137. Although he himself never traveled to Jerusalem, he knew of the Templum Domini through previous pilgrimage accounts, to which he would have had easy access as the Librarian of Monte Cassino. Peter dedicated his description of the holy places to his Abbot, who was about to go on pilgrimage: “To the east, below Mount Calvary, is the Templum Domini, in another part of the city, which was built by Solomon. It has four doors, the first on the east, the second on the west, the third on the south, and the fourth on the north, which signify the four quarters of the world, and outside it has eight corners, each one turning a corner of twelve paces. In the middle of the Temple is a great mountain surrounded by walls, in which is the Tabernacle; there also was the Ark of the Covenant, which, after the destruction of the Temple, was taken away to Rome by the Emperor Vespasian. On the left side of the Tabernacle the Lord Jesus Christ placed his foot, on the occasion when Symeon took him in his arms, and his footprint remains there exactly as if it had been made in wax. And on the other side of the rock is the opening of the Tabernacle, into which people go down by twenty-two steps....” John Wilkinson, Joyce Hill, and William F. Ryan, Jerusalem Pilgrimage, 1099–1185 (London, 1988), 212–13. Regarding the Tabernacle, see n. 30 below.

28. “[F]or I thought within myself and in my soul decided not to depart from the place until I had seen all, as you shall find written. And not to fail, from day to day I wrote upon a pair of gypsum tablets which I carried by my side.” Niccolò da Poggibonsi, Voyage Beyond the Seas, trans. Bellorini and Hoade, 105.

29. “A large piazza lies beyond this gate, which is very beautiful and square and is enclosed by a wall; and in the middle is the Templum Domini, which the prophet David commenced and Solomon completed: but it has been destroyed three times and rebuilt; and beside it to the south is the Templum Salomonis, which is covered with lead. The Templum Domini is very beautiful exteriorly, and appears a marvel, with a round dome like a hat, while as it descends it grows larger, with very fine windows. How it is within, I know not, because the cursed Saracens have made of it a mosque; and he who would enter it, will deny the faith or be sawn in two.” Niccolò da Poggibonsi, Voyage Beyond the Seas, trans. Bellorini and Hoade, 47. Marco di Bartolommeo Rustici copied Niccolò’s description of the Templum Domini almost word for word in his own personal guidebook, produced in the 1440s in Florence and now known as the Codex Rustici. Marco, however, misinterpreted the description of the dome being like a hat (cappello) as referring to a chapel (cappella): “The Tempio di Domine is beautiful from the outside and is a marvel to see, and it is all round and the chapel is made of three faces with beautiful windows and columns” (fol. 199r). Marco may have been referring to the octagon’s appearance of “three faces” when viewed from a single vantage point. This is my translation from a transcription of the Italian made by Kathleen Olive for “Creation, Imitation, and Fabrication: Renaissance Self-Fashioning in the Codex Rustici” (PhD diss., University of Sydney, 2004).

30. The spelling of Solomon in Latin and Italian in this period varies—Templum Salamonis or Solomonis, and Templio di Salamone or Salomone—sometimes within a single manuscript or book. The meaning of the term Templum Salamonis is not clear in the sources. Many pilgrims seem to have believed that the Aqsa Mosque had been the Palace of Solomon, and some historians of pilgrimage literature have argued that templum could refer to a palace as well as a temple. See Wilkinson et. al., Jerusalem Pilgrimage, 28. Like other pilgrims, Niccolò da Poggibonsi described the Temple of Solomon (Tempio di Salamone) as comprising the entire Temple Mount—referred to as a “piazza”—including the Porta Aurea, Templum Domini, and Templum Salamonis. The description of these three buildings is the subject of the chapter on the Tempio di Salamone in the Libro d’Oltremare: see Niccolò da Poggibonsi, Voyage Beyond the Seas, trans. Bellorini and Hoade, 47. Like many pilgrims, Niccolò does not give any further details on the Templum Salamonis, simply describing its location (south of the Templum Domini) and its lead roof. There is no evidence of Italian pilgrims believing that the Aqsa Mosque constituted the entirety of the Temple of Solomon. Whatever variations there may have been in the identifications of the buildings on the Temple Mount, the rock and cave at the center of the Templum Domini were almost always identified as the place of the Holy of Holies, containing the Ark of the Covenant (1 Kings 8:6–9). According to the Bible, Moses had originally built the Tabernacle (tabernaculum) to enclose the Holy of Holies (sanctum sanctorum), and Solomon built the Temple in Jerusalem according to the dimensions of the Tabernacle (Wisdom 9:8). I have never seen a pilgrimage account that locates the site of the Holy of Holies or Tabernacle in the Aqsa Mosque. For an example of a later pilgrim who identified the Rock with the Holy of Holies, see the late-fifteenth-
31. At the beginning of the twentieth century, Girolamo Golu-
bovich argued that certain statements in the guidebook
indicated that the original version must have contained
drawings, e.g., “[A]nd that they may be the better under-
stood, I shall represent them as they appear, exactly as the
holy places are.” As quoted in Girolamo Golubovich, ed.,
Biblioteca bio-bibliografica della Terra Santa e dell’Oriente
francescano, dal 1346 al 1400 (Rome, 1921), 4. Bellarmino
Bagatti, in the introduction to Voyage Beyond the Seas, the
English translation of the guidebook published in 1945,
refuted Golubovich’s theory, stating that “it remains to be
proved that Niccolò over and above his descriptions of
the places, also made drawings of the places to adorn his book.”
Niccolò da Poggibonsi, Voyage Beyond the Seas, trans. Bel-
lorini and Hoade, xxvii.

32. The inscription identifying the copyist is found on the
back of the title page of Ms. Panc. 78: “This book of Pagolo
del Pagone was copied 20 May 1453 from the original
itself.” For the Italian, see Luigi Gentile, I Codici Palatini
(Rome, 1889), 132–33, where the manuscript is known as
Ms. Patatino 106. See the same for the copyist’s inscrip-
tion in Ms. Panc. 79, which is known as Ms. Patatino 54.
These two manuscripts, like Ms. II. IV. 101, were used by
Alberto Bacchi della Lega to create the 1881 text of the Libro
d’Oltramare. He cited these three copies among the ten Flo-
rentine manuscripts that he consulted, but made no mention
of their drawings. Bacchi della Lega refers to Ms. Panc. 78
and Ms. Panc. 79 by their old collocations, namely, “Codici
Palatini...2. No 54, già Pianciati...3. No 106, già Pincipi-
tachi...” See Alberto Bacchi della Lega, Libro d’Oltramare

33. For a facsimile of the 1500 edition, see Armando Petrucci
and Franca Petrucci, eds., Viazo da Venesia al Sancto Iteru-
salem (Rome, 1972). For a listing of the later editions, see
Röhrich, Bibliotheca Geographica Palaeasinae, 158–59.
C. D. M. Cossar argued that the illustrations of a unique
fifteenth-century German translation of the guidebook
(British Library, Ms. Egerton 1900) were the basis of the
woodcuts of the 1500 Viazo: C. D. M. Cossar, The German
Translation of Niccolò da Poggibonsi’s Libro d’Oltramare
(Göppingen, 1985). Until now, this was presumed to be the
only copy of Niccolò da Poggibonsi’s guidebook that was
ever illustrated. I would argue, however, that the illus-
trations in the German translation were copies of the drawings
in the previous Italian manuscripts, and that certain aspects
of the illustrations in the German translation preclude the
possibility that it was the source for the Viazo’s woodcuts.
For instance, the illustration of the Templum Domini
and Templum Salomonis in the German manuscript is separated
into two different drawings, back-to-back on a single page
(fols. 52r and 52v). First, on fol. 52r, the Templum Salomonis
is represented as a multistoried tower, while on fol. 52v the
Templum Domini is represented as a domed temple. The
woodcut in the Viazo, however, represents the two build-
tings together in a single illustration, just as in the Italian
manuscript versions (Ms. II. IV. 101, fol. 20v; Ms. Panc.
79, fol. 35r; Ms. Panc. 78, fol. 8v; and Ms. Spencer 62, fol.
42r). See also John Lowden’s entry on Ms. Egerton 1900 in
the British Library’s online catalogue of “Treasures Known
and Unknown in the British Library” (http://www.bl.uk/
catalogues/illuminatedmanuscripts/TourKnownF.asp).
Although he did not know of the existence of the illustrated
Italian versions, Lowden argued in this catalogue that the
drawings of Ms. Egerton 1900 could not have been the basis
of the woodcut illustrations of the 1500 Viazo da Venesia,
concluding “that the Italian version with woodcuts printed
at Bologna in 1500 was based on a lost model.”

34. See Petrucci’s introduction to the facsimile of the Viazo, as
well as Bellarmino Bagatti’s introduction to Voyage Beyond
the Seas, the English edition of the Libro d’Oltramare, in
which the woodcuts are characterized as drawings emerging
from the illustrator’s imagination: Petrucci, ed., Viazo da
Venesia, xi–xvi; Niccolò da Poggibonsi, Voyage Beyond the

35. See, for instance, Florens Deuchler, “Duccio Doctus: New
541–49. Deuchler argued that Duccio’s textual source was
Flavius Josephus’s popular De bello iudaico (On the Jewish
War), written in the first century A.D. Deuchler suggested
that the description could have easily been conflated with
the medieval “iconographic tradition” of representing the
Temple as an octagonal building (p. 548).


38. Hayden B. J. Maginnis, Painting in the Age of Giotto: A His-
torical Reevaluation (University Park, Pa., 1997), 113.

39. We see this in at least two anonymous accounts, one dat-
ing from twelfth century, the other from the thirteenth:
“[T]here is the Templum Domini in which is a great rock,
and above the rock was the ark of the Lord….Between the
temple and the Porta Aurea were trees from which they
took palm branches and threw them in the street when God
was going by amidst palm branches.” De Sandoli, Itinera
Hierosolymitana, 3:92–93. “From there one comes to the
Porta Aurea through which Christ entered [Jerusalem] Palm
Sunday when, sitting upon an ass, he was received. There,
just as far as an arrow shot, is the Templum Domini, in which
there are four entrances and twelve doors…. [The Templum
Domini] is magnificently made as a round building (opere
rotondo)…. Between the temple and Porta Aurea were trees
from which boys pulled branches when the Lord sat upon
(All translations from the Latin are my own.)

40. It is also important to mention that Duccio depicted the
Temple in four other scenes found on the Maestà. In both
the Presentation in the Temple and Christ Disputing with
the Doctors, the building is represented from the interior.
As Maginnis had observed, details in both scenes—including
the capitals and voussoirs of the arches—indicate that
they are both views into the same building, the Temple of
Maginnis had also argued that the octagonal form of the Temple, as depicted from the exterior in both the *Temptation on the Temple* and *Funeral Procession of the Virgin*, allows the viewer to recognize that this is the same building as in the *Entry* scene. Maginnis, “Places Beyond the Seas,” 1. The octagonal Temple in the *Entry* scene is by far the largest and most detailed, while the exterior views in both the *Funeral Procession* and *Temptation* are reduced, syncopated representations of the same building—both have fewer windows, for example. It is also worth mentioning that the association between the *Templum Domini* and the Temptation of Christ may have derived from contemporary pilgrimage accounts. For instance, John of Würzburg includes in his lengthy description of the *Templum Domini* a reference to how Christ stood above the pinnacle of the Temple when he was tempted by the devil. De Sandoli, *Itinerarum Hierosolymitana*, 2:236. Another example of this association can be found in an anonymous thirteenth-century account: “From there one comes to the Golden Gate through which Christ entered Palm Sunday, when he was sitting upon an ass. There, at just an arrow’s shot, is the *Templum Domini*, in which are four entrances and twelve doors….That which was by the Babylonians first destroyed was afterwards by the Romans faithfully made in a centralized form….Nonetheless they have an image of Muhammad in the temple and do not permit any Christians to enter. In that temple, the blessed Virgin had been given over to Joseph….In that temple, the Virgin had been given by his parents to Simeon….There, even above the pinnacle of the temple, he ascended, where the devil tempted him…..” De Sandoli, *Itinerarum Hierosolymitana*, 3:352–54. (My translation from the Latin.)

41. Maginnis had himself suggested that the octagonal temple in the Assisi fresco probably also connected to the topography of Jerusalem as it was known in pilgrimage accounts. He related this to the Franciscan dedication of the church. The Franciscan dedication of Santa Croce in Florence is also significant in this context—perhaps Niccolò da Poggibonsi, a Franciscan, had seen one or both of these frescoes depicting Jerusalem before he left Tuscany. For Montepulciano, see Diana Norman, *Siena and the Virgin: Art and Politics in a Late Medieval City State* (New Haven: Yale University, 1999), 192. For an interpretation of the Solomonic symbolism of the octagonal Temple in Taddeo Gaddi’s frescoes, see Marvin Trachtenberg, “Architecture and Music Reunited: A New Reading of Dufay’s ‘Nuper Rosarum Flores’ and the Cathedral of Florence,” *Renaissance Quarterly* 54, 3 (Autumn, 2001): 740–75. Trachtenberg argued that the fourteenth-century design of the octagonal domed crossing of Florence’s cathedral was based upon the representation of the centralized *Templum Domini* adjacent to the Golden Gate in the frescoes of the Baroncelli Chapel. The artist, Taddeo Gaddi, was a member of the committee that finalized the design of the cathedral’s crossing in the 1360s. If this was indeed the case, then this would be an important precedent for Galeazzo Alessi’s design of the Temple of Solomon as an octagonal church at the Sacro Monte di Varallo, which, he tells us, was based upon both well-known paintings of the Temple as an octagonal building and the Biblical description of the Temple as a rectangular one (see below). For more on the symbolism of fourteenth-century Florentine architecture in the context of the idea of a New Jerusalem, see Marvin Trachtenberg, “Scénographie urbaine et identité civique: Réflexion sur la Florence du Trecento,” *Revue de l’Art* 102 (1993): 11–31.

42. This is from a large sheet combining a map of the Holy Land with a view of contemporary Jerusalem (*Ritratta con parte del suo circuito secondo che hoggidi si uede dalla parte d’oriente*), printed from copperplate in Rome, ca. 1590, by Nicolo van Aelst of Brussels. For some explanations as to why the Dome of the Rock was to be referred to as the *Tempio di Salamone*, see n. 67 below.


45. The illustration of the Golden Gate is located on fol. 20r in Ms. II. IV. 101, fol. 40r in Ms. Spencer 62, fol. 8v in Ms. Panc. 78, and fol. 34r in Ms. Panc. 79.

46. For instance, John of Würzburg: “[T]he *Templum Domini* has a round form (*formam habet rotundam decentem*), rather a rounded octagon (*immo circulariter octogonam*), that is, having eight angles in a circle (*octo angulos habentem in circuitu*)…..” De Sandoli, *Itinerarum Hierosolymitana*, 2:236. Fulcher of Chartres compares the *Templum Domini* with the Sepulcher noting that both are centralized, “rotund” (*rotundus*) buildings, but emphasizes that only the Sepulcher has an opening in the top: “In the same city [as the Holy Sepulcher], one finds the *Templum Domini*, built in a round form (*opere rotundo compositum*). The church of the Sepulcher of the Lord is similarly of round form (*forma rotunda similiter*), but it is not covered; instead, it is always open…..” De Sandoli, *Itinerarum Hierosolymitana*, 1:110. (My translations from the Latin.)

47. See, for instance, the 1335 description of the Augustinian Jacopo da Verona. This account is known through a copy dated to 1424, which omitted a groundplan of the Sepulcher that had apparently been included in a previous version. The 1424 copy includes a rough sketch of the sacred places on Mount Sinai, but leaves blank spaces on two other pages, apparently intended for a drawing of a map and a drawing of the Holy Sepulcher, as the text indicates: “The Sepulcher is wondrously built: there is no other church in the world built in such a way….” I have described it in the way I know. And afterwards, I will explain even as it is drawn…..” This statement is followed by a blank page in the 1424 copy, and the description then continues: “[T]hat Sepulcher…is in the form of a small round chapel (*in una parva capella rotunda*)…..” Jacopo da Verona, *Liber peregrinationis*, ed. Ugo Monneret de Villard (Rome, 1950), 25–26. (My translation from the Latin.) The drawing was perhaps intended to be like the groundplan of the circular Rotunda included in
the printed version of Santo Brasca’s guidebook, first published in Milan in 1481. Deborah Howard published this 
groundplan in *Venice and the East*, 205.

48. “It seems as though circle and polygon were interchangeable 
throughout the Middle Ages”; “The ‘indifference’ towards 
precise imitation of given architectural shapes prevails 
throughout these ‘copies’ of the Holy Sepulchre”; “This 
inexactness in reproducing the particular shape of a definite 
arquitectural form, in plan as well as in elevation, seems to 
be one of the outstanding elements in the relation of copy 
and original in medieval architecture”. Krautheimer, “Intro-

49. Both Ms. Panc. 78 and Ms. Panc. 79 of the Biblioteca Nazio-
nale Centrale di Firenze are missing several folios, which 
have been replaced with modern blank pages. The beginning 
of the guidebook, including the section on the Church of the 
Holy Sepulcher, is entirely missing from Ms. Panc. 79.

50. “Regard how the holy Church, within which is the holy 
Sepulchre of Christ, is set upon a plain, facing east; and in 
front has two doors facing south; in front of it is a beautiful 
piazza; one door is walled up; the other, which opens, stands 
two steps from the one walled up. The doors are arched, 
vaulted and worked with beautiful columns of green, red, 
and white porphyry. Above the arch of the said door which 
opens, there is a figure of the Blessed Virgin with the child 
in arms, and it is mosaic work….” Niccolò da Poggibonsi, 
*Voyage Beyond the Seas*, trans. Bellorini and Hoade, 12.

51. “[T]here is nothing explicit in the architectural form of any 
of these buildings [i.e., Baptisteries] to establish a link with the 
Holy Sepulchre. On the other hand, there would seem to 
have been a general, typological association of the octago-
nal baptistery with a common form of late Roman imperial 
mausoleum, and this would have emphasized the association 
between baptism and death.” Ousterhout, “The Temple, the 
Sepulcher, and the Martyrion of the Savior,” 52.

52. Only the illustration of the exterior of the Church of the Holy 
Sepulcher in Ms. II. IV. 101 includes all three vaults in the 
drawing. These are reduced to two in Ms. Spencer 62, and 
to a single dome in the 1500 *Viazo da Venesia*. Moreover, 
in Ms. II. IV. 101, the southernmost vault is represented as 
a cone with an opening in the top—suggesting an attempt 
to represent the unique shape of the conical vault of the 
Anastasis Rotunda. For this and other reasons, I would argue 
that the drawings in Ms. II. IV. 101 may have been created 
by Niccolò da Poggibonsi himself, who spent four months 
living in the church complex while in Jerusalem.

53. Niccolò da Poggibonsi, *Voyage Beyond the Seas*, trans. Bel-
lorini and Hoade, 21.

54. Ousterhout has noted that the Crusader church of the Holy 
Sepulcher had so many disjunctions as a building “that 
Robert Venturi included its plan as an illustration in his 
semenal book *Complexity and Contradiction in Architecture*. 
It hardly stands comparison with the clarity of its chief com-
petitor in the city, the Umayyad Dome of the Rock.” Robert 
Ousterhout, “Architecture as Relic and the Construction of 
Sanctity: The Stones of the Holy Sepulchre,” *Journal of the 
10.

55. Kenaan-Kedar, “Symbolic Meaning in Crusader Architec-
ture.”

56. See J. E. A. Kroesen, *The Sepulchrum Domini Through the 

57. “[T]here is nothing explicit in the architectural form of any 
of these buildings [i.e., Baptisteries] to establish a link with the 
Holy Sepulchre. On the other hand, there would seem to 
have been a general, typological association of the octago-
nal baptistery with a common form of late Roman imperial 
mausoleum, and this would have emphasized the association 
between baptism and death.” Ousterhout, “The Temple, the 
Sepulcher, and the Martyrion of the Savior,” 52.

58. For example, see Juan Antonio Ramírez, *Edificios y sueños: 
Ensaios sobre arquitectura y utopia* (Madrid, 1991), 49.

59. See Alick McLean, “Italian Architecture of the Late Middle 
Ages,” in *The Art of the Italian Renaissance: Architecture, 
Sculpture, Painting, Drawing*, ed. Rolf Toman (Cologne, 
1995), 16–21.

60. In particular, the representation of the Golden Gate would 
perhaps have been interpreted in terms of Siena’s own *Porta 
SOLARIA*. On Palm Sunday, this gate stood for the Golden 
Gate in processions that symbolically welcomed Christ into 
Siena. See Chiara Frugoni, *A Distant City: Images of Urban 
Experience in the Medieval World*, trans. William McCuaig 
(Princeton, N.J., 1991), 28. See also Wolfgang Braunfels, 
*Mittelalterliche Stadtbaukunst in der Toskana* (Berlin, 1953), 
85.

61. Deborah Howard has argued that the Dome of the Rock may 
relate to the church of Santa Fosca on the island of Torcello 
in Venice, rebuilt around 1100. Howard, *Venice and the 
East*, 213–25. See also Deborah Howard, “Venice and Islam 
in the Middle Ages: Some Observations on the Question of 
59–74. The church of Le Zitelle in Venice, dedicated to the 
presentation of the Virgin (like the seventeenth-century 
Santa Maria della Salute), was interpreted in relation to the 
forms and Biblical associations of the Dome of the Rock by 
André Corboz, “Sur les Zitelle, le Temple et les façades à 
intersection,” in *Fünf Punkte in der Architekturgeschichte:*

63. For a general introduction to the Sacro Monte di Varallo and the Libro dei Misteri, see Questi sono li Misteri che sono sopra el Monte de Varalle, ed. Stefania Stefani Perrone (Varallo, 1987). For a related interpretation of this project as modeled on the Dome of the Rock, see Ramírez, “Evocar, reconstruir, tal vez soñar,” 136–37.

64. See Wharton, “Fabricated Jerusalem: Franciscans and Pious Mountains,” in Selling Jerusalem, 49–96. She does not discuss the Libro dei Misteri.


67. The explanations for why the Dome of the Rock came to be referred to as the Tempio di Salamone in the sixteenth century vary. The Latin label given to the building in Reuwich’s panorama in Breydenbach’s Peregrinatio of 1486—Templum Salamonis—may have contributed to this shift from Templum Domini to Tempio di Salamone. Perhaps the most interesting evidence of the overlapping of these terms is found in the printed editions of Niccolò da Poggibonsi’s Holy Land guidebook. In the 1500 Viaggio da Venetia, the illustration of the Templum Salamonis and Templum Domini—referring to the Aqsa Mosque and Dome of the Rock—was presented in a single woodcut, based upon the previous manuscript drawings (see above). But in the 1518 Viaggio da Venetia, and subsequent editions, this illustration was replaced with a bird’s-eye view of an octagonal, onion-domed temple, based upon Reuwich’s illustration of the Templum Salamonis (here referring to the Dome of the Rock, not the Aqsa Mosque). This woodcut is repeated twice within a single book, first labeled the Tempio di Salamone, then labeled the Templum Salamonis Templum Domini—as it had been in the 1500 Vazio. See fig. 22 for an example of one of these woodcuts.

68. Alessi, Libro dei Misteri, 1:43–45.


70. “Plan and elevation of the Temple called Solomon’s. This design is a Temple, which having been built in the place where that of Solomon stood, has also usurped the name; and of the previous one there is not the least vestige, except the esplanade, having been destroyed fifteen times and completely sacked. The former was long and narrow, this is round inside and outside it has eight corners. In a word the truth is that it is not the ancient one, nor a part of it, from the great difference between the one and the other.”


72. This political context may help explain the decision to allude to the Dome of the Rock in Venice’s most prominent seventeenth-century church, Santa Maria della Salute, constructed in the period when the Jesuits were expelled from Venice. See Howard, Venice and the East, 215. See also Andrew Hopkins, Santa Maria della Salute: Architecture and Ceremonies in Baroque Venice (Cambridge, 2000). On the Jesuits’ role in establishing the Bible as the source for reconstructing the image of the Temple of Solomon, see Jaime Lara, “God’s Good Taste: The Jesuit Aesthetics of Juan Bautista Villalpando in the Sixth and Tenth Centuries B.C.E.,” in The Jesuits: Cultures, Sciences, and the Arts, 1540–1773, ed. John W. O’Malley (Toronto, 1999), 506–21.

73. See Rosenau, Vision of the Temple, 33, where she characterizes the medieval depictions of the Temple not in relation to the real topography of Jerusalem as known to pilgrims, but as meaningless images resulting from “abstract design.”


75. This is not to say that there have not been many attempts to move beyond the idea of mimesis as an objective mirroring or copying of visual experience in the study of Western art. See, for instance, András Horn, “The Concept of ‘Mimesis’ in Georg Lukács,” British Journal of Aesthetics 14, 1 (1974): 26–40.


77. “In architecture...mimesis consists then in a form of homology that conserves fundamental structures, the ‘form’ that uniquely and critically identifies the work, its scheme, its intrinsic properties. In this framework, the specificity of the model will owe to the pertinence of the choice of the elements that define the work in its precise individuality and whose syntactic relations are conserved in every transformation...” Vittorio Ugo, “Mimesi,” in Temi e codici del disegno d’architettura, ed. Roberto de Rubertis, Adriana Soletti, and Vittorio Ugo (Rome, 1992), 17–18. (My translation from the Italian.)


79. Ibid., 50.

80. “Representations of buildings in medieval sculpture and painting appear to confirm the peculiar relation between copy and original in medieval architecture....Like the copies they show the disintegration of the prototype into its single elements, the selective transfer of these parts, and their reshuffling in the copy.” Krautheimer, “Introduction to an ‘Iconography of Medieval Architecture,’” 14.


82. Ibid., 23.


84. Ibid., 64.

85. “[T]he consumption of preexisting architectural forms might be seen as a dynamic form of production rather than a deficient form of reproduction. In this way the mosques might be viewed not as synchronic products of a finished event, but as constantly (re)produced by a potentially open-ended series of displacements and interpretations mediated and negotiated by multiple chains of actors and agents in specific contexts. This approach replaces a backward-oriented (and often ideologically charged) source-mongering with a more forward-looking emphasis on innovation and mediation.” Finbarr Barry Flood, “Lost in Translation: Architecture, Taxonomy, and the Eastern ‘Turks,’” Muqarnas 24 (2007): 79–115, 107–9.

MIDDLE BYZANTINE AESTHETICS OF POWER AND THE INCOMPARABILITY OF ISLAMIC ART:
THE ARCHITECTURAL EKPHRASEIS OF NIKOLAOS MESARITES

An early thirteenth-century historical treatise, The Palace Revolt of John Komnenos by Nikolaos Mesarites, an author of the middle Byzantine period (ca. 843–1204), contains a passage that briefly describes an Islamic-style building, the Mouchroutas, which was part of the imperial palace complex in Constantinople (see Appendix). The author emphatically states that the structure was the work of “a Persian hand,” that is to say, it was not a Byzantine interpretation of an Islamic building but was fabricated by craftsmen of Islamic, specifically Seljuk, origin. The name of the hall, Mouchroutas, is thought to derive from the Arabic word makhrūṭa (cone), and presumably referred to the chamber’s distinctive ceiling, which, judging from Mesarites’s description, had the faceted, honeycomb structure of a muqarnas vault. Mesarites reports that the surface of the ceiling depicts “Persians in their various costumes,” suggesting that it was decorated with “princely cycle” imagery. Therefore, the building evoked Islamic models in both name and form.

Scholars typically treat the passage as a descriptive document upon which to base hypothetical reconstructions of the Mouchroutas. While the archaeological potentials of the ekphrasis are unusually rich, a focus on these aspects of the text has obscured other possible interpretations, in particular its significance as a record of the Byzantine reception of Islamic art. The document provides a rare and fascinating account of how a Byzantine viewer negotiated an Islamic work of art through Byzantine aesthetic principles, and how he judged this foreign work as simultaneously satisfying and falling short of Byzantine standards, particularly those encoded in religious and imperial art and architecture. I am not suggesting that the Mouchroutas hall was built with the expectation that viewers would make comparisons between churches and this building, or between sacred and imperial icons and the images on the ceiling of the Mouchroutas. Rather, these juxtapositions were constructed by Mesarites and indicate his reception of, not the original intentions behind, the Islamicizing work of art.

Nikolaos Mesarites (d. ca. 1214) was a Byzantine courtier from a prominent family. In The Palace Revolt of John Komnenos, which was composed on the eve of the Fourth Crusade, probably in 1203, he recounts a coup attempted on July 31, 1200 at the imperial palace in Constantinople. The usurper, John Komnenos (d. 1200), was better known as John the Fat, an epithet that indicates the critical eye that history casts upon this character. John was related on his mother’s side to the dynasty of the Komnenoi, who occupied the Byzantine imperial office from 1081 to 1185. This association provided the necessary lineage to justify his placement on the throne. But despite the high rank and illustrious reputation of his forefathers, John was a man of little merit. In the historical record, he is noted foremost for his drunkenness and obesity. Placed on the throne after a popular revolt, he was a puppet emperor, who was violently unseated within a day. Mesarites’s description of the Mouchroutas occurs at the climax of the historical narrative, just before John the Fat is captured, beaten, and decapitated, and his corpse is paraded through the Hippodrome by soldiers loyal to the reigning emperor, Alexius III Angelos (r. 1195–1203).

From a literary perspective, Mesarites’s text employs an elevated prose style and a sophisticated, even innovative, rhetorical technique. It was clearly written for an erudite audience, presumably aristocrats of the Constantinopolitan court. These readers likely lived through the events that are described, and the setting of the story,
The imperial palace in Constantinople, would have been familiar to them.

The Mouchroutas is no longer extant, but Mesarites purports that it was decorated by a “Persian” artist and depicted “Persian” figures. The Byzantines commonly referred to contemporary foreigners by the names of their ancestors. In twelfth- and thirteenth-century Byzantine parlance, “Persian” meant Islamic, and specifically Seljuk. The Seljuks were among the foremost enemies of the Byzantines from the eleventh until the mid-thirteenth century, and their victories at the battles of Manzikert, in 1071, and Myriokephalon, in 1176, were crucial turning points for the devolution of Byzantine power in the medieval world. Although the precise construction date of the Mouchroutas is unknown, it was probably built in the mid-twelfth century, possibly during a period of détente around 1161, when the Seljuk Sultan Kılıç Arslan II (r. 1155–92) visited the court of the Byzantine emperor Manuel I Komnenos (r. 1143–80). In sum, the building marks an intriguing instance of artistic emulation in the midst of a predominantly adversarial political relationship.

The form and program of the Mouchroutas can be gleaned from Mesarites’s description, and possible parallels can be identified in roughly contemporary Islamic and Islamicizing architectural decoration. Mesarites first describes a staircase leading up to the hall, which indicates that the structure was composed of two levels. The staircase was built from brick, gypsum, and marble. Part of the building was decorated with cross-shaped polychrome tiles colored deep red, blue, green, and purple. These features call to mind the early Seljuk palace pavilion in Konya, the kiosk of Kılıç Arslan II, the same Seljuk sultan who visited Constantinople in 1161. The exact date of this structure is uncertain, but its patronage is secure; it is therefore typically placed within the period of Kılıç Arslan’s reign, circa 1156 to 1192. Like the Mouchroutas, the kiosk is composed of two levels (fig. 1). More importantly, it is the earliest preserved Seljuk building ornamented with ceramic tiles, many of which are cross-shaped and show a palette similar to that noted by Mesarites (figs. 2–4).
Fig. 3. *Mināʾī* tiles in the shape of crosses. Seljuk, from the kiosk of Kilç Arslan II, Konya, second half of the twelfth century, height of cross-shaped piece ca. 9 in. (23 cm). Turkish and Islamic Arts Museum, Istanbul. (After Rüçhan Arık and Oluş Arık, *Tiles, Treasures of Anatolian Soil: Tiles of the Seljuk and Beylik Periods* [Istanbul, 2008], 234, figs. 169 and 170)

Fig. 4. *Mināʾī* tiles showing a human-headed griffin. Seljuk, possibly from the kiosk of Kilç Arslan II, Konya, second half of the twelfth century, fritware, overglaze-painted and gilded: diam. 9.2 in. (23.3 cm), ht. 9.25 in. (23.5 cm), wid. 8.25 in. (21 cm). Gift of Mr. and Mrs. Jack A. Josephson, 1976 (1976.245), The Metropolitan Museum of Art, New York, N.Y. © The Metropolitan Museum of Art/Art Resource, N.Y. (Photo: courtesy of The Metropolitan Museum of Art/Art Resource, N.Y.)
The tiles of the Konya kiosk are mostly disarticulated and many are damaged. Nevertheless, they preserve much of their original decoration, as well as evidence of their technique, providing useful comparanda for the Mouchroutas hall decorations. The kiosk tiles are executed in mināʾī (enamel), a highly refined overglaze technique of polychrome painting more commonly found in ceramic vessels. Mināʾī is also known as haft-rangi (seven-color), a reference to its multihued palette, which consists of several of the colors cited by Mesarites, including blue, green, red, brown/black, gold, yellow, and white. In Seljuk architectural tile ensembles, cross-format pieces were often positioned at the interstices of large eight-pointed stars (fig. 3). In this arrangement, the stars tend to dominate the composition. In another pattern, however, cross-format pieces are combined with small square-shaped tiles placed in the spaces between the arms, causing the crosses to appear more prominently (fig. 5). Mesarites does not mention star-shaped tiles, raising the possibility that in the Mouchroutas, cross-format tiles were combined with small squares.

Mesarites’s reference to the “serrated” (ὀδοντουμένη) decoration to either side of the staircase may also find analogues in Seljuk architectural ornament, albeit of a later date. Seljuk modifications to the Roman theater in Aspendos (near modern-day Antalya, Turkey), dating to the 1220s to 1230s, include the application of chevron (zigzag)-patterned frescoes in a staircase leading to a belvedere (fig. 6). The in situ remains are greatly deteriorated, but nonetheless preserve a motif that could be described as “serrated” (fig. 7). Seljuk palaces of the 1220s to 1230s preserve frescoes in chevron patterns on both exterior and large interior wall expanses. In addition, the palace in Alanya shows zigzag patterns executed in tile (fig. 8).

Moving into the hall, Mesarites explains that the ceiling was constructed from densely packed hemispheres...
Fig. 6. Elevation drawing of the south staircase of the Roman theater at Aspendos in modern-day Turkey, showing Seljuk alterations including chevron frescoes, ca. 1220–30. (Illustration: J. A. Perlmutter, courtesy of Scott Redford)

Fig. 7. Detail showing the chevron frescoes that were part of the Seljuk alterations to the Roman theater at Aspendos. (Photo: courtesy of Scott Redford)

Fig. 8. Tiles with a chevron pattern. Seljuk, from the inner castle in Alanya, early thirteenth century. Antalya Museum, Antalya, Turkey. (Photo: courtesy of Kale Group Cultural Publications, Istanbul)
arranged at angles. As noted above, his description recalls the appearance of muqarnas vaults. Yet structures of this kind are not attested in extant Seljuk monuments prior to the mid- to late thirteenth century.\(^{22}\) Parallels are found instead among twelfth-century and earlier monuments of North Africa and Sicily, including the wooden ceiling in the Norman royal chapel, the Cappella Palatina in Palermo (ca. 1140), where concave forms compose an intricate stalactite structure of faceted stars and cones (fig. 9).\(^{23}\) Mesarites further specifies that the decoration of the Mouchroutas portrays “Persians and their various costumes,” and that John the Fat sat on the floor of this marvelous room, “gulping his drink quickly, courting favor with the Persians painted on the chamber and drinking to them.” This description suggests that the subject matter of the Mouchroutas program imitated an Islamic princely cycle, which would have depicted courtiers engaged in elite pastimes such as drinking, hunting, and listening to music.\(^{24}\) These themes appear in tiles from the kiosk at Konya (fig. 2), as well as on the ceiling of the Cappella Palatina, where hunters pursue their quarry and courtiers sit cross-legged on the floor, imbibing wine, watching wrestlers and dancers, and listening to musicians (fig. 10).\(^{25}\) A similar structure and decorative repertoire appear in fragments from a mid-tenth- to mid-eleventh-century Fatimid fresco program excavated from the remains of a bath complex (destroyed in 1168) in the city of Fustat, near Cairo. It preserves hemispherical elements, including one decorated with an elaborately attired seated figure holding a prominent drinking cup (fig. 11).\(^{26}\) Close scrutiny of Mesarites’s description, in combination with comparative study of extant medieval monuments, suggests that the Mouchroutas possessed features of roughly contemporary Islamic and Islamicizing buildings, such as polychrome cross-shaped tiles,
chevron patterns, a muqarnas ceiling, and a figural program depicting princely pleasures.

This kind of architectural comparison and hypothetical reconstruction marks the extent of most art historical interpretations of Mesarites’s ekphrasis. Certainly one factor contributing to this tendency is the brevity of the ekphrasis itself, which constitutes a relatively short passage within a much longer historical account. In addition, reticence to investigate the text more deeply may be due to the fact that Mesarites describes a secular building, which scholars might tacitly assume to lack the degree of complexity and sophistication commonly perceived in Byzantine ecclesiastical structures and the ekphraseis on them. It has also been suggested that a Byzantine viewer may not have understood the significance of the Islamic program that decorated the Mouchroutas and would therefore have engaged with it in only superficial terms. According to this argument, Mesarites’s lack of elaboration regarding specific details of the program indicates that “their meaning was lost on” him; he registered the material richness of the monument, but ultimately viewed it as “a piece of exotic, even decadent, orientalism.”

At stake in this passage, however, is not Mesarites’s understanding of the original Islamic meaning of the decorative program of the Mouchroutas. Rather, the significance of the ekphrasis lies in how Mesarites interpreted this monument through Byzantine modes of visuality. It seems that Mesarites did consider the Mouchroutas to be “a piece of exotic, even decadent, orientalism,” but this perception is articulated in a more complex manner than has heretofore been recognized. Furthermore, the terseness of Mesarites’s description of the Mouchroutas hall might indicate his expectation that the audience would be well familiar with the monument and the tradition of Islamic palace decoration from which it drew, thus making a more detailed description superfluous.

Regardless of the reasons behind the scholarly tendency to focus on the descriptive potentials of the passage, the result is that relatively little attention has been paid to the use of the Mouchroutas as a rhetorical
device. The description of the Mouchroutas is not an independent ekphrastic document, but an ekphrastic passage in service of a larger narrative and argument.\(^{31}\)

The description of the building is not undertaken for its own sake; rather, it is tightly intertwined with Mesarites’s intensely critical characterization of John the Fat. The passage introduces the climax of the narrative, when John is executed by soldiers of the true emperor. As such, Mesarites’s description of the Mouchroutas contributes to his broader purpose of vilifying John as unfit for the Byzantine throne.

In a key phrase, Mesarites states that the building was a “Persian stage—the work of the hand of John’s kinsman from his grandfather’s family.” This passing comment epitomizes Byzantine muckraking at its best, because it reminds the reader that John Komnenos was in fact John Komnenos Axouch. Although on his mother’s side John the Fat was descended from two emperors, Alexios I Komnenos (r. 1081–1118) and John II Komnenos (r. 1118–43), his father’s family name indicates a less illustrious paternal origin (fig. 12). Axouch was a foreign, specifically Turkic, name, and it recorded the Seljuk heritage of the other branch of John’s parentage. His paternal grandfather, John Axouch (d. 1150), was taken prisoner in 1097, when still a youth, and kept at the Byzantine court of Alexios I Komnenos, where he converted to Christianity. John Axouch became a favorite of the imperial heir, John II Komnenos, who eventually granted him the prestigious title sebastos (venerable). In the Komnenian era, this rank was given almost exclusively to members of the imperial family, a clear indication of John Axouch’s prominence at court and his intimacy with the emperor. Under John II Komnenos, John Axouch later held the important position of megas domestikos (supreme military commander after the emperor). John Axouch continued to serve under John II Komnenos’s son and successor, Manuel I Komnenos (r. 1143–80).\(^{32}\) The clearest evidence of John Axouch’s prestige was the marriage of his son (and John the Fat’s father), Alexios Axouch, to Maria Komnene, the granddaughter of the emperor John II Komnenos and daughter of his eldest son, Alexios Komnenos (d. 1142).\(^{33}\) Alexios Axouch held the respectable office of protostrator (chief of the imperial grooms) and led military expeditions to Italy, Cilicia, and Hungary. However, he fell from imperial favor in 1167 under suspicion of conspiring against Manuel I Komnenos.\(^{34}\)

In twelfth-century sources, reference is often made to the Persian origins of John the Fat’s family in order to question their fitness for imperial service.\(^ {35}\) Indeed,
Mesarites’s reference to John the Fat’s part-Seljuk origins can be read as a thinly veiled indictment of John as an enemy of Byzantium. As Paul Magdalino notes, “[i]t could be argued that Mesarites’ description isolates the Islamic elements in the building because the author’s purpose is to evoke the dramatic irony of a usurping emperor of Turkish descent who spent his last tragic moments in suitably infidel surroundings.” Yet this observation might be extended to argue that John was lampooned not only for being a “Seljuk John Axouch,” but also for not being enough of a “Byzantine John Komnenos,” because the rhetorical force of Mesarites’s description of John the Fat was generated in part through its striking contrast with the standard image of the middle Byzantine ruler.

Between the end of Iconoclasm in 843 and the advent of the Fourth Crusade in 1204, imperial portraits followed a decidedly Christian iconography of divine endorsement. This visual ideology is evident in portraits of the Macedonian dynasty (867–1056). In an ivory panel depicting Constantine VII Porphyrogenetos (r. 945–59), the emperor bends his head to receive Christ’s blessing (fig. 13). The primacy of the Son of God is demonstrated by his higher elevation, but the emperor’s depiction in the presence of the divinity makes clear the ruler’s exalted status among men. Harmony of mind between emperor and Christ is conveyed through their strikingly similar physiognomies. The emperor is defined in part by his Christomimetic (Christ-like) appearance. Parallel concepts are at play in imperial portraits of the subsequent dynasty, that of John the Fat’s own family, the Komnenoi. In the frontispiece to a twelfth-century Gospel book, John II Komnenos and his son Alexios—the maternal great-grandfather and grandfather, respectively, of John the Fat—are blessed by Christ, who sits enthroned above them (fig. 14).

It therefore comes as little surprise that when Mesarites wanted to lampoon the false emperor John the Fat he inverted the very qualities that constituted the core of the imperial ideal. Rather than presenting a stoic picture of John on the royal throne receiving blessings from Christ, Mesarites describes the degenerate imposter as...
an obese and sweaty drunkard squatting on the floor of an Islamic-style hall and raising a glass to toast the colorful “Persian” figures depicted on the ceiling. Mesarites paints in words the image of a man whose erratic movements, disheveled appearance, and undignified posture form an absolute antithesis to the static, orderly, and imposing figures preserved in extant representations of the emperor.  

In addition to these rather blunt condemnations, Mesarites criticizes John with more subtle, although no less damaging, associations. In true Byzantine fashion, Mesarites’s final insults are delivered through a backhanded compliment. He shows little reservation in praising the aesthetic achievement of the Mouchroutas, celebrating it as a spectacle of color and design, one that provides “insatiable pleasure.” But as he concludes his survey of its superlative qualities, he states that the building surpasses not a Byzantine monument, but an ancient Greek one: “This Persian hall is more delightful than the Lakonian ones of Menelaus.” The genuineness of his praise would have been evident to any educated reader who knew of the marvelous palace of Menelaus from Homer’s description in Book IV of the Odyssey.  

But to a Byzantine ear, Mesarites’s extolling remark might have simultaneously been heard as cleverly conditional praise. By comparing the Mouchroutas to a non-Byzantine, non-Christian building, Mesarites firmly placed the Islamic monument in a category that operates outside a Byzantine aesthetic system. What, specifically, was at stake in the distinction that Mesarites took pains to express?

While physical properties of color, form, and light were important factors in the appreciation of works of art, Byzantine ekphrasis constantly juxtaposes the sensible with the intelligible, indicating that Byzantine aesthetic values were concerned with both the physical and spiritual impact of a work of art. The most essential aspect of Byzantine visuality was the viewer’s anagogical engagement. This experience was at its most quintessential when one gazed upon a sacred icon of Christ, the Virgin Mary, or a saint. The viewer perceived not just the beautiful image rendered in paint, but also its prototype. In post-Iconoclastic Byzantium, an image furnished a passage from the depiction of a saint to the actual holy person. Dynamics of sacred visuality could also shape secular visuality, particularly in viewing images of the emperor. The earthly court was understood as a parallel to the court of heaven, and the Byzantine emperor was a reflection of the celestial ruler, Christ. Much as an icon served as a conduit to and from the saint it depicted, the emperor was a link with
the divine authority of God and His Son. This anagogical principle was conveyed through imperial images like the crowning of John II and Alexios Komnenos (fig. 14), which clearly depicts the conductive relationship between emperor and Christ.

In other instances, however, it is possible that secular art was defined not by its adoption of strategies germane to sacred art but by the lack of an anagogical dynamic. I suggest that in his description of the Mouchroutas and John the Fat, Mesarites draws upon the viewer’s familiarity with the anagogical process of Byzantine visibility, in reference to both religious and imperial images, so as to highlight the failure of the Islamic paintings to realize the spiritual potential attained by Byzantine art. While the figure of the true emperor or the icons of the saints connected the viewer with a higher level of sacred reality, the images of the Mouchroutas provided no such revelation. Indeed, they quite simply could not compare.

Access to these more subtle messages embedded in Mesarites’s text is greatly aided by the fact that between 1198 and 1203 Mesarites penned a much longer ekphrastic account of another monument in Constantinople, the Church of the Holy Apostles.50 Liz James and Ruth Webb propose that in the description of this Christian building, Mesarites deploys ekphrasis not only to describe the physical appearance of the structure, but also to reveal the spiritual reality of the images that decorate it.51 They localize this attitude in the introduction to the ekphrasis, in which Mesarites states:

Now however it is time for us to proceed in our description to the things within the Church and to look at the things there with the eyes of sense and to understand them with eyes of the spirit. For the spirit is wont to advance from those things that are perceived by the senses, and led by the lesser faculty [of sight], to understand ultimate things and to penetrate to the secret places, to which the faculty which leads it [physical sight] is in no wise able to come [italics are mine].52

In other words, the material form and decoration of the building operate as cues or pathways to spiritual revelation. For this reason, ekphrasis was not necessarily intended to describe the work of art for the viewer in objective terms, but rather to guide the viewer toward looking at it in a specific way. Mesarites’s task is to lead his audience to a hidden meaning via description of the physical monument and its decoration. What distinguishes Mesarites is not his reference to the spiritual dimension of sacred art, but rather the explicit manner in which he identifies the revelation of this deeper significance as the fundamental purpose of his ekphrasis.53 Mesarites’s self-proclaimed rhetorical intentions in the case of the Church of the Holy Apostles support the notion that concealed meanings were likewise communicated through his account of the Mouchroutas.

But what of Mesarites’s statement that ekphrasis guides the reader beyond the material splendor of the work of art to its spiritual significance? This might be true of the Church of the Holy Apostles, but the Mouchroutas—not just a secular structure, but an Islamic monument—was no doubt as distant as a Byzantine author might fear to fall from the sacred truth of art. In fact, it is this very incomparability of Islamic art to Byzantine art, and of John the Fat to the Byzantine emperor, that underlies Mesarites’s text. The spiritual reality of the Mouchroutas hall—and John the Fat—is insufficient and corrupt; it is characterized by failure and absence, and Mesarites took it upon himself to lay bare this truth.

There are two keys to understanding the “ultimate things” that Mesarites intended to communicate and accessing the “secret place” where spiritual truth was to be found in the decoration of the Mouchroutas hall. The first is the Byzantine concept of the relationship of images, specifically icons, to their prototypes. The second is the ideology of the Byzantine emperor’s Christomimetic nature. As noted above, in Byzantine post-Iconoclastic thought, the icon was not a dwelling place of the divine but a pathway of access to the holy.54 When looking at an icon, the physical eye might be limited to perception of the paint, wood, ivory, or precious metal of an image, but the mind could penetrate this material surface to reach a more profound spiritual understanding.55 The anagogical dimension of an icon—its ability to carry the viewer beyond the materiality of an image to the spiritual reality of the holy figure it depicted—was essential to the post-Iconoclastic justification of icon veneration.

Mesarites’s celebration of the beauty of the Mouchroutas, the skill of its construction, and the lavishness of its decoration at first suggests that the author is satisfied merely to indulge in the “insatiable enjoyment”
that the building provides. But in the process of articulating his experience of aesthetic wonder, Mesarites makes specific reference to another characteristic of this Islamic work of art: the satisfaction found in these foreign images is “not hidden, but on the surface.” Unlike the Christian icon, which provides a conduit to holy beings, these Islamic images do not conceal deeper spiritual reality; they are devoid of the profound connection with the divine that constitutes the essence of the power of the Christian icon. Just as Mesarites claims responsibility for guiding his audience to recognize the concealed truth of the sacred images at the Church of the Holy Apostles, he likewise draws his reader’s attention to the absence of this dimension in the paintings.
of the ceiling of the Mouchroutas. Although a wonder to the physical eye, they provide little for the mind and nothing for the soul.

On the one hand, this distinction between foreign and Byzantine art is not at all surprising; on the other hand, it is striking that Mesarites expends the effort to alert his audience to this obvious difference. Indeed, having established the lack of an anagogical referent for the Islamic work of art, he shifts immediately from a description of the building to a description of John. It is here that Mesarites concludes his anti-anagogical reading of the Islamic decorative program, for it is in John—sitting on the floor, drunk and disheveled, wiping sweat from his brow—that these Islamic images find their referent. In this way, a distinction drawn between the anagogical potential of Byzantine as opposed to Islamic art simultaneously serves as a critique of John and casts a critical gaze upon the otherwise celebrated “Persian” paintings decorating the ceiling. Mesarites’s subtle comparisons of the Islamic image to both the Christian icon and John the Fat constitute the first “ultimate thing” that Mesarites intends his reader to understand. Penetration of this secret meaning is predicated on the audience’s familiarity with Byzantine theories of the relation of images to their prototypes. It demonstrates the use of a sacred, Christian mode of seeing to underscore both the shortcomings of a secular, Islamic work of art and the corruption of the figure of John the Fat, who parallels the painted “Persians” in both ethnic origin and indecorous behavior.

Still, the “secret place” to which Mesarites seeks to lead his reader requires a second key: familiarity with Byzantine imperial ceremonial at the Great Palace and the concept of Christomimesis that informed these rituals. It is clear that Mesarites presents John as unimperial: although wearing a crown, he is not a king; slothful and degenerate, he sits on the floor, not a throne. The lack of royal dignity in this portrait is absolute. Still, Mesarites may further allude to a more specific way in which this scene confirmed John’s status as an anti-emperor. In the opening reference to the Mouchroutas, the author cites the building’s proximity to the Chrysostriklinos (Golden Hall), the throne room of the Byzantine emperor and the symbolic center of his authority. In Jean Ebersolt’s hypothetical plan of the tenth-century imperial palace, the Chrysostriklinos is located at the southeastern side of the complex (fig. 15). The Mouchroutas, which was built about two hundred years after the phase represented in Ebersolt’s plan, is thought to have occupied a space in the area of the longitudinal hall to the west of the Chrysostriklinos. While Mesarites’s reference to the Chrysostriklinos might be understood as simply topographical, it is also possible that through this association he intended to cue his reader to further criticism of John the Fat.

From textual accounts, the Chrysostriklinos can be reconstructed as a freestanding, eight-lobed building resembling a small chapel with an extended alcove at its eastern end. This footprint is evident in Ebersolt’s reconstruction (fig. 15, no. 35). In the apse-like space was located the imperial throne, and a mosaic in the half-dome above depicted the enthroned Christ. A post-Iconoclastic inscription running around the ceiling of the room is preserved in the Anthologia Graeca, a tenth- or eleventh-century compendium of epigrams, many of which were from monuments in Constantinople. The inscription referred specifically to the image in the conch. It read:

The ray of Truth has shone forth again and has dimmed the eyes of the imposters. Piety has grown, error has fallen, faith blooms, and Grace spreads out. For behold, once again the image of Christ shines above the imperial throne and confounds the murky heresies; while above the entrance is represented the Virgin as divine gate and guardian. The Emperor and the Bishop are depicted close by along with their collaborators inasmuch as they have driven away error, and all around the building, like guards, [stand] angels, apostles, martyrs, priests. Hence we call “the new Christotriklinos” that which aforetime had been given a golden name [i.e., Chrysostriklinos], since it contains the throne of Christ, our Lord, the forms of Christ’s Mother and Christ’s heralds, and the image of Michael whose deeds are filled with wisdom [italics are mine]. In this passage, the centrality of the image of Christ for imperial ideology in the post-Iconoclastic period is conveyed by the pun on the name of the hall: Chrysostriklinos (Golden Hall), becomes Christotriklinos (Christ’s Hall). When the emperor sat on the throne, he assumed a position directly below the image of Christ. This arrangement established a visual parallel between Christ as emperor of Heaven and the emperor as Christ’s
representative on earth, drawing a composition much like that of the image of John II Komnenos and his son Alexios (fig. 14).

As noted above, in Byzantine political theory, the earthly and heavenly courts were understood as “inter-penetrating” realms: the emperor was second in rank below Christ in the heavenly court, but first within the earthly court; the emperor ruled below as Christ ruled above. When the emperor mounted the throne beneath the image of Christ in the Chrysotrikilinos, he became the earthly reflection of the true emperor in Heaven, serving as a conduit to the divinity much in the way that a painted icon provided access to the saint it portrayed. Accounts of middle Byzantine court ceremonial make clear the essential role that this performative juxtaposition of Christ and emperor played in rituals conducted in the throne room. The Christomorphic scene would have been familiar to Mesarites’s well-educated, aristocratic readers because high-ranking courtiers constituted the primary audience for these imperial displays.

Returning to the description of the Mouchroutas, an expectation to see the emperor enthroned in the Chrysotrikilinos, below the image of Christ, would have been ingrained in the minds of Byzantine readers, particularly the elite audience to whom Mesarites’s History was addressed. John the Fat was positioned, however, not only outside the imperial throne room but in an anti-Christotrikilinos, below an image not of Christ but of “Persians,” sitting not on a throne but on the floor. While the representation of Christ above the emperor in the Chrysotrikilinos attested to the divine origin of the emperor’s authority and his exalted status as Christ’s representative on earth, the image of the “Persians” in the ceiling of the Mouchroutas led back to earth and to the pathetic, drunken, sweaty John the Fat.

One could take this line of reasoning a step further, extrapolating as a Byzantine viewer might have, into another absent-but-present space, that of actual contemporary Islamic palaces, which the Mouchroutas was thought to imitate. One would imagine the “Persian” king sitting on the floor of his hall, staring at the images that decorated the ceiling of his throne room and searching in vain to “understand ultimate things and to penetrate secret places.” But unlike the true earthly king, the Byzantine emperor, whose authority was sanctioned by God through the image of Christ guarding over his throne, the “Persian” ruler was sheltered by mere gold and paint, squatting under images, which, although beautiful to the eye, were “on the surface” only. By recalling the contemporary “Persian” court, Mesarites’s ekphrasis on the Mouchroutas might have been intended to criticize not only John the Fat, but also the Seljuk rulers to whom he was implicitly likened.

This final suggestion highlights how Mesarites’s description of the Mouchroutas might be understood to employ ekphrasis as a particularly effective tool of alterity. As argued by W. J. T. Mitchell, when the object of ekphrasis is non-verbal and non-active, it speaks only through the description of the author. As such, ekphrasis functions to give voice to its object, but in so doing, ekphrasis also has the power to deny the thing described of original agency or self-determination. In the case of the Mouchroutas, the Islamic monument is denied its significance as an emblem of Islamic princely authority and status. Instead, its meaning is reoriented to critique the Islamic culture that produced it and the Seljuk ruler whom it was originally intended to celebrate. In other words, while it might be correct to interpret Mesarites’s view of the Mouchroutas as “a piece of exotic, even decadent, Orientalism,” his attitude is not necessarily the result of ignorance. Rather, it might indicate a highly intentional and well-informed subversion of the original significance of the Islamic palace buildings that were the models for the Mouchroutas in order to serve Mesarites’s rhetorical aim of condemning John the Fat as unworthy of the Byzantine throne.

Theories of Byzantine rhetoric and visuality support the hypothesis that Mesarites would have expected his audience to grasp subtle juxtapositions of Byzantine icons and Islamic wall painting, of imperial throne room and exotic pleasure palace. According to ancient and Byzantine rhetorical texts, the most effective ekphraseis were written with a sense of the “storehouse” of imagery already in the minds of the audience. The author’s task was to make the images in the reader’s mind more vivid and to direct understanding of what was “seen” to a higher level. Still, the ultimate connection between physical reality and spiritual truth was completed in
the mind of the beholder, through his or her imagination. It is reasonable to hypothesize that in constructing his critique of John the Fat, Mesarites anticipated his elite audience’s familiarity not only with the Mouchroutas and the Chrysotriklinos—two buildings still standing in the imperial palace in the early thirteenth century—but also with the anagogical relationship of icons to their prototypes, the Byzantine imperial ideology of Christomimesis, and the implicit impossibility that “Persian” (Islamic) art and culture could participate in the ultimate truths of Byzantine visuality.

Mesarites’s reticence to state openly his reading of the Mouchroutas is very much in keeping with middle Byzantine rhetorical strategies. For example, in a tenth-century commentary on the second- to third-century rhetorician Hermogenes (d. ca. 230), an anonymous Byzantine author proposed the usefulness of subtle and even obscure argument, stating: “when the speaker intends one thing but says another, and the listener accepts what was said, having grasped its true import, then obscurity (ἀσάφεια) becomes beneficial.” In this case, obscurity draws the reader deeper into the text, implicating the audience in the interpretation of the author’s message. A similar technique might be said to inform Mesarites’s strategy of praising the aesthetic achievement of the Mouchroutas on a material level while at the same time condemning its aesthetic shortcomings on a spiritual level. Mesarites’s statement is subtle, but the audience’s presumed ability to understand his true meaning makes the obliqueness of his message a flourish of rhetorical virtuosity. By requiring his readers to come to their own conclusions regarding the ultimate message of his text, Mesarites engages them in a demanding resolution of veiled allusions and subtle literary structures, exactly the kind of rhetorical techniques in which this erudite, courtly audience would have themselves been trained. When they arrived at these conclusions, the force of the argument was enhanced by the effort required to understand it.

This reading of the Mouchroutas aligns well with the intentions of ekphrasis that Mesarites himself states. In the course of his description of the Church of the Holy Apostles, he asks for divine guidance so that his mind may enter and gaze on the things within [the church] and may, so far as it can, furnish for its appreciative and grateful hearers a clear conception, through the description in pen and ink, of the outwardly expressed and inwardly contained meaning. It would seem that in Mesarites’s ekphrasis attention to hidden meaning was a concern not only of Christian works of art, but of secular and foreign works of art as well.

Mesarites’s ekphrasis on the Mouchroutas hall allows for the partial recuperation of a now-lost building that attests to Byzantine emulation of Islamic architectural models on the eve of the Fourth Crusade. But beyond this archaeological application, the text also provides a rare glimpse into the reception of Islamic art by a Byzantine viewer. In this way, it sheds light on the position of Islamic art within middle Byzantine aesthetic sensibilities. Mesarites uses the Mouchroutas to highlight John the Fat’s unsuitability for the imperial throne by depicting his un-imperial character and half-Seljuk origins. But the text also cues the reader to a deeper meaning. By comparing the Mouchroutas not to a Byzantine building but to an ancient Greek monument, the palace of Menelaus, Mesarites implies that the Mouchroutas operates within an aesthetic category that is outside the tradition and dynamics of Byzantine Christian visuality. Noting that the beauty and wonder of the Mouchroutas functions only on the surface, Mesarites makes clear the superficial nature of this foreign work of art and draws attention to its inability to fulfill Byzantine aesthetic expectations. The ekphrasis is predicated on the reader’s ability to connect Mesarites’s verbal description with his own mental images of icons and imperial ceremony. The text anticipates that the audience will apply the logic of these viewing experiences to penetrate to a deeper level of significance embedded in Mesarites’s account. Mesarites negotiates Islamic art through the conventions of Byzantine imperial imagery and ceremonial by inverting his reader’s expectations for imperial Christomimesis. In so doing, he employs the Mouchroutas in an unambiguous but still subtle verbal and visual condemnation of the emperor-for-a-day, John the Fat.
The aesthetic incomparability of the Mouchroutas to Byzantine art and of John the Fat to the image of the emperor reaffirms the most essential and defining qualities of the very categories to which both the man and the monument fail to compare. At the same time, Mesarites attests to a Byzantine engagement with Islamic art that went beyond mere physical appreciation, requiring his audience to reflect on the meaning of Islamic royal art and the reasons why, in Mesarites’s estimation, it could never rival that of Byzantium.

Department of Art History and Archaeology, Washington University in St. Louis St. Louis, Mo.

APPENDIX

Excerpt describing the Mouchroutas hall from The Palace Revolution of John Komnenos by Nikolaos Mesarites

27. From that point on, the doors of the palace lay open and unguarded, the Triklinos of Justinian [another hall in the imperial palace] being stripped of men. An assault was made on the Chrysotriklinos and the soldiers spread out as they charged the corners of the palace, piercing with swords and cutting down to pieces those who huddled together in fear. But the soldiers were still made nervous by the small number coming out to meet them face to face. On account of this they held back, being anxious lest some ambush, or some secret scheme, or plot, was lying in wait somewhere. Therefore, because of the dearth of pursuers, the shield-bearers of John, seized by fear, proceeded up to the Mouchroutas. The Mouchroutas is an enormous hall, next to the Chrysotriklinos, located on the westerly side. The steps to this hall are made from baked brick, gypsum, and marble. The staircase bears serrated decoration on either side and turns in a circle. It is painted with dark blue, shining with deep red, dyed with green, blooming with purple from mixed, cross-shaped tiles joined together. The chamber was the work not of a Roman, Sicilian, Celt, Sybarite, Cypriot, or a Cilician hand, but rather of a Persian hand, because it bears figures of Persians and their various costumes. Everywhere on the ceiling are scenes of various types applied to the heaven-like ceiling made of hemispheres. The recesses and projections of the angles are densely packed. The beauty of the carving is extraordinary, the spectacle of the concave spaces is delightful; overlaid with gold, it produces the effect of a rainbow more colorful than the one in the clouds. There is insatiable pleasure—not hidden, but on the surface: not just for those who for the first time direct their gaze upon it, but also for those who visit it frequently [it evokes] amazement and surprise. This Persian hall is more delightful than the Lakonian ones of Menelaus.

28. This Persian stage—the work of the hand of John’s kinsman from his grandfather’s family—framed the actor John. Although crowned, he was not dressed royally, sitting on the ground, a symbol of the suffering that had seized the wretch, and of the unbearableness of his misfortune. He was gulping his drink quickly and courting favor with the Persians painted on the chamber and drinking to them. Running with sweat, he sometimes wiped the sweat with a towel, sometimes flicked the sweat away with his crooked finger; already he was passing into a very deep sleep.
The architectural ekphrases of Nikolaos Mesarites

1. Although The Palace Revolt of John Komnenos was edited in 1907 and a German translation was published in 1958, the text as a whole has received little further critical attention. The passage that describes the Mouchroutas is found in an abridged translation in Cyril Mango’s collection of primary source documents on Byzantine art. See Nikolaos Mesarites, Die Palastrevolution des Johannes Komnenos, ed. A. Heiser (Würzburg, 1907), par. 27–28; Nikolaos Mesarites, Die Palastrevolution des Johannes Komnenos, ed. and trans. Franz Grabler (Graz, 1958); and Cyril Mango, The Art of the Byzantine Empire, 312–1453: Sources and Documents (Englewood Cliffs, N.J., 1972; repr. Toronto, 1997), 228–29.

2. The Seljuks emerged during the 1040s in eastern Iran. Two separate and, at times rival, dynasties were actively engaged with the Byzantines: the dynasty known today as the Great Seljuks (1040–1194) and the Seljuks of Anatolia, also known as the Seljukids of Rum (ca. 1080–1307). As Koray Durak notes, Byzantine authors of the eleventh century and, in some cases, twelfth century (e.g., Anna Komnene [d. 1153–54]) differentiate between the Great Seljuks and the Seljukids of Anatolia by referring to the former as “Persians” and the latter as “Turks.” This distinction disappears in the late twelfth and thirteenth centuries, after the decline and eventual disappearance of the Great Seljuks. Byzantine historians writing in this period (e.g., John Kinnamos [d. after 1185], Niketas Choniates [d. 1217], and George Akropolites [d. 1282]) use the terms “Turk” and “Persian” interchangeably. See Koray Durak, "Defining the 'Turk': Mechanisms of Establishing Contemporary Meaning in the Archaising Language of the Byzantines," Jahrbuch der Österreichischen Byzantinistik 59 (2009): 65–78.

3. Mango, Art of the Byzantine Empire, 228 n. 229.


5. In this regard, I follow the recent trend in the study of ekphrasis to view such texts as “evidence for response to images...as a depiction of the process of viewing.” Ruth Webb, “Accomplishing the Picture: Ekphrasis, Mimesis, and Martyrdom in Astieros of Amasiae,” in Art and Text in Byzantine Culture, ed. Liz James (Cambridge, 2007), 13–32, at 14. It must be noted, however, that such records are themselves self-conscious constructions of—not spontaneous responses to—the experience of viewing a work of art.


NOTES

An earlier version of this paper was presented at the Thirty-Ninth International Congress on Medieval Studies in Kalamazoo, Michigan, May 2004. I thank the session participants and audience for their useful suggestions. I am also grateful to the two anonymous readers commissioned by Muqarnas, whose contributions significantly improved this article, and to Oya Pancaroglu, Koray Durak, Rustam Shukurov, and Scott Redford, who read drafts of this text and provided valuable comments. A faculty research grant from the School of Arts and Sciences, Washington University in St. Louis, funded the illustrations. The arguments of this essay are further developed in my book, The Emperor and the World: Exotic Elements in the Imaging of Middle Byzantine Imperial Power, 820–1261 CE (forthcoming, 2011).


9. See n. 2 above. Mesarites’s use of “Persians” to mean Seljuks, and specifically the Seljuks of Anatolia, is also attested in an earlier passage, in which he refers to the “Persians” as the ones who held sway over “Asia” in his own day. Mesarites, Die Palastrevolution des Johannes Komnenos, 21, par. 3, line 15.


11. Magdalino, “Manuel Komnenos and the Great Palace,” 108–9. I do not, however, endorse the argument that the Mouchroutas was built to house the Seljuk delegation. Mesarites’s description suggests that it was a reception hall. The date of John the Fat’s revolt (1200) provides a terminus ante quem for the construction of the Mouchroutas. The absence of the hall from earlier references to the Great Palace, particularly the mid-tenth-century record of palace rituals, The Book of Ceremonies, indicates that the structure was built in a subsequent period. Magdalino proposes Manuel I Komnenos and Isaac II Angelos (r. 1185–95) as the most likely patrons because these emperors are known to have undertaken major building campaigns at the Great Palace: Magdalino, “Manuel Komnenos and the Great Palace,” 108–9. Hunt reads Mesarites’s statement that the building is “the work of the hand of John’s kinsman from his grandfather’s family” to imply that the Mouchroutas was constructed during the lifetime of John the Fat’s grandfather, John A xo uch, who died in 1150: Hunt, “Comnenian Aristocratic Palace Decoration,” 142. But Mesarites’s statement need not be taken literally. Instead he may be alluding to the purported common “Persian” ancestry of John the Fat and the artist who executed the ceiling.


13. It is unclear from Mesarites’s text whether the tiles decorate the staircase or the chamber itself. They are described after the walls of the staircase and before the ceiling of the hall, suggesting that they may have decorated the walls of the main chamber, possibly as a dado. Although painted ceramic tile decoration was used in Constantinople during the middle Byzantine period, its popularity seems to have been limited to the ninth to eleventh centuries. See Sharon E. J. Gerstel and Julie A. Lauffenburger, eds., A Lost Art Rediscovered: The Architectural Ceramics of Byzantium (Baltimore, 2001), passim. None of the preserved Byzantine
ceramic architectural material resembles that described for the Mouchroutas hall, supporting Mesarites’s statement that the style of the building and the origin of the craftsman responsible for it was foreign.


15. Asutay-Effenberger, “Muchrutas,” 320, posits the date 1173–74 for the construction of the kiosk and further argues for its close connection to the Mouchroutas. While it is tempting to draw conclusions for the date of the Mouchroutas based on the speculation that it was modeled specifically on the kiosk at Konya, a direct correspondence between these structures is neither evident in the sources, nor necessary for an understanding of the Mouchroutas. It seems more prudent to conclude that the Mouchroutas emulates a Seljuk architectural type of the second half of the twelfth century—of which the kiosk is representative—rather than a particular building.


19. Ibid., 269–70, figs. 217 and 218.

20. For cross-shaped purple tiles that recall one of the colors cited by Mesarites, see ibid., fig. 238, 184.


22. Seljuk monuments did not participate in the early development and dissemination of muqarnas domes and vaults, which began in the mid-eleventh century; the earliest muqarnas elements in Seljuk buildings date to the end of the twelfth century, are in stone, and are limited to relatively small spans covering niches: Yasser Tabbaa, “The Muqarnas Dome: Its Origin and Meaning,” Muqarnas 3 (1985): 61–74, esp. 61 and 63; Ayla Ödekan, “Anadolu Selçuklu Çağında Mukarnas Bazeme,” in Selçuklu Çağında Anadolu Sanatı, ed. Doğan Kuban (Istanbul, 2002), 329–35. While it is possible that mid-twelfth-century Seljuk muqarnas ceilings once existed but are now lost, it must also be noted that Mesarites wrote his account several decades after the construction of the Mouchroutas, and therefore may not have been accurately informed regarding the specific identity of the artist(s) and designer(s) who were responsible for its construction and decoration. Indeed, according to the text, Mesarites identifies the artist as “Persian” because the ceiling “bears figures of Persians and their various costumes.” In other words, he infers the painter’s origin from the style of the building and its ornamentation. It is possible that his specification of the painter and work of art as “Persian” may have been an invention intended to draw a closer connection between the Mouchroutas and John the Fat, who was himself of Seljuk descent.


25. Ibid., 142, fig. 8. For an extensive compendium of images from the Cappella Palatina and a wide range of comparanda, see Ugo Monneret de Villard, Le pitture musulmane al soffitto della Cappella palatina in Palermo (Rome, 1950); and Ernst J. Grube and Jeremy Johns, The Painted Ceilings of the Cappella Palatina (Genoa, 2005).


27. For discussion of Byzantine ekphraseis on secular structures, including other areas of the imperial palace, see Hunt, “Commenian Aristocratic Palace Decoration,” 138–47; Paul Magdalino, “The Bath of Leo the Wise and the ‘Macedonian Renaissance’ Revisited: Topography, Iconography, Ceremo-
Hunt, "Comnenian Aristocratic Palace Decoration," 142.

30. As Ruth Macrides and Paul Magdalino note, early Byzantine

33. Alexios Komnenos was made co-emperor in 1122, but died

32. Regarding John Axouch's relationship with John II and

34. Alexios Axouch was censured for decorating the walls of his


37. For a brief introduction to ruler imagery of the middle

38. Ioli Kalavrezou, "Plaque Fragment with Christ Crowning

39. Vatican City, Biblioteca Apostolica Vaticana, Ms. Urb. Gr. 2,

40. Henry Maguire, "Style and Ideology in Byzantine Imperial

41. Ibid., 225.


43. Regarding disorderliness as an indication of unfitness for the

44. Odyssey, Book IV, lines 43–113. It is possible that an addi-

45. Regarding the Byzantine habit of grouping ancient pagan

46. Ruth Webb, "The Aesthetics of Sacred Space: Narrative,


tianikes Archaiologikes Etairies 17 (1993–94): 21–24; and Helen Saradi, "The Kallos of the Byzantine City: The Develop-


29. The term "visuality" recognizes that the act of viewing and

the cognition of the visual is neither innocent nor natural but

acculturated and even open to manipulation. For discussion

of Byzantine visuality, see J. Trilling, "The Image Not Made

by Human Hands and the Byzantine Way of Seeing," in The

Holy Face and the Paradox of Representation, ed. Herbert

Kessler and Gerhard Wolf (Bologna, 1998), 109–27. Regarding

the distinct visualities of pre-modern and non-western

cultures, see Robert S. Nelson, ed., Visuality Before and

Beyond the Renaissance: Seeing as Others Saw (Cambridge,

2000).

30. As Ruth Macrides and Paul Magdalino note, early Byzantine

ekphrasis was often delivered in close proximity to the monu-

ments or works of art that it described and to audiences

familiar with the buildings and objects: see Ruth Macrides

and Paul Magdalino, "The Architecture of Ekphrasis: Con-

struction and Context of Paul the Silentiary's Poem on Hagia


47–82, esp. 50; and Liz James and Ruth Webb, "To Under-

stand Ultimate Things and Enter Secret Places: Ekphrasis


12. Henry Maguire perceives a similar phenomenon in mid-

dle Byzantine ekphrasis, including Mesarites's own descrip-

tion of the Church of the Holy Apostles in Constantinople.

He argues that Mesarites’s audience would have likely been

familiar not only with the building he described but with many

of the rhetorical devices he employed: Henry Maguire,

"Truth and Convention in Byzantine Descriptions of Works


31. James and Webb, "To Understand Ultimate Things and

Enter Secret Places," 5; and Ruth Webb, "Ekphrasis Ancient

and Modern: The Invention of a Genre," Word & Image 15,


Byzantine rhetoric and art, see the seminal work by Henry

Maguire, Art and Eloquence in Byzantium (Princeton, N.J.,

1981). Regarding the role of ekphrasis in antique literature,

see Ruth Webb, Ekphrasis, Imagination and Persuasion in

Ancient Rhetorical Theory and Practice (Farnham, U.K.,

2009).

32. Regarding John Axouch’s relationship with John II and

Manuel I, see Paul Magdalino, "Isaac Sebastokrator (III),

John Axouch, and a Case of Mistaken Identity," Byzantine


33. Alexios Komnenos was made co-emperor in 1122, but died

before his father and therefore never assumed independent

rule. On the careers of John and Alexios Axouch, see Brand,
"Turkish Element in Byzantium," 4–6, 8–9, 15–16, 18, 23.

34. Alexios Axouch was censured for decorating the walls of his

palace with scenes of the Seljuk sultan’s campaigns. Hunt

suggests that this program may in fact have been an Islamic

princely cycle, misinterpreted or intentionally misconstrued

as representing the enemy’s victories: Hunt, "Commenian

Aristocratic Palace Decoration," 140, 142; also see Brand,
"Turkish Element in Byzantium," 10.

35. Criticizing the forefathers of John the Fat, the historian and

imperial secretary John Kinnamos (d. ca. 1185) raises the

issue of their questionable loyalty, an accusation that seems

to stem from their Seljuk origins and, therefore, suggests

distortion bred as much from prejudice as from fact. John

Kinnamos, Deeds of John and Manuel Comnenus, trans.


37. For a brief introduction to ruler imagery of the middle

Byzantine era, see Henry Maguire, "Imperial Images," in The

Glory of Byzantium: Art and Culture of the Middle Byzantine

Era, A.D. 843–1261, ed. Helen Evans (New York, 1997),

182–91.

38. Ioli Kalavrezou, "Plaque Fragment with Christ Crowning

Constantine VII Porphyrogennetos Emperor," in Evans,

Glory of Byzantium, 203–4, cat. no. 140.

39. Vatican City, Biblioteca Apostolica Vaticana, Ms. Urb. Gr. 2,

fol. 10v; Jeffrey Anderson, "The Gospels of John II Kom-

nou," in Evans, Glory of Byzantium, 209–10, cat. no. 144.

40. Henry Maguire, "Style and Ideology in Byzantine Imperial


41. Ibid., 225.


(Milan, 1936–41), 1:46–47, lines 35–58, at line 36; cited by

Maguire, "Style and Ideology in Byzantine Imperial Art,"

224.

43. Regarding disorderliness as an indication of unfitness for the

imperial throne, see Maguire, "Imperial Images," 185–88.

44. Odyssey, Book IV, lines 43–113. It is possible that an addi-

tional factor motivated Mesarites’s selection of this particu-

lar ancient monument. In response to words of praise for

his palace, Menelaus says that he would readily sacrifice his

abode and possessions in order to revive all the comrades

lost in the battles that brought him his riches. In this way,

the beauty of Menelaus’s palace carries a moralizing mes-

sage regarding human vanity and the high price of material

wealth. A similarly critical perspective may have been cast

on the Mouchroutas and John the Fat.

45. Regarding the Byzantine habit of grouping ancient pagan

and contemporary Islamic artistic forms in a common cat-

gory, see Alicia Walker, "Meaningful Mingling: Classicizing

Imagery and Islamicizing Script in a Byzantine Bowl," The


46. Ruth Webb, "The Aesthetics of Sacred Space: Narrative,

Metaphor and Motion in Ekphraseis of Church Buildings,"

48. Regarding the unusual status of the imperial image between secular and sacred representation, see Antony Eastmond, “Between Icon and Idol: The Uncertainty of Imperial Images,” in Icon and Word: The Power of Images in Byzantium: Studies Presented to Robin Cormack, ed. Antony Eastmond and Liz James (Aldershot, 2003), 73–85. The emperor and depictions of him also featured in debates surrounding the definition of sacred images during and after the Iconoclast controversy. On this point, see Barber, Figure and Likeness, 74–75.


52. Downey, “Nikolaos Mesarites,” 867 and 900, Ch. XII, line 1.

53. For additional Byzantine authors who cite the necessity to move beyond the physicality of an image to the spiritual truth it conveyed, see James and Webb, “ ‘To Understand Ultimate Things and Enter Secret Places,’” 11.

54. On this distinction, see n. 47, above.

55. For example, in his discussion of the Church of the Holy Apostles, Mesarites refers to Christ as a means to access God. He describes the image of Christ Pantokrator in the dome over the central space of the building (from which extended four lateral halls) as follows:

…the other [hall] in the center stands up above them [the four lateral halls], and the direction of this one faces toward heaven, calling on the heavenly God-Man, I believe, to descend to it and through it as though from heaven, and, in His portrayed form, to gaze down upon all of the sons of men, who by His command dwell upon the earth, but possess their commonwealth in heaven. And like a square-cut stone or a geometric outline, it [the central hall] binds the other four to itself and binds them to each other as well, and stands there as a kind of mediator and a reconciler of those which formerly were separated from each other, in this, I believe, imitating the mediator between God and Man, who is portrayed in the midst of it [in the dome of the central hall], Christ, truly the square-cut stone, who bound together those things which formerly were far divided, and who through Himself drew us, who were formerly His foes, to His own Father and our God (Downey, “Nikolaos Mesarites,” 869 and 901, Ch. XIII, lines 5–6; also see James and Webb, “ ‘To Understand Ultimate Things and Enter Secret Places,’” 17 n. 80).

56. Webb, “Aesthetics of Sacred Space,” 69, notes that in ekphrases on churches, Byzantine authors carefully enjoin the
viewer not to dwell on the physical beauty of these structures, but to “lift their perception from the material to the spiritual.” Mesarites’s emphasis on the physical properties of the Mouchroutas might, therefore, be read as a statement regarding its lack of spiritual significance.

In this respect, the relationship between the “Persian” images and John the Fat has something in common with Byzantine theories about the mechanics of pagan idols, which are considered either embodiments of corrupt and malevolent otherworldly forces or mere material objects that lacked spiritual prototypes. On this point, see Eastmond, “Between Icon and Idol,” 76–77.


In Byzantine imperial panegyrics, buildings were commonly used as a means to acclaim the achievements of an emperor as founder or renovator: Macrides and Magdalino, Architecture of Ekphrasis, 50; and Jaś Elsner, “The Rhetoric of Buildings in the De Aedificiis of Procopius,” in James, Art and Text in Byzantine Culture, 33–57. In the case of Mesarites, however, this topos is inverted: John is not himself a patron of the hall, but only the passive recipient of his predecessor’s accomplishments. Furthermore, these predecessors and their building are, like John, foreign, and as such intrinsically inferior, even morally and physically corrupt.

The Chrysotriklinos was likely built in the sixth century and renovated in subsequent eras. As Mango notes, the Book of Ceremonies does not provide a concise and specific description of the Chrysotriklinos, but rather mentions different features at various points throughout the text: Mango, Art of the Byzantine Empire, xii. Also see Gilbert Dagron, “Trônes pour un empereur,” in Byzantio, Kratos ki Koinônia: Mnêmē Nikou Oikonomidē, ed. Anna Abranea (Athens, 2003), 180–203; and Jeffrey Michael Featherstone, “The Chrysotrikinos Seen through De Cerimoniis,” in Zwischen Polis, Provinz und Peripherie: Beiträge zur byzantinischen Geschichte und Kultur, ed. Lars M. Hoffmann (Wiesbaden, 2005), 845–52.

Jean Ebersolt, Le Grand Palais de Constantinople et le Livre des cérémonies (Paris, 1910), 149–50. Regarding the identification and location of the Mouchroutas, see Magdalino, "Manuel Komnenos and the Great Palace," 101–8. Based on structures depicted in early modern views of Constantinople, which she interprets as parallels to Mesarites’s description of Mouchroutas, Asutay-Effenberger, “Muchrutas,” 323–28, positions the monument between the western end of the Hippodrome and the Marmara sea wall. She declines to address, however, the relative location of the Chrysotrikinos (Asutay-Effenberger, “Muchrutas,” 315), a question that is essential to any argument for the placement of the Mouchroutas because Mesarites clearly states that the two structures are in close proximity to one another.

Regarding the potential of monumental inscriptions to assist in accessing the viewing experience of Byzantine audiences, see Amy Papalexandrou, "Echoes of Orality in the Monumental Inscriptions of Byzantium," in James, Art and Text in Byzantine Culture, 161–87.

Pierre Waltz, ed. and trans., Anthologie grecque, 12 vols. (Paris, 1960), 1:106; Mango, Art of the Byzantine Empire, 184 and 184 n. 9. The “imposters” mentioned in the inscription are the Iconoclast emperors, who removed images of Christ and other holy figures from the churches and palaces of Constantinople. “Michael whose deeds are filled with wisdom” refers to Emperor Michael III (r. 842–67), under whose rule Iconoclasm was ended in 843. Mango dates the decoration and the inscription at the Chrysotrikinos between 856 and 866 because no mention is made of Empress Theodora (r. 842–56; expelled from the palace in 856) or Emperor Basil I (who was crowned co-emperor in 866 and ruled independently from 867 to 886): Mango, Art of the Byzantine Empire, 184.

Maguire, “Heavenly Court,” 257.

The divine origin of imperial authority is also attested in the acclamations that were publicly recited during imperial ceremonies. For example, the Book of Ceremonies records that on the feast of Epiphany, the emperor was greeted with the words: “He [Christ] who today was baptized through the hand of the Prodromos [John the Baptist], proclaims you today emperor with his awesome hand, god-crowned benefactors, and points you out as worthy throughout the universe.” Constantine VII Porphyrogennetos, Le Livre des cérémonies, ed. and trans. Albert Vogt, 2 vols. (Paris: Les Belles Lettres, 1935), 1:36–37, lines 23–27; cited and discussed in Ioli Kalavrezou, “Helping Hands for the Empire: Imperial Ceremonial and the Cult of Relics at the Byzantine Court,” in Maguire, Byzantine Court Culture, 53–79, at 73.

Downey, “Nikolaos Mesarites,” 867 and 900, Ch. XII, line 1.


Hunt, “Commenian Aristocratic Palace Decoration,” 142.

As Ruth Webb summarizes, “The impact [of ekphrasis] derived from the judicious choice of details that corresponded to the audience’s prior knowledge and expectations, calling up the mental images already stocked in the viewer’s mind. In the storehouse of memory”: Webb, “Ekphrasis Ancient and Modern,” 13–14. Webb introduces the concept of enargeia, or vividness, to explain the process of mutual imagination of author and audience as well as the author’s anticipation and manipulation of imagery in the audience’s visual storehouse. For a full discussion of enargeia and its relation to phantasía.
In terms of the beholder’s completion of the work of art, scholars suggest that the characteristic abstraction of Byzantine art may indicate an expectation that the viewer would complete the image, that mimesis was realized not in the work of art but in the viewer’s mind. Within this “transfer of aesthetic responsibility,” rhetoric, especially ekphrasis, played an important role as a means of guiding the viewer in the completion of the work of art. See John Onians, “Abstraction and Imagination in Late Antiquity,” Art History 3 (1980): 1–23; and Trilling, “Image Not Made by Human Hands,” 121–23, with additional references, 121 n. 31.

70. In terms of the beholder’s completion of the work of art, scholars suggest that the characteristic abstraction of Byzantine art may indicate an expectation that the viewer would complete the image, that mimesis was realized not in the work of art but in the viewer’s mind. Within this “transfer of aesthetic responsibility,” rhetoric, especially ekphrasis, played an important role as a means of guiding the viewer in the completion of the work of art. See John Onians, “Abstraction and Imagination in Late Antiquity,” Art History 3 (1980): 1–23; and Trilling, “Image Not Made by Human Hands,” 121–23, with additional references, 121 n. 31.


73. In his account of the Church of the Holy Apostles, Mesarites describes the various levels of students who attend the school attached to the church, the most advanced of whom, “have achieved the higher and more complete stages, weave webs of phrases, and transform the written sense into riddles, saying one thing with their tongues, but hiding something else in their minds”: Downey, “Nikolaos Mesarites,” 866 and 899, Ch. VIII, line 3. Yet he seems to cast a potentially negative judgment on this type of rhetorical dissembling. In a subsequent passage, he asks St. Thomas to drive off “those who say one thing with their tongues and hide something else in their minds, who are white and black at once, seeming white so far as the outward man is affected, and showing the white and pure character of friendship, and, so to speak, clad with it outwardly, but black within, in their hearts which sit in ambush, full of envy and abuse and anger and darkness”: Downey, “Nikolaos Mesarites,” 868 and 900, Ch. XII, line 13. We might assume, therefore, that Mesarites’s own obscurity and hidden messages were pure in intention.

74. Downey, “Nikolaos Mesarites,” 868 and 901, Ch. XII, line 18.

75. Such expectations were not limited to Mesarites. Macrides and Magdalino argue that Paul the Silentiary’s sixth-century ekphrasis of Hagia Sophia was recited for a select group of Byzantine elites and that the effectiveness of the speech relied on the audience’s previous exposure to both the building and the mosaic that he described, as well as to a Syriac hymn sung at Hagia Sophia. The hymn made typological parallels between the church and Jewish Tabernacle that were contrasted in the ekphrasis so as to promote a more secular, imperial reading of the church. They propose that Paul’s ekphrasis was in part shaped by theological precepts, and that middle Byzantine descriptions of Hagia Sophia incorporate explicitly mystical interpretations of the decoration: Macrides and Magdalino, “Architecture of Ekphrasis,” 76–79.

76. As James and Webb posit, “Ekphrasis thus made present not the actual picture, which could be seen, but the spiritual reality behind it”: James and Webb, “‘To Understand Ultimate Things and Enter Secret Places,’” 12.

77. The following translation adapts and expands that of Mango, Art of the Byzantine Empire, 228–29. I thank Emmanuel Bourbouhakis for his assistance with translation of the text.

78. Mesarites, Die Palastrevolution des Johannes Komnenos, 44–46.
Medieval Islamic architecture in Northern Syria is unthinkable without the use of spolia. Despite the abundance of local building material—there are ample limestone quarries in the area and even basalt occurrences both northwest and south of Aleppo—numerous buildings from the Zangid (1127–1183), Ayyubid (1171–1260), and also the Mamluk (1260–1516) periods exploited older architectural elements to a great extent. In Northern Syria, it is extremely easy to make use of already existing building materials. The architectural heritage of this region, with its numerous ruined and abandoned sites from not only the early Christian but also the classical and ancient Near Eastern periods, is exceptionally rich, which must have been very convenient, especially for the ambitious building projects undertaken by the Zangid and Ayyubid rulers. During their reign, entire towns, castles, and city walls were refurbished completely or at least in great part, mosques were either renovated or newly constructed, and new building types, such as law schools (sing. madrasa), Sufi monasteries (sing. khānqāh), and hospitals (sing. māristān or bīmāristān) appeared for the first time.\(^1\) That architects regularly returned to abandoned sites within reach is confirmed both by literary sources and architectural studies: the minaret of the Great Mosque in Aleppo was built with stones from the former cathedral nearby,\(^2\) the Great Mosque in Harran incorporated elements from the neighboring Sabaean temple of the moon,\(^3\) and the Great Mosque of Diyarbakır, too, exploited its predecessor church.\(^4\) The new fortifications were especially in need of good-quality stone material: the citadel of Aleppo boasts numerous ancient column shafts, mainly in the glacis but also in the citadel wall, as well as heavy, monolithic Jewish tombstones, which were skillfully recycled in various parts of the enormous defense system.\(^5\)

However, secondhand material was not only cheap and easily available—it was also often charged with additional meaning, and there were many instances in which medieval craftsmen clearly reused ancient architectural fragments on purpose. An important motive seems to have been the desire to refer to a specific event or period in the past: Zangid and Ayyubid architecture frequently contained historical allusions and commemorated certain ancient sites: for example, the Shuʿaybiyya madrasa was built by the Zangid ruler Nur al-Din (d. 1174) on the location of the first Umayyad mosque of Aleppo.\(^6\) The stones from a tower built by the Umayyad general Maslama b. Iyṭufal Abd al-Malik (d. 738), reused in the late Ayyubid Aleppine Qinnasrin Gate (bāb Qinnasrīn), are an explicit historical reference to the famous warrior, whose siege of Constantinople between 715 and 718 earned him lasting fame. It would have been more than appropriate to commemorate him by including remnants from one of his towers in a gate that was to protect the city against the infidel foes.\(^7\) In addition, we also find a large number of Crusader spolia, whose political and ideological implications have recently been reexamined.\(^8\) The Crusader capitals, deliberately turned upside down and flanking the mihrab of the Abu ʿl-Fida' madrasa in the Nur al-Din mosque in Hama,\(^9\) are well-known examples of war trophies, as is the much more illustrious portico of the Crusader church of St. Jean d’Acre, splendidly integrated into the Cairene madrasa of Sultan al-Nasir Muhammad.\(^10\) There are plenty of other Crusader spolia in Northern Syria, mainly columns and capitals reused in various mihrabs in mosques, madrasas, and
khanqahs, which remain to be studied in detail. So far, there has been no serious examination of the origins of all the Crusader spolia in Northern Syria. Some were certainly taken from the various Crusader castles: many columns and capitals, for example, are missing from the chapel of Qal’at Marqab (Margat). Apart from their propagandistic value, they were certainly also selected for their beauty and precious material—all Crusader columns are of extremely good-quality marble, in different colors and shades.

While the political and symbolic implications of reused architectural elements have increasingly raised the interest of Islamic art historians, this paper will examine another attribute of spolia: their magical qualities, a highly underestimated aspect, no doubt because the entire subject of magic is generally relegated to the field of Islamic folklore and popular religion. However, both ethnographic and medieval literary data strongly suggest that talismanic and apotropaic spolia were enormously important and also widespread in the Middle East. Reading the literary sources, one might even argue that the presumed magical properties of spolia represented a major reason for their usage. An entire branch of medieval Islamic literature is dedicated to the topic of such talismans (ʿilasmāt), a term of Greek origin that basically covers ancient “magic” inscriptions and figurative sculptures that are meant to avert danger, ward off destruction, keep away evil, manipulate natural forces, heal the sick, or simply bring good luck. As we shall see below, special chapters were devoted to such ʿilasmāt in medieval topographical works. Talismanic spolia are, in a way, fixed versions of portable amulets, with exactly the same magical potential. Like amulets, they were part of the vast network of magical rites and beliefs practiced and well established in the everyday life of medieval Middle Eastern society, despite regularly recurring theological reservations.

Talismanic spolia are not particular to Northern Syria but have survived in many parts of the Middle East. Viktoria Meinecke-Berg and, more recently, Désirée Heiden have repeatedly demonstrated the significance of apotropaic pharaonic spolia for medieval Egyptian architecture, and there were and still are numerous folk tales and popular traditions attached to them. Finbarr B. Flood has noted the use of talismanic spolia in Syria, Yemen, Iran, India, and Pakistan. In fact, the phenomenon is not restricted to the Islamic Middle East. Magical spolia seem to have also existed in the Byzantine world and in medieval Europe, although the subject has hardly been studied systematically in either area. Talismanic sculptures, statues, and figurines were common in the classical world and, of course, even before then, in the ancient Middle East, although there are obviously no examples from those periods of architectural elements being reused for their presumed apotropaic or talismanic qualities such as are under discussion here.

This article will concentrate on the evidence from Northern Syria, an area unusually well represented in both the literary and ethnographic traditions. It will also look at archaeological evidence, which provides unique insights into how spolia were chosen, a process about which very little is otherwise known. Quite a number of the talismanic spolia mentioned in historical sources still exist today. They can be found in the context of religious, domestic, and fortification architecture, and include all sorts of building elements, such as ancient inscriptions, stone reliefs with figural depictions, and freestanding figural sculptures. As for their historical origin, there seems to have been no preference for any particular era: Syrian talismanic spolia might be of either ancient Near Eastern, classical, or even Byzantine origin. It will, in fact, be argued that the specific historical origin of the spolia used is actually irrelevant.

TALISMANS, MIRACLES, AND HOLY SITES: THE LITERARY EVIDENCE

Maybe more than any other area in the Middle East, Northern Syria is astonishingly well covered in medieval historical and geographical literature. The Ayyubid and Mamluk chroniclers Ibn al-ʿAdim (d. 1262), Ibn Shaddad (d. 1285), Sibt b. al-ʿAjami (d. 1479), and Ibn al-Shihna (d. 1485) in particular are exceptionally rich and valuable sources on the region, providing us with detailed information on its landscape, history, building heritage, and, what is important for us, the use of spolia in medieval architecture. In a certain way, it might come as a surprise that architectural spolia were considered important enough to be mentioned in the first place.

Maybe more than any other area in the Middle East, Northern Syria is astonishingly well covered in medieval historical and geographical literature. The Ayyubid and Mamluk chroniclers Ibn al-ʿAdim (d. 1262), Ibn Shaddad (d. 1285), Sibt b. al-ʿAjami (d. 1479), and Ibn al-Shihna (d. 1485) in particular are exceptionally rich and valuable sources on the region, providing us with detailed information on its landscape, history, building heritage, and, what is important for us, the use of spolia in medieval architecture. In a certain way, it might come as a surprise that architectural spolia were considered important enough to be mentioned in the first place.
Indeed, not only are they referred to at various points throughout the historical accounts but entire chapters are even devoted to them, with titles such as “Talismans, Marvels, and Places to Visit” (ṯlasm̱n, ḵṟām̱āt, m̱za̱ṟāt). Another important source is the pilgrimage itinerary by ʿAli b. Abi Bakr al-Harawi (d. 1215), which lists the principal shrines of his age and also mentions ṯlasm̱ṉāt.

The sources refer to a wide range of spolia in different locations. For Aleppo, for example, we find mention of a Greek inscription on the Ayyubid Gate of Victory (bāb al-Naṣr) (fig. 1), a Hieroglyphic-Luwian inscription (fig. 2) and a Hebrew inscription in the Mamluk mosque of al-Qayqan in the al-ʿAqaba quarter, and a “black column” on the no longer extant al-Afris Street that was probably made of basalt and hence of pre-Islamic origin. We have references to serpent “talismans” in Mayyafariqin (Silvan), Diyarbakır, Aleppo, and Maʿarrat al-Nuʿman. We do not know what they looked like. In Harran, they apparently resembled

←

Fig. 1. The talisman-spolium in the Gate of Victory (bāb al-Naṣr) in Aleppo. The Greek inscription is to the right of the cavities, darkened by use, where the afflicted placed their fingers. It is turned vertically and barely recognizable. (Photo: Julia Gonnella)

Fig. 2. The Hieroglyphic-Luwian inscription-spolium in the Mamluk mosque of al-Qayqan in Aleppo. (Photo: Julia Gonnella)
jinns with two heads, and thus remind us of the many dragon effigies known from various city gates.

These spolia were valued primarily for their healing qualities, which are surprisingly specific: each one is depicted as curing a particular malady. Consider, for example, the Hieroglyphic-Luwian inscription—described as a “black stone with figures”—which is still in situ and well known among Near Eastern archaeologists: it is an imperial foundation inscription for a temple dating back to the early thirteenth century B.C. According to medieval historians, it was apparently very efficient at fixing dislocated jaws, which could be remedied by coming to the mosque on three successive mornings before sunrise. The Hebrew inscription in the al-Qayqan mosque, an epitaph, was said to cure back pains. The Greek inscription on the Gate of Victory, again fragments of an epitaph, is still visited today by those suffering from hand and fingernail problems: the afflicted person is meant to stick his or her fingers into little cavities, now darkened after years of frequent usage (fig. 1). The black basalt column on Afris Street has unfortunately disappeared. It was described as having been particularly good at curing prostate problems. The serpent tilasmāt were effective against snakebites, and there were also numerous scorpion talismans against scorpion bites. Rather curious is a charm, not further specified, in the Hayyat mosque in Aleppo. It was meant to cure wild animals (sing. waḥš) stricken with a colic. Throughout the Islamic Middle East, wild animals are generally considered unclean and are thus avoided. Local inhabitants perhaps hoped that the tilasm would help them to ward off epidemics. The Hayyat mosque was originally a synagogue and the charm was possibly associated with the Hebrew inscription still in situ.

Of course, it was not the intention of medieval chroniclers to provide the reader with a topographical map of the major centers for various cures. Spolia were part of a whole range of extraordinary, supernatural phenomena—and there were other “non-architectural” oddities described alongside, such as the rather awkward report of a gentleman who threw a pottery shard into a pool in a place called al-Khannaqiyya outside Aleppo that was apparently grabbed by a strange hand appearing out of nowhere from behind a door under the water. There were also descriptions of unusual lights flaring up at certain locations, such as the one over a village near Rawandan. Very much like the mirabilia in medieval Europe, such remarkable phenomena were highly regarded in many parts of the Middle East and in fact belong to the “marvels” (ajā′īb) that were collected more systematically by Arab geographers from around the twelfth century onwards, eventually forming a literary genre of their own, the Ajā′īb al-makhlūqāt (Marvels of Creation) by the famous cosmographer and geographer Zakariyya b. Muhammad al-Qazwini (d. 1283) being the most illustrious oeuvre of this kind. These marvel stories described curiosities to a certain extent, but were concerned above all with miracles, wonders, and signs of supernatural power. These signs could be positive, as described above, but also negative. With respect to the spolia, they might very well be regarded as unpropitious omens of impending disasters. Such was the case with the basalt lion—quite certainly of ancient Near Eastern origin—that appeared in the course of restorations in the Great Mosque of Aleppo, making people feel very uneasy about continuing work there. Another basalt lion was discovered when the Ayyubid palace on the citadel of Aleppo was being built: it was taken as an omen portending the destruction of the fortification walls. Stories like these certainly were recurrent topoi, but as we shall later see, there were also some documented, “real” discoveries, such as the citadel lion, which almost certainly belonged to a predecessor site and was possibly identical with one of the two spolia lions that were integrated into the fountain house near the palace (fig. 3). It is noteworthy that of all the spolia, literary sources seem to pay particular attention to ancient inscriptions: among those mentioned are a reused Hebrew inscription in the town of Qinnasrin, and Greek inscriptions in Tarsus, Adana, and Nasibin, as well as Damascus. Rather odd is the reference to a “three-thousand-year-old” Greek inscription on an antique marble altar, apparently bearing the Roman emperor Diocletian’s name. It was brought from Apamea to the Hallawiyya madrasa in Aleppo by Nur al-Din and became the object of much admiration.

One might be tempted to interpret this preoccupation with ancient inscriptions as a manifestation of a
fascination with history—the study of the past being, after all, an important research category of medieval Islamic scientific literature. This concern for the past also included an interest in ancient sites, and we know of several rulers who eagerly investigated archaeological remains, such as the Ayyubid sultan Salah al-Din (d. 1193), who went to see the pyramids in Cairo and also paid a visit to Alexandria, the ancient Hellenistic venue of learning and science.45

But did one really hope to extract historical information from the ancient inscriptions? Instead, the fascination with inscriptions seems to have been connected with the magical mysteries they supposedly revealed. The emir Sayf al-Din ‘Ali b. Qilij, for example, had someone translate a Greek epitaph that came from a cemetery famous for its unusual light phenomena. The text, read by one of Aleppo’s Greek scholars, turned out to be a religious note proclaiming that this light was a present from God.46 The emir was certainly not interested in this inscription for its historical value but rather because he hoped to make use of its talismanic properties. The beautiful, “three-thousand-year-old” altar, with its white, translucent marble patina, which was brought to the Hallawiyya madrasa in Aleppo, was also not appreciated for its historical significance alone. It was reused for serving pastries to the jurists residing in the madrasa. Significantly, the service took place on a specific night, the blessed Laylat al-Qadr, the twenty-seventh night of Ramadan, a particularly propitious date in the Muslim calendar. The altar was evidently considered to be auspicious.47 Above all, the ancient inscriptions were obviously cherished because of their close association with magical formulas and invocations, as one also finds them on portable amulets and handwritten charms, which often made use of pseudo-alphabets and Kabbalistic letters—seemingly “foreign” scripts. Letters (ḥurūf), like numbers, were generally believed to possess occult properties, and particular religious specialists were cherished for their apparent knowledge of such secrets and for their presumed expertise in accordingly influencing the supernatural spheres.48 Magicians also employed foreign scripts to keep their knowledge of the occult secret; they likewise made use of special magical ink.49

Fig. 3. Two reused basalt lions in the fountain house near the palace on the citadel of Aleppo (detail of photo by Gertrude Bell in Ernst Herzfeld, Inscriptions et monuments d’Alep, 2 vols., Matériaux pour un Corpus inscriptionum Arabicarum, Deuxième partie, Syrie du Nord (Cairo, 1954–56), vol. 1, pt. 3, pl. IVe). Both lions no longer exist.

In examining the use of spolia, it certainly is of value to study more closely what are often labelled as the “popular,” local traditions of Islam. Especially in the ethnographic accounts of the veneration of saints, one finds plenty of practices and beliefs directly relevant to our subject. Particularly rich are the fascinating reports of the widely travelled Bavarian ethnographers Rudolf Kriss and Hubert Kriss-Heinrich, who in the late 1950s assembled numerous oral traditions on popular pilgrimages, saints’ tombs, and amulets in the Balkans, Greece, Syria, Turkey, Palestine, Egypt, and Ethiopia.50 A great number of the holy places they encountered have since disappeared. Others continue to exist and...
are still today potent sites of visitation, at least for parts of the present populations of these regions.

Many of the so-called folklore customs and beliefs described are of great antiquity. Such is the case with the particular significance of doors, thresholds, and gateways, which represent dangerous, permeable openings into safe, domestic spaces and thus need additional magical protection through charms, shrines, or talismanic statues. Assyrians and Hittites used “guardian” figures, both full statues of lions, sphinxes, and griffin demons and little terracotta figurines that were buried under thresholds, to prevent evil from entering.\(^{51}\) Stele with moon and bull aspects secured entrance gates in ancient Israel.\(^{52}\) In Greece, talismanic statues protected cities and citadels.\(^{53}\)

Islamic folklore tradition as well has several potent magical rites to secure endangered architectural aper-
tures, such as the hanging of special herbs, mounted animals such as crocodiles, or other charms above the doorway, and even today numerous houses are safeguarded by amulets and other protective measures, both in the countryside and in urban settings.\(^{54}\) Such protective measures were by no means taken only in the context of vernacular architecture, as is perfectly illustrated by the formidable design of the three heavy Ayyubid iron gates of the mighty Aleppo citadel, with its regular layout of horse shoes, an impressive example of a visually satisfying, apotropaic decoration making use of an old amulet type still common in Syria and Turkey today (fig. 4).\(^{55}\) Ethnographic reports from nineteenth-century Cairo relate that it was still common to guard the entrance to one’s residence with hieroglyphic inscriptions. They also mention herbal and handwritten amulets as well as talismanic *spolia*.\(^{56}\) City gateways were and still are often protected by shrines and talismans—the city wall shielding the inhabitants from both natural and supernatural hostile incursions. There are numerous ancient traditions and miracles associated with gates. For example, Kriss and Kriss-Heinrich recorded that at Zuwayla Gate (bāb Zuwayla) in Cairo people used to stick nails in the doors, place teeth in the joints, and bind threads around the nails, all to find relief from headaches and toothaches (fig. 5).\(^{57}\) In Syria, many of these ancient beliefs and traditions are still very much alive.\(^{58}\) At Aleppo’s western gate, the Gate of Antakya (bāb Antākya), one can still admire the large iron cannon ball of Shaykh Ma’ruf, who is said to have fended off the Crusaders.\(^{59}\) At the Gate of Victory to the north, both the shrine of al-Khidr and the aforementioned fingernail talisman, the ancient Greek inscription (fig. 1), are regularly visited for their healing qualities, as is the *maqām* (shrine) of the “flying” Shaykh al-Tayyar at the southeastern Gate of Qinnasrin, which was recently renovated by private initiative. Even Aleppo’s citadel boasts a potent gateway saint, again al-Khidr, in its heavily fortified entrance complex, which is still visited on a regular basis.\(^{60}\)

The magical qualities of the gateways might have also played a role in how doors themselves came to be regarded as a worthy trophy: there is a long record of doors having been translocated as booty, not only in Islamic but also in Byzantine and medieval European contexts.\(^{61}\) The robbing of doors certainly represents

---

**Fig. 4.** Detail of the Ayyubid iron doors with horseshoe decoration from the main entrance gate of the Aleppo citadel. (Photo: Klaus-Peter Kohlmeyer)
one of the most sophisticated ways to symbolically display victory, leaving behind the defeated enemy, frail and unprotected not only physically but also visually. One prominent example is the odyssey of the famous Byzantine iron doors of Ammuriyya, which were carried off to Samarra by the Abbasid caliph al-Mu'tasim (r. 833–42) after he captured the Byzantine stronghold in 838. They were then brought via al-Raqqa to Aleppo, where the Ayyubid sultan al-Nasir Yusuf II (r. 1236–60) integrated them into the newly restored Qinnasrin Gate.62 This conscious statement against his Christian enemies was further reinforced by his decision to complement the doors with the aforementioned remains from the Umayyad tower built by Maslama b. 'Abd al-Malik, who was remembered not only for his famous siege of Constantinople but also for defeating the Byzantine army near Ammuriyya.63 These doors were thus certainly charged with a strong political significance, but one might well assume that they were also believed to have numinous powers.

Apart from thresholds, gateways, and doors, ethnographic data further reveal the significance of stones and columns, which play a key role on saintly premises (fig. 6).64 The attribution of magical qualities to natural stones, stone blocks, and columns is again a well-known pre-Islamic phenomenon: they were often believed to be inherently numinous or animated. Stone sanctuaries (Gr. baityloi) were built by the Phoenicians, the Greeks, and the Israelites, as well as the ancient Arabs. They served as either abodes or aniconic images of a deity, and were even sometimes considered divine themselves.65 In his book on the religion of the early pagan Arabs, the Muslim historian Ibn al-Kalbi (d. ca. 819) describes some of the rites that surrounded such sanctuaries: visitors circumambulated the sites, sacrificed animals, and smeared their blood over the stones.66 The Greeks also had “sacred” columns, which were said to have “fallen from the sky” (diopetēs, lit. “fallen from Zeus”), a possible indication of their meteoritic origin.67

In Northern Syria, one encounters columns ancient and new, some cut from rock and others fashioned from spolia, as well as pillars and piers. In both literary and oral traditions, there were plenty of columns and pillars boasting specific healing abilities. The remains of a column shaft in a cemetery near Jerusalem, for example, were believed among the locals to cure headaches.
Fig. 7. Column with strings in the Petrus grotto of ‘Akura. (Photo: Kriss and Kriss-Heinrich, Volksglaube, 1: pl. 142)

Fig. 8. Piers with strings in the church of Mar Yuhanna in Jubayl. (Photo: Kriss and Kriss-Heinrich, Volksglaube, 1: pl. 141)
Magic spolia in medieval Islamic architecture of northern Syria

had been wrapped around the piers after a major cholera outbreak. There were also, and still are, miracles associated with columns: a column in a local maqām near Skopje in the Balkans, for example, is said to have arrived there by flying through the air from Khorasan.73

These magical qualities might indeed account for the very common practice of reusing column shafts in architecture. Fortifications in particular make significant use of column shafts in various parts of their defensive systems. In most cases, they are vertically set into the wall constructions as header ties, leaving the round section of the columns visible on the outside wall.74

While it is commonly argued that column shafts were mainly employed for stability reasons—the columns are meant to hold the walls together to protect foundations against sapping75—Michael Greenalgh has recently pointed out that the layout of the shafts within the fortification walls was very often too regular and overly decorative.76 Indeed, many of the shafts are fixed on a very high level and are thus hardly functional for defensive purposes. Recent architectural studies on the citadel of Aleppo and the city walls have further revealed not only the existence of large numbers of reused column shafts but also “fake” columns, that is, roundels cut into the masonry as a way to mimic the originals (fig. 9). Instead, there seems to be a magical raison d’être behind their frequent usage. This is certainly strongly suggested by the wall decoration of the small Mamluk mosque of al-Qayqan in Aleppo, where column shafts are conspicuously displayed on both façade sides, together with the aforementioned talismanic Hebrew and Hittite inscriptions and other non-epigraphic spolia (fig. 10).77 In this case, concern for stability most definitely could not have been a factor in their inclusion.

It certainly is surprising how many of the smaller, local shaykhs’ tombs are furnished with columns. In most cases, these columns originated from more ancient constructions nearby and sometimes even directly from predecessor buildings. Muslim shaykhs’ tombs were often built on more ancient holy sites, Christian churches and/or pagan temples. The reemployment of older building material created a visual continuity of sacred space—both in Northern Syria and in other places as well. In some cases, shaykhs’ tombs not only made use of single spolium but were even integrated into the ruins of the predecessor building, as with the

when circumambulated seven times,68 and the “sweating” column in the Hagia Sophia—also known among Muslims as the “column of al-Khidr”—was, and by some still is, said to be rather efficacious against eye problems and infertility: the afflicted are supposed to stick their thumbs in a small cavity of the shaft.69 Ibn Shaddad mentions a beneficent pillar that was visited by both Muslims and Jews, illustrating perfectly that such beliefs were not confined to one religious community alone.70 People came, and still come today, to bind strings around particular columns as a way to confirm personal vows (fig. 7)71—again a practice known among not only Muslims but also local Christians—as is likewise made clear by reports from the chapel of St. Ananias in Damascus and the church of Mar Yuhanna in Jubayl, in present day Lebanon (fig. 8).72 In the latter case, Kriss and Kriss-Heinrich were told that the strings

Fig. 9. “Fake” column shafts at the Gate of Victory (bāb al-Naṣr) in Aleppo. (Photo: Julia Gonnella)
Fig. 10. Reused column shafts at the Mamluk mosque of al-Qayqan in Aleppo. (Photo: Julia Gonnella)

Fig. 11. The shrine of “Nabi Huri” in Cyrrhus. (Photo: Klaus-Peter Kohlmeyer)
local *maqām* within the Roman temple ruins on Barakat mountain, near the famous Byzantine monastery of St. Simeon, or the *maqām* of Uriya b. Hannan (“Nabi Huri”) on the antique site of Cyrrhus near the Turkish border—until today one of the most important shrines for local Kurds—in a nearly intact Roman tomb (fig. 11). This manner of using predecessor buildings is in no way confined to so-called vernacular architecture: the Hallawiyya madrasa in Aleppo preserves part of the ancient cathedral, and the cella of the Baal temple in Palmyra was first turned into a church and then into a mosque in the twelfth century, without many changes to the place. Of course, ancient inscriptions, *spolia*, and archaeological ruins emphasize the antiquity of a religious site. They imply that the site has always been worshipped, evoking a sort of timelessness, as do indeed the Muslim saints themselves, whose historical personality has in general long been forgotten and who are simply remembered for having lived “a long time ago” (*min zamān*). In anthropological terminology, one would say that both saints and shrines were removed from the “natural circle of life,” and instead belong to a “sacred,” permanent time.

**RECUTTING SPOLIA:**

**THE “CLASSICAL REVIVAL”**

It would be incredibly fascinating to look at so-called classical revival architecture from a “magical” perspective. This architectural phenomenon, which was rather unusual for Islamic art, appeared in Northern Syria in the eleventh and twelfth centuries. It makes deliberate use of antique forms, including pilasters, pediments, and cornices with different types of moldings. In fact, these occurrences of classicisms are restricted to single architectural details such as friezes or capitals, rather than to entire buildings. In a way, one could say, therefore, that we are dealing here with architectural elements made to look like *spolia*. A well-known example is the ornate entablature of the Shu’aybiyya madrasa in Aleppo, built in 1150 by Nur al-Din, which...
Jean Sauvaget mistook for recut antique material (fig. 12). The phenomenon of fabricating stones all’antica, i.e., of fabricating one’s own spolia, is, of course, also known from other parts of the world, such as medieval Europe, where one deliberately tried either to finish off a decorative arrangement with already existing antique elements or to produce new, prominent, antique-looking eye-catchers for selected parts of the buildings.

Terry Allen has argued that these classicizing motifs in Northern Syria were employed in places that had appropriate—albeit rather general—“antique” associations and where there were already antique monuments or remains. The Shu’aybiyya madrasa, for example, commemorated the first mosque in Aleppo and was built near a now-lost Greek arch that might have served as a model, and both the minaret of Aleppo and the mosque of Harran have associations with the prophet Ibrahim. Allen has also pointed out that these classical motifs seem to have appeared mainly on religious and not on secular buildings, although this is a rather speculative observation, considering how little secular architecture has survived from this period.

It is extremely tempting to theorize that these classical motifs, the so-called pseudo-spolia, were also meant to evoke magical associations. If this was the case, they would have enhanced the sanctity of the respective building, not unlike the fake saint’s tomb of the Aleppo suq, which was specifically installed during the pilgrimage period in order to attract additional customers. A magical association would certainly require us to revise the traditional interpretation of the “classical revival.” The appearance of classical motifs on religious buildings, for example, would then have to be seen as yet another way of emphasizing the antiquity of the sacred site rather than the antiquity of the site having been the source of inspiration for this exquisite workmanship, as has previously been argued. It would also explain the different antique styles used within the framework of “classical revival” architecture that have always puzzled art historians, making it difficult to interpret this phenomenon as a conscious attempt to recreate a specific historical period. Spolia were used to make buildings look “ancient” in a very general sense rather than to evoke a specifically “Byzantine,” “Umayyad,” “early medieval,” or even “classical Roman” past. Of course, these preceding remarks remain highly theoretical and should be studied further.

I would like to conclude with archaeological evidence that not only testifies to the significant magical role of spolia per se, but also provides us with a rare insight into the process of choosing spolia. Between 1996 and 2006, Syrian-German excavations at the citadel of Aleppo yielded an important Bronze and Iron Age temple dedicated to the storm god, one of the major cultic places in the entire Middle East. The temple was decorated not only with various sets of spectacular reliefs depicting the storm god himself and his entourage, but also with an exceptional portrait of King Taita, a potent but yet little-known ruler of the eleventh century B.C. These reliefs were added to the temple at various stages and are currently dated between 1400 and 900 B.C.

Before the excavations started, a series of single ancient sculptures and reliefs dispersed on the citadel and in the local museum were already important harbingers of the future discovery. Of those, a group of five limestone and basalt blocks is particularly striking. One of these blocks is reused as a spolium next to the entrance gate of the upper Ayyubid mosque (fig. 13). The others are presently exhibited as isolated pieces in front of the citadel museum. They, too, had apparently been integrated into the same mosque, but were extracted once the mosque was dismantled for restoration during the period of the French Mandate. These blocks, which are around 85 to 95 centimeters tall and 1.5 meters wide, all show a grid- or knot-like pattern in two registers. They date to the period of the Hittite Empire (fourteenth–thirteenth century B.C.) and are meant to depict “false windows” with carved window grilles resembling lattice woodwork screens (mashrabiyyas), as corroborated by miniature house models in clay.

The excavations revealed that these blocks belonged to the original decoration of the former temple when, in 2003 and 2004, the practically intact interior of the eastern and southern walls of the temple was exposed, yielding nine further mashrabiyya blocks still in situ (fig. 14).
From this it was clear that the other five blocks originated from the western wall, which had been completely destroyed in the Ayyubid period during the construction of a series of storage rooms. These storage rooms still exist to the east of the lower mosque and now—after clearing—expose the foundation of the temple wall. When the Ayyubid workmen had this wall demolished, they evidently removed the decorated stone blocks from their original location and incorporated them into the upper mosque, which was completely rebuilt under the Ayyubid sultan al-Malik al-Zahir (r. 1186–1216) after it burned in a fire in 1212.90

The knot-like patterns of the so-called false windows probably induced the Ayyubid architects and workmen to reuse the Hittite stone blocks as talismanic spolia near the mosque entrance. The motif fits very well with Ayyubid apotropaic decoration. Knots are known for their magical associations: it is an ancient Arab custom to spit on knots, for example, and knotted threads are thrown upon saints’ tombs.91 Knot motifs are common not only on Ayyubid pottery and metalwork92 but also in Ayyubid architecture, the most famous example being the two intertwined dragons sitting over the main entrance of the Aleppo citadel. The choice to integrate a “false window” next to the mosque entrance, therefore, seems plausible within both the Ayyubid magical and aesthetic contexts.

Lion figures were also obviously reused on the citadel, as seen in the aforementioned photograph by Gertrude Bell (fig. 3).93 It shows two basalt lion sculptures flanking the entrance of a building, which can probably be identified as the fountain house next to the Ayyubid palace. Unfortunately, it is impossible to date this building activity precisely and the lions have since

---

Fig. 13. A “false window” reused in the upper mosque of the Aleppo citadel. (Photo: Julia Gonnella)

Fig. 14. The reliefs of the eastern wall of the temple of the storm god in Aleppo. (Photo: Kay Kohlmeyer)
disappeared, too. However, the two Ayyubid three-quarter profile lions (the “laughing” lion and the “weeping” lion) on both sides of the third gateway in the large entrance complex are clearly conscious reminders of the important pre-Islamic tradition associated with this site.

Not all reliefs from the ancient temple were equally appreciated by the Ayyubids. The famous one previously discovered by the French archaeologist Georges Ploix de Rotrou in 1929, with two winged genii and a sun and moon motif, was reused as an ordinary cornerstone in a medieval foundation, hiding the figural decoration. In the course of repair work by the Aga Khan Trust for Culture (AKTC) in 2004, the remains of a massive, ancient Middle Eastern sculpture were discovered as a foundation stone of the second gate in the large Ayyubid entrance complex. The sculpture, representing either a sphinx or a griffon, had been turned upside down and cut into shape. Its head was missing, making it difficult to identify the creature with certainty. In both cases, the buried sculpture demonstrates that the Ayyubids were seriously concerned about displaying it in public, despite the fact that griffons and sphinxes do not regularly appear in medieval decorative Islamic art and neither has explicitly negative associations.

For the final set of reliefs, we do not have any actual remains, although one might assume that they also ended up as foundation material in medieval buildings. The original temple decoration discovered in the excavations shows not only “false windows” but also alternating “bullmen” with lifted arms. These ancient mythical creatures evidently produced strong feelings of anxiety, certainly for their hooves alone, which made them appear to be jinns. Until today, none of the bullmen, which must have embellished the western wall of the temple, has been recovered. The excavations on the citadel, however, demonstrate very well that medieval architectural spolia were chosen with the greatest care and attention.

Museum für Islamische Kunst
Berlin, Germany

NOTES

Author’s note: This article is dedicated to the memory of Viktoria Meinecke-Berg, who was one of the first to deal with spolia in the context of Islamic architecture. An earlier version of this paper was given at the conference on Byzantine Spolia in Islamic Monuments, held between October 31 and November 3, 2003 at the Skulpturesammlung und Museum für Byzantinische Kunst (SPK) in Berlin. I would like to thank Neslihan Asutay-Effenberger and Arne Effenberger for having organized this very inspiring event.


2. The historical text actually mentions that the kadi Abu’l-Fadl Ibn al-Khashshab took stones from a fire temple for the minaret. The Aleppo cathedral was originally believed to have been a fire temple before it was christianized: ‘Izz al-Din Abū ‘Abdallāh Muhammad Ibn Shaddād, al-‘Araq al-kha/tīra fī dhikr umār al-Shām wa/l-Jazīra = La description d’Alep d’Ibn Shaddād, vol. 1, pt. 1, ed. Dominique Sourdel (Damascus, 1953), 34. See also Terry Allen, A Classical Revival in Islamic Architecture (Wiesbaden, 1986), 23–24.


6. For full references, see n. 80 below.


11. It would be interesting to find out whether some *spolia* were not in fact reworked copies. In Aleppo, it is very conspicuous that all the so-called Crusader columns flanking the various Ayyubid and Mamluk mihrabs always appear in pairs. They always fit perfectly in their position, never look cut or damaged, and also go very well with the rest of the marble decoration on the mihrabs (e.g., greyish marble columns and greyish marble decoration in the Aleppo Shadhbakhtiyya madrasa, greenish marble columns and mihrab decoration in the Sultanīyya madrasa, red marble in the Farafra khanqah, etc.). This perfect arrangement makes one wonder whether the columns were in fact not booty but rather conscious reworkings in Crusader style executed together with the rest of the prayer niche. Strangely enough, the only dodgy pair of columns is in the Firdaws madrasa, which is otherwise noted for its superb mihrab. These columns do not fit very well in their position, and the color of the marble differs from the overall decoration. They may be later additions.


26. Ibn Shaddād,
28. For various examples of dragon reliefs in Anatolia and
16. See, for example, Richard H. L. Hamann-Maclean, “Antiken-
17. Little research has been conducted on the topic of spolia in
classical and ancient Middle Eastern architecture. For talis-
manic statues in ancient Greece, see Christopher A. Faroane,

18. See the chapter “Les particularités et les talismans, les lieux
miraculeux d’Alep, dans les murs, hors-les-murs, et dans sa
province,” in Abū Dharr Ahmad Sīḥ ibn al-‘Ajamī, Kunūz
al-dhabah fi ta’rikḥ Halab = “Les trésors d’or” de Sīḥ ibn
al-‘Ajamī, trans. Jean Sauvaget, Matériaux pour servir à l’his-
toire de la ville d’Alep 2 (Beirut, 1950), 1.

Janine Sourdel-Thomine (Damascus, 1957).

other references.

21. Sīḥ ibn al-‘Ajamī, “Les trésors d’or,” 2; Julia Gonzella, Isla-
mische Heiligenverehrung im urbanen Kontext am Beispiel
von Aleppo (Syrien) (Berlin, 1995), 225. On the mosque, see
407–8, fig. 132.

22. Ibn Shaddād, La description d’Alep, vol. 1, pt. 1, p. 123; Sīḥ
choisies,” 136; Gonzella, Islamische Heiligenverehrung, 256.


24. Van Berchem and Strzygowski, Amida, 82.

25. In the burj al-thā‘ābīn (serpent’s tower) in Aleppo. See Ibn
Shaddād, La description d’Alep, vol. 1, pt. 1, p. 123; Sīḥ
choisies,” 135–36.

The antique stone column in Ma’arrat al-Nu’man is also
described by Nasir-i Khusraw (d. 1088): see Guy Le Strange,
ed. and trans., Palestine under the Moslems: A Description of
Syria and the Holy Land from A.D. 650 to 1500 (orig. pub.
Boston and New York, 1890; repr. Beirut, 1965), 495.

27. Sīḥ ibn al-‘Ajamī, “Les trésors d’or,” 2; Nikita Elisseeff, Nûr
ad-Dīn, un grand prince musulman de Syrie au temps des
Croisades (511–569 h./1118–1174), 3 vols. (Damascus, 1967),
1:145.

28. For various examples of dragon reliefs in Anatolia and
Mesopotamia, including the famous knotted dragons on
the entrance of the Aleppo citadel, see Joachim Gierlichs,
Mittelalterliche Tierreliefs in Anatolien und Nordmesopo-
tamien: Untersuchungen zur figürlichen Baudekoration der
Seldschuken, Artuqididen und ihrer Nachfolger bis ins 15. Jahr-

29. For the Hieroglyphic–Luwian inscription, see Annelies Kam-
enhuber, Hethitisch, Palaisch, Luwisch, Hieroglyphenlu-
wisch und Hattisch: Altkleinasiatische Indices zum Handbuch
der Orientalistik (Munich, 1969), 168. This inscription was
originally reintegrated upside down. It was later turned
around 180°, probably during the French Mandate period.
The Hebrew inscription is recorded in Herzfeld, Inscriptions
et monuments d’Alep, 2:407–8, fig. 132.

30. For the Greek inscription, see Louis Jalabert and René
Mouterde, Inscriptions grecques et latines de la Syrie (Paris,
1929), vol. 1, 107. Another “(tomb?)stone” with healing
qualities in the same city gate is mentioned by al-Harawi,
Guide des lieux de pèlerinage, 9. It has not survived, however.
For the gate, see Herzfeld, Inscriptions et monuments d’Alep,
vol. 1, pt. 1, pp. 29–39. For references to a maqām of al-Khīd in
the same gate, see Gonzella, Islamische Heiligenverehrung,
162–63.


32. Cf. a similar column near the Umayyad mosque in Damas-
cus that, once circumambulated three times, enabled horses
and donkeys to urinate again: al-Harawi, Guide des lieux de
pèlerinage, 56.

33. For a discussion of the various medieval scorpion and
serpent talismans, see Almut von Gladiss, “Medizinische
Schalen: Ein islamisches Heilverfahren und seine mittelal-
terlichen Hilfsmittel,” Damaszener Mitteilungen 11 (1999):
147–61; Flood, “Image against Nature,” 146–66, also notes
numerous talismans against reptiles, pigeons, spiders, and
other creatures.

34. Sīḥ ibn al-‘Ajamī, “Les trésors d’or,” 1–2; the talisman is
described as being on Nasiriyya Street. On the mosque, see
309–12; Meinecke, Die mamulische Architektur, 2:145, no.
33/34.

35. For example, see the article on dogs in F. Viré, EI2, s.v.
“Kalb.”

36. On the synagogue and its inscription, see Herzfeld,
Inscriptions et monuments d’Alep, 2:312, no. 165, pl. CXIIb.


38. Lights descending from the heavens are a common topos for
designating shrines or holy places. Ibn Shaddād, La descrip-


al-Shihna, “Les perles choisies,” 136. For other miraculous
incidences in the Great Mosque, see Gonzella, Islamische
Heiligenverehrung, 209–11.


42. The two lions have disappeared. Bell’s detailed picture of one
of the lions has been published by Herzfeld, Inscriptions
et monuments d’Alep, vol. 1, pt. 3, pl. IVe; for the pair as seen
from afar, see pl. XXXIXd.

43. Sīḥ ibn al-‘Ajamī, “Les trésors d’or,” 4; Ibn Shaddād, La des-
50. Rudolf Kriss and Hubert Kriss-Heinrich, *Volksglaube in der Figurate von Betsaida (et-Tell)* (Freiburg, Switzerland, 1998).


52. For the multi-layered significance of Nur al-Din’s installation of this altar table in the converted former cathedral of Aleppo, see Flood, “Medieval Trophy,” 52–64. The great age of the table obviously played an important role in underlining the antiquity of the place: see also Allen, *Classical Revival*, 60. Flood considers the Christian associations of the spolia to be more important; in his opinion, they were explicitly intended to reassert Nur al-Din’s propagation of a newly ascendant Islam.


56. People also took small stones from the column and placed them under their heads: Kriss and Kriss-Heinrich, *Volksglaube*, 1:169.


58. For Aleppo, see Gonnella, *Islamische Heiligenverehrung*, 158–64.

59. Ibid., 158–59 and 184–85.

60. Ibid., 259.


62. The history of the journey of the large ‘Ammurīyya iron doors is very complex and its details are subject to discussion. From Samarra they were first brought to al-Raqqa, where they were probably reused in one of the city gates, and then to Aleppo, by either the Hamdanids or the Ayyubids. In Aleppo, the doors were damaged when the Mongols captured the city gate in 1260; the Mamluk sultan Baybars (r. 1260–77) finally had them transferred to Cairo, where they disappeared without a trace. For the literary sources, see n. 7 above. For a recent discussion and also a full bibliography, see Stefan Heidemann, “Die Geschichte von ar-Raqqa/ar-Rāfiqa: Ein Überblick,” in *Die islamiche Stadt*, ed. Stefan Heidemann and Andrea Becker, *Raqqa 2* (Mainz, 2003), 49.


64. Kriss and Kriss-Heinrich mention numerous shrines with columns, among others, the remains of a column in the grotto in Mar Thekla (Ma‘lula) reused as a water basin (Kriss and Kriss-Heinrich, *Volksglaube*, 1:236, pl. 126), and several columns clustered around the tomb of Shaykh Faraj near Salamiyya (Kriss and Kriss-Heinrich, *Volksglaube*, 1:283–84, pl. 162).


66. People also took small stones from the column and placed them under their heads: Kriss and Kriss-Heinrich, *Volksglaube*, 1:169.


68. As one of the numerous examples cited, see the column in the grotto near the Ibrahim River (the former “Adonis”...
72. Ibid., 1:215, 255.
73. Ibid., 1:337.
74. See also Michael Greenalgh, "Spolia in Fortification: Turkey, Syria and North Africa," in *Ideologie e pratiche del reimpiego nell'alto Medioevo*, Settimane di studio del Centro italiano di studi sull'alto Medioevo 46 (Spoleto, 1999), 785–932, esp. 869–75.
78. Arab tradition associates this site with the Biblical eponym as a revival rather than a survival: Michael Rogers, *Classical Revival*, 58–59, for a discussion of the new fortress gate with its reused antique reliefs of Hermes and Heracles.
It is necessary to reexamine the way we see and think about the Sultanate architecture of South Asia. Across the subcontinent, different regional traditions of Islamic religious architecture incorporated “small models of large buildings” into their structure and decoration. This phenomenon sprang directly from fundamental Indic principles of architectural design, and constituted an important component in the making and reception of Indic architecture. In spite of this, current scholarship largely overlooks or underplays the interpretation of these principles in Sultanate architecture. This study identifies two of the main regional traditions in which this architectural aesthetic is present and suggests a preliminary typological classification for the different applications of “small models of large buildings” in Sultanate South Asia; the final section reflects on future avenues of research into the making and reception of micro-architecture in Islamicate contexts. I also propose that the word “micro-architecture” be adopted from European scholarship as an umbrella term to unite the terminological diversity that currently marks South Asian research in this area and prevents it from engaging in broader dialogues. While this term offers a useful way of analyzing and reinterpreting many regional traditions of Islamic architecture in various time periods, I focus on Gujarat and the Deccan between the late thirteenth and the seventeenth centuries, when these two areas developed individual micro-architectural traditions (fig. 1).

MICRO-ARCHITECTURE IN THE INDIC TRADITION

Many architectural traditions are interested in their own forms and cover architecture with architecture, from the aedicules of classical temples to Gothic’s prolific use of “small models” and the treatment of mihrab niches in Islamic religious architecture. In such traditions, architects have turned to monumental buildings to generate both form and decoration. This interest in micro-architecture varies widely by region and by period, and a vast, though arguably diffuse, literature now exists on the topic. This said, Indic architecture surely occupies a particularly prominent place in the story of micro-architecture. In a comparative survey of architectural ornament across the world, Stuart Durant draws attention to Indic religious architecture’s uniquely sustained interest in covering architecture with architecture and generating architecture from the aggregation of smaller architectural elements. As eloquently expressed by Durant, Indian temples are “totalities composed of a multiplicity of subsidiary forms—themselves sometimes miniature versions of the temple structure itself.” Indic traditions of micro-architectural composition and decoration, as applied in the context of temple architecture, have received a substantial amount of scholarly attention in recent years, and it is this body of work that provides the foundations of the present study.

Western scholars of Indic temple architecture quickly noticed its propensity for employing “small models of large buildings”—a phrase coined in 1876 by James Fergusson in his pioneering History of Indian and Eastern Architecture. However, focused study of the phenomenon only began in the 1980s and one of the most detailed studies of its type remains that of Adam Hardy, a practicing architect and architectural historian. In Indian Temple Architecture: Form and Transformation, Hardy deconstructed Indic temple types to reveal how they were built according to the principle of “the combination and interrelation of images of
shrines," with small shrines literally embedded within the core of the central temple. Figure 2 shows Hardy’s deconstruction of a typical Shekharî temple—one of the many formal types found in north India—illustrating how it can be understood as the embedding of four smaller shrines into the faces of a larger, identical central shrine, with the centers of each of the four external walls further marked by a miniature wall-shrine, and the four corners adorned with yet another miniature shrine form. Upon this basic substructure, the external surfaces of the temple and even its internal doorways and columns could then be richly encrusted with multiple small shrine images. In extreme cases, micro-architecture was the principal mode of decoration and a number of temples designed and built during the eleventh to fourteenth centuries as part of the
so-called Vesara tradition, in what is now Karnataka in the Deccan region of peninsular India, dispense almost entirely with both figural iconographies and vegetal or floral decoration. In one eleventh-century temple, the lower wall is covered with a micro-architecture of small temples and temple superstructures (śikhara) displayed on pillars. With its multiple, small, horseshoe-shaped windows and barrel vaults, the temple’s superstructure recreates the appearance of a multistoried palace (fig. 3). In some examples, as here, human faces are carved at the windows, as if the palatial superstructure were actually inhabited.

In many regional traditions of Indian architecture, micro-architectural principles were used extensively in internal decoration and for the design of elements such as columns. As seen in the central mandapa, or columned hall, of the early thirteenth-century Luna Vasahi temple on Mount Abu in Rajasthan, just across the border of Gujarat in western India, the lintel of the far doorway is surmounted by a “templescape” of miniature, multi-tiered mandapas, while the columns in the foreground are composed of multiple miniature shrines embedded into the body of the column (fig. 4).

These design principles thrived across South Asia from the sixth century A.D. and underpin the majority of temple-building traditions across the subcontinent. In fact, we can argue that they go back well before the sixth century. Hardy’s focus on temple composition through the embedding of architectural components distracts him from a more generalized and much older interest in architectural representation and the simple covering of architecture with architecture. Earlier Buddhist architecture in the subcontinent already shows an interest in its own forms: stupas (mound-like structures containing a relic) bear images of stupas and are often surrounded by votive stupas, small-scale copies of large stupas, themselves covered with stupa images. The Buddhist reliquaries entombed at the heart of most stupas were also frequently micro-architectural in form, leading to a “Russian nesting doll”-style succession of
stupas and stupa representations. Thus, while the sixth century may mark a distinct change in the principles of temple composition, many of the elements used to carry out this idea—the micro-architectural components that are often miniature representations of the main monument itself—build upon a much older architectural awareness. It is of little surprise then that such a fundamental principle of Indic architectural design should also be translated into South Asia’s Islamic religious architecture, part of the long dialogue between the ritual needs of Muslims and regional traditions of architectural design.

**SULTANATE MICRO-ARCHITECTURES**

Across Gujarat and the Deccan, it is possible to see two broad applications of micro-architecture. In Gujarat, micro-architectural elements are principally located on, or around, openings such as gateways, doorways, and mihrab niches along the main axes of mosques. By contrast, in the Deccan, micro-architecture appeared mainly at roof level, either at the corners and main axes of the building or wrapped around the entire perimeter of the roof as a continuous micro-architectural parapet. This survey excludes mihrab niches unless they feature actual micro-architectural elements. The idea of the mihrab niche as micro-architecture is not new, even if the term “micro-architecture” has not been specifically
The terminology of micro-architecture

Before continuing, I would like to clarify a point about terminology. As noted earlier, in this article I use the term “micro-architecture” to refer to what Fergusson calls the “small models of large buildings” found in Indic architecture. The term is borrowed from western medieval architectural scholarship and has not hitherto been used in South Asian architectural history. Why propose this change? Currently, South Asianists use a wide variety of words and phrases to refer to this phenomenon. In addition to Fergusson’s phrase, Durant refers to “miniature versions” and “architectural elements,” while Hardy continues the vocabulary of Classical architectural analysis, using the terms
“aedicularity” and even “multi-aedicularity.” Sinha and other scholars have preferred the Sanskrit term *kuṭastambha*, literally “pillar shrine,” taken from the śastra literature. This lack of terminological agreement has arguably contributed to the fragmentation of scholarship on Indic micro-architecture. The term “micro-architecture” was introduced in the 1970s by scholars of medieval European and especially Gothic material culture to refer to the representation and use of small buildings in architecture and architectural decoration and furnishings, as well as in precious metalwork and architectural model making. Although micro-architecture has, to the best of my knowledge, never been formally defined, essential to it is the idea that it should depict or evoke recognizable structural types, or involve the organization of several components according to recognized architectural sequences. The term is clearer than any of those currently in use in Indian architectural history and sufficiently general to encompass the wide range of micro-architectural applications seen in the subcontinent. I suggest here that it should be adapted more widely.

In the following discussion, I identify as micro-architecture any element designed to replicate known monumental architectural types. Thus, a simple dome on four pillars, or a simple dome on an arched base, is not micro-architecture. However, if the dome, drum, base, and pillars are designed, articulated, and decorated with deliberate reference to monumental architecture, this is defined as micro-architecture. Essentially, if they are “small models of large buildings,” I have classified them as micro-architecture. To my mind, micro-architecture tends to retain a strong link to the three-dimensional character of architecture, and includes truly three-dimensional miniature buildings, as well as buildings rendered in varying depths of relief. But we should always bear in mind that this differentiation between three- and two-dimensional representations is in many ways artificial, since architects simultaneously worked with both modes. As the following examples will show, the category of micro-architecture includes small models of generic building types, copies of specific buildings, and forms generated from the very building that they decorate (referred to as self-imaging).

GUJARAT

A wide variety of micro-architectural experiments permeate the architecture of the Tughluq sultans (1320–1412) in Gujarat and that of the dynasty that succeeded them after the disintegration of their empire, the so-called Ahmad Shahi sultans (1407–1543). Yet the micro-architecture of western India is noticeably focused on or around openings, along the principal axes of individual mosques and tombs, and even along major city axes in certain cases.

Translating mandapas and shrines

Across Gujarat, the lintels of numerous doorways and the mihrabs of fourteenth- and early fifteenth-century mosques bear miniature *mandapa* forms, representations of the single or multistoried pavilions that form an essential component of the local temple architecture, characterized by some scholars as the Maru-Gurjara style. In the 1325 Friday mosque at Cambay, the lintels of the three mihrabs each have their own architectural landscape of miniature pavilions, interspersed with trees (fig. 5[a–c]). The idea clearly builds upon established regional architectural conventions, as seen in the micro-architectural lintel in the thirteenth-century Luna Vasahi temple at Mount Abu (fig. 4), which bears miniature temples as well as multistoried *mandapas*. Alka Patel has perceptively pointed out how, from the fourteenth century, the Gujarati mihrab was “conceived of as a doorway into the sanctum of a temple.”14 The *mandapa* types on the mosque at Cambay are indeed identical with those seen in Maru-Gurjara temple decoration and it is likely that these lintels are composed of spoliated material. Micro-architecturally treated serpentine brackets, which are certainly *spolia*, are prominent in the small pavilion at the center of the mosque’s courtyard. Whether spoliated or purposefully carved, these adornments had a long life in Gujarat, as the mihrabs of various Ahmad Shahi mosques from the early fifteenth century feature similar, miniature multistoried *mandapas*.15

But perhaps the most interesting aspect of this micro-architecture is the care taken in the translation of the lintels to an Islamic context and the filtering out of certain architectural forms. As demonstrated by the
Fig. 5, a, b, and c. Lintels from the principal mihrabs of the Friday mosque in Cambay, featuring micro-architectural mandapas and trees. Cambay, Gujarat, 1325. (Photo: Elizabeth A. Lambourn)
interior of the Luna Vasahi temple, the regional micro-architectural vocabulary was extremely broad, but Islamic structures display a clear and apparently deliberate avoidance of certain forms, such as complete temples and even miniature shrine towers (śikhara). This absence suggests an understanding by the architects, and perhaps their Muslim patrons, of the iconographic significance of these particular elements. Miniature temples clearly represented non-Islamic religious architecture, and even a partial temple element such as the śikhara, which rose above the garba griha (womb chamber), appears to have signalled the very heart of the temple and the deity it housed. George Michell has also noted that in the process of temple spoliation in western India the śikhara was frequently specifically targeted, while the remainder of the temple was left intact.¹⁶ **Mandapas** by contrast, were multipurpose structures, used across the temple complex as entrance pavilions, dance halls, and places of congregation, and may have been seen as less symbolically charged. In his work on Karnataka temples, Ajay Sinha has argued that micro-architecture was “iconographically potent” and that images of shrines conveyed “the manifesting divinity into the worshipper’s space.”¹⁷ The selective use of mandapas in Gujarat would certainly appear to bolster Sinha’s argument. Recent work on spolia in South Asia has sought to counterbalance the frequently negative connotations of the term by underlining the creative processes often involved in the reuse of material, and the material from the Friday mosque at Cambay undoubtedly contributes to this fresh perspective.¹⁸

What mandapas connoted in this new Islamic religious context is difficult to ascertain. Mandapas certainly served as gateways to mosques, and the prayer halls of mosques can also be seen as having been formed from multiple adjoining mandapas. Even so, it is difficult to see how these associations would enrich the meaning of micro-architectural mandapas in an Islamic context.
It is possible that *mandapas* carried a diffuse association with the sacred that was felt to be appropriate to an Islamic religious context.

In contrast to this are attempts to generate a distinctively Islamic micro-architecture from, and for, Islamic religious architecture. If *śikhara* forms are noticeably absent from the Islamic micro-architectural vocabulary, a number of early fourteenth-century mihrabs show experimentation with generic shrine forms and their appropriate translation to an Islamic environment. While *śikhara* s are the tower-like superstructures that frequently mark the central shrine and *garba griha* in large temples, smaller temples could consist of quite modest shrines with lower superstructures. A number of mihrabs from Cambay feature miniature shrines, whose distinctively staggered exteriors (known as *bhadra* projections), miniature string courses, and domes with bulbous finials (sing. *amalaka*) all refer to generic shrine forms (fig. 6). In this instance, the front of the shrine features a small lamp set within a cusped arch, whose shape identifies it as a specifically Middle Eastern type of mosque lamp. While the cusped arch is also distinctive of Sultanate Islamic architecture, both elements in fact relate to the large, sculptural mihrabs then under production at Cambay. A similar adaptation of the shrine form can be seen on the lintel of the mihrab in the Kazaruni tomb complex at Cambay, which was built as a later addition to the Friday mosque, sometime after al-Kazaruni’s death in 1333 (fig. 7). The lintel is composed of alternating vegetal and architectural elements, just like the adjoining Friday mosque. Here, however, the *mandapas* are replaced by five basic shrine forms; those at the sides are marked by a neutral diamond pattern, while the one in the middle bears a simple flat niche with a cusped arch. Although the mihrab allusion is less overt than in the first example, some reference to the focal point of the mosque seems intended, thus transforming a generic shrine into a specifically Islamic micro-architecture.

**Making an Islamic micro-architecture: The Hilal Maliki mosque at Dholka**

Nowhere is the idea of creating an Islamic micro-architecture explored more consistently and thoroughly than in the Friday mosque built by Hilal Maliki at Dholka in 1333 (fig. 8). The main axis of the structure is woven through with a series of micro-architectural cross-references. However, rather than selectively transposing and adapting micro-architectural elements from the existing Maru-Gurjara vocabulary, the designers of the Friday mosque sought to produce an example of micro-architecture both suitable to a specifically Islamic religious context and actually generated from it. A row of seven micro-architectural mihrabs is placed above the main
entrance doorway and micro-architectural minarets are placed on the lintels of four of its five side mihrabs. At Dholka, micro-architectural decoration has not only been translated to suit its new context, but also appears to have been created from the very building it covers. If we look at the lintel of micro-architectural mihrabs above the entrance door (fig. 9), they are almost exact miniature copies of the mosque’s central mihrab, the lower part of which has the same combination of central niche, rosette, inset pilasters, and heavier, outer pillars (fig. 10). Although the superstructure of the central mihrab is now lost, it is still possible to make out clear traces of the original serpentine arch seen in the miniature mihrabs. The principle is clearly an extension of the self-imaging commonly seen in temple architecture and we are reminded of Durant’s description of Indian temples as having sometimes been composed of “miniature versions of the temple structure itself.”

Similarly, might the rather strange finials seen atop the mihrabs in the seating area for the ruler and his courtiers (mulūk khāna) (fig. 11) and at the centers of the two side mihrabs in the prayer hall be read as attempts to represent the distinctive minarets that mark the center of the mosque’s prayer hall façade (fig. 12)? The minarets stand about four and a half meters (fifteen feet) above the roof of the mosque. Their solid shafts, which are carved with vertical flutes, are divided up into various registers by horizontal moldings and have two “eaves” supported by serpentine corbels, a wider one positioned about halfway up the shaft and the second almost at its summit. Surely the best way to account for the strange canopied shafts seen above the mihrabs is to interpret them as renderings of the minarets as viewed from ground level, where it is precisely the corbelling of the first set of eaves that strikes the viewer most (fig. 12).

Seeing micro-architecture is not only contagious, but almost inevitably generates webs of associations and cross-references. The representation of architecture, in any number of dimensions, raises issues of mimesis—of the relationship between originals and copies, between specific examples and generic prototypes, between real and represented architecture. The rooftop minarets of the Dholka mosque may themselves be seen as micro-architectural elements, since they are solid shafts that mimic the real tower minarets of the much earlier Friday mosque at Ajmer in Rajasthan built between 1199 and circa 1230. To date, the Dholka mosque is unique among surviving mosques in western India for its elaboration of a coherent, self-referencing micro-architectural decoration across a single building.

Cross-referencing and trompe l’oeil in the mihrabs of Cambay

The example of the Hilal Maliki mosque in Dholka demonstrates how quickly micro-architecture is able to beget complex networks of cross-references and allusions that operate both inside and outside the structure. A remarkable series of fourteenth-century marble mihrabs that survive from the port of Cambay opens a window into the other types of micro-architectural
finally painted; yet architecture, glass, and metal are actually sculpted and painted marble. This central niche was framed by a conventional lintel on engaged pilasters and the entire piece was topped by an elaborate and deeply carved arch featuring micro-architectural mihrabs. One of the most complete surviving mihrabs of this type from Cambay is the Lar mihrab, so called because it was found at the city of Lar in Fars, from which it had in all probability been exported in the fourteenth century (fig. 13). Photographs of the Lar mihrab indicate that the upper arch was originally framed by two shrine-shaped finials carved with lamps cross-referencing that were being generated in western India in the same period. Although the brick and timber mosques and mausolea to which the mihrabs originally belonged are long gone, depriving us of their relationship to the decorative program as a whole, even in isolation they weave remarkably complex associations. As the Cambay mihrabs have already been studied in some detail, this section will merely summarize the main aspects of their micro-architectural elements.

Each of the Cambay mihrabs comprised a deeply sculpted central niche in which a marble lamp was “suspended” by marble chains from the top of a corbelled semi-dome with a cusped arch front. The intention was clearly illusionistic, and from a distance it might have been easy to mistake the marble lamp “hanging” at the heart of the niche for a real glass lamp suspended by a metal chain, particularly if the whole mihrab was originally painted; yet architecture, glass, and metal are actually sculpted and painted marble.
Fig. 11. Lintel with micro-architectural minarets, from the mihrabs in the mulūk khānas in the Hilal Maliki mosque. Dholka, Gujarat, 1333. (Photo: Elizabeth A. Lambourn)

Fig. 12. View of the prayer hall façade of the Hilal Maliki mosque, showing the pair of pseudo-minarets over the central arch. Dholka, Gujarat, 1333. (Photo: courtesy of the American Institute of Indian Studies)
Research into the development of mihrab representations at Cambay indicates that the plantain motif appears to have been introduced around the 1290s, apparently from images of *chawris* (a type of small temporary structure built from the trunks, stems, and leaves of trees and plants) in contemporary Jain iconography (fig. 14). In the Jain examples, the split plantains are added to pavilions in reference to the common Indian practice of using the split trunks of those trees to flank doorways of houses and shrines or to build small pavilions for marriage ceremonies. It is this type of ephemeral vegetal structure that is represented in the Jain miniatures and that became conflated with micro-architectural representations of mihrab niches. It seems clear that, in their Islamic context, the split plantains do not represent a marriage pavilion; rather, they seem to have been adopted as part of a visual tradition for representing pavilions, perhaps in an attempt to underline the ceremonial function and importance of the mihrabs.

The mihrab represented in the upper niche (fig. 13) is not, however, an exact micro-architectural copy of the larger mihrab that bears it: although the central niche with cusped arch and suspended lamp are directly related, the upper mihrab has no lintel and superstructure and, most surprisingly of all, it is flanked by representations of halved banana plants (see also fig. 6).
were supplemented with elements borrowed from existing visual conventions. The source of these motifs introduces yet another layer of cross-reference—to ephemeral architectural constructions—into the already complex interplay generated by micro-architecture. The comparison usefully highlights the extent to which the relationships between “real” architecture, micro-architecture, and even ephemeral architecture are always complex and multidirectional processes.

Micro-architectural façades in the Ahmad Shahi architecture of Ahmedabad

Micro-architectural experiments continued in western India in the later architecture of the independent Ahmad Shahi sultans of Gujarat from the early fifteenth century onwards, but in such a radically different manner that the deeper continuities have hardly been noticed. In contrast to the largely internal mihrab- and doorway-focused experimentation of earlier centuries in Gujarat, in the later Islamic architecture of the region micro-architecture played a major role in the development of façade design.

The architecture of the Ahmad Shahis is famous for its development of extremely tall and slender pairs of tower minarets, which marked the façades of the mosque prayer hall. Whereas at Dholka the pseudo-minarets sit directly on top of a plain prayer hall façade, in many of the earliest Ahmad Shahi mosques of Ahmedabad the façade of the prayer hall features elaborate bases that “support” the roof-level minarets, rendered in high relief. One of the earliest examples of this is Ahmad Shah’s 1414 Bhadra mosque, where a pair of massive engaged pillars neatly unites the prayer hall façade with the two tower minarets at roof level in a way that had previously not been achieved, for example, in the façade of the Dholka mosque (fig. 15). Although there is no structural unity between the two parts, the reliefs establish an imagined one, as if the two tower minarets were literally embedded within the prayer hall façade. The
phenomenon has so far been discussed mainly in formal terms. However, later executions of these minaret bases are overtly micro-architectural and can be seen as multi-balconied towers metaphorically embedded in the prayer hall façade. One of the earliest micro-architectural treatments of the minaret base is seen on the circa 1420 Sayyid Alam mosque in Ahmedabad (fig. 16), where the central arch of the prayer hall is flanked by deep reliefs depicting a sequence of columned balconies “opening” onto the mosque courtyard. This idea was not exclusive to religious architecture and can also be found in secular structures, notably the façades of the mid-fifteenth-century Tin Darwaza in Ahmedabad, part of Ahmad Shah’s great city plan (fig. 17). Although seen here outside a religious context, it is noticeable that micro-architectural elements are still positioned around the openings and gateways that emphasize the principal axial street of the urban plan. However, instead of connecting with a tower-minaret as on the mosque façades, in the Tin Darwaza micro-architecture serves to visually frame and even buttress the openings. We cannot but notice the resemblance of these “towers” to the three multi-storied towers carved over the lintel in the early thirteenth-century Luna Vasahi temple (fig. 4). But the form also appears to refer to contemporary monumental architecture and the type of tall, multi-balconied tower known from Chittorgarh in southeastern Rajasthan: the Manastambha (variously dated between the thirteenth and fifteenth centuries) and the Kirttistambha, which was consecrated in 1448 (fig. 18).

The chronology and diffusion of this tower type, and particularly its relationship to contemporary tower minarets in Gujarat, clearly remain to be clarified but already suggest complex webs of allusion and perhaps even citation between contemporary polities in western India. Nevertheless, the idea of the false balcony or vantage point has a long history in Indic temple design and, in a Gujarati context, the “faux” structures seen on the Tin Darwaza and Ahmedabad mosques also immediately recall the inhabited trompe l’œil balconies that constituted a noticeable element of the decoration and design of Dabhoi, the thirteenth-century capital of the Vaghela rulers of central Gujarat (fig. 19). At Dabhoi, the city walls and the walls of a nearby water pavilion are carved in high relief, with balconies inhabited by courtiers. The trompe l’œil balconies are juxtaposed with real structural balconies, from which actual viewers would have looked out, thereby engaging both the viewer and the user of the structures in complex visual and functional puns. Translated here to an Islamic religious context, the balconies are now uninhabited, the balcony space marked by a lotus rosette. However, the allusion to real, balcony towers remains clearly expressed. The balconied tower continued to be explored formally in Ahmad Shahi architecture, leading, over the course of the fifteenth century, to ever more developed minaret bases—the façades of mosques such as the 1472 Achyut Kuki mosque seem almost to have two freestanding tower minarets attached to them. This façade type was relatively successful in Ahmad Shahi architecture across
elizabeth a. lambourn

Gujarat, only fading in the mid-sixteenth century. As with all such principles, they set in motion a complex play of references and cross-references, as architecture carries architecture.

THE DECCAN

If it can be said that in Gujarat there was a sustained interest in micro-architecture over the fourteenth and fifteenth centuries, the volume of surviving material there is dwarfed by that found in the Deccan from the mid-sixteenth century onwards. Again, this micro-architecture is hardly “seen” in the majority of writing about Deccani Islamic architecture, and probably most interest has focused on the examples from the Adil Shahi dynasty (1490–1686) of Bijapur, where it has been regarded as part of a general trend toward intense, almost jewel-like, carved decoration.29 While this article cannot engage in an exhaustive cataloguing of examples, it is clear that the Deccani material requires far more research. Nevertheless, key patterns and ideas can be clearly discerned even at this early stage of research.

Early experiments in Bidar, Ahmednagar, and Bijapur

The earliest micro-architectural experimentation in Deccani Islamic architecture began cautiously. One of the very first intimations appears to come from the mausoleum of Ahmad Shah Wali Bahmani (d. 1436) at Ashtur, outside Bidar in Karnataka. The plaster exteriors of the domed corner finials are treated as two tiers of blind niches, which were meant to evoke the contemporary exterior articulation of Bahmani tombs and so generate a micro-architectural allusion.30 This earliest Deccani example already displays many of the features seen in later Deccani micro-architecture: it is placed at roof level and appears to have been grafted onto generic Sultanate roof elements such as finials, chhatris (elevated, dome-shaped pavilions), and parapets. Other tentative experiments can be cited but we have to wait until the sixteenth century and the fragmentation of the Bahmani territories into the Deccani sultanates to see the first definitive micro-architectural experiments.31

The prosperity of the Deccani sultanates after the defeat in 1565 of Vijayanagara, the seat of Hindu power since the fourteenth century, and the supposed, but not proven, movement of craftsmen to the sites of their new
permanent capitals undoubtedly spurred on micro-architectural experimentation. From the late 1560s onwards, the inclusion of micro-architectural elements in Islamic religious architecture expands exponentially across the Deccan, and a vast range of micro-architectural types were employed, featuring domed squares or octagons of either one or several stories, octagonal towers, and many other forms.

The small jewel-like Damri mosque, built in the Nizam Shahi capital of Ahmednagar in Maharashtra in 1568, represents an early example of Deccani micro-architectural experimentation (fig. 20). The corners of the roof of the Damri mosque are marked by four elaborate domed finials, while the center of the prayer hall façade is distinguished by a freestanding “flying” arch, flanked by a pair of domed finials. Cleverly spaced out to provide maximum legibility from ground level, the six finials all follow the same design of a domed octagonal pavilion (fig. 21). The ribbed dome, with a delicate band of lotus petals around its base, sits on a heightened drum, marked by a ribbed molding, the whole piece resting on a minutely rendered octagonal structure with arched openings and rounded corner bastions. Even the base of the parapet with its drainage openings receives a micro-architectural treatment: interpreted as a long arcade that encircles the mosque, the drainage openings are delicately inserted into the framework. The overall effect is of a “cityscape,” as seen later at the mausoleum of Ibrahim ‘Adil Shah (r. 1580–1627) in Bijapur—the celebrated Ibrahim Rawza, built between 1626 and 1633 (figs. 22 and 23). Once again, architecture carries architecture. The Damri mosque’s domed octagons do not directly refer to any known architectural model and thus may be read as generic *qubba* (domed structure) types. Domed octagons were used in both religious and secular architecture, for shrines and mausolea as well as for garden pavilions, and thus the precise charge of this micro-architecture is difficult to assess. The comparatively poor preservation of the architecture of the Nizam Shahi capital also makes it difficult to gauge how unusual this design was.32

Another early example is the Shahpur Darwaza at Bijapur, a gate built between 1565 and 1568 that formed part of the great urban development plan initiated by ‘Ali ‘Adil Shah (r. 1558–80) after the conquest of Vijayanagara. Its façade is marked by a pair of miniature gateways topped by domed finials that evoke the very structure and organization of the gateway they adorn—an example of the self-imaging frequently seen in temple design.33 The gateway is a rare example of micro-architecture outside an Islamic religious context but would appear to be a unique experiment, since no other surviving Bijapuri gateway follows this design.

The diversity of early micro-architectural experiments in the Deccan is further illustrated at the funerary
mosque of ‘Ali Barid Shah (d. 1580) at Bidar. The roof of the mosque is distinguished by two tall and slender minarets decorated with circular balconies (fig. 24). Much as at Dholka, these are in fact pseudo-minarets with pseudo-balconies, but in profile they bear a remarkable resemblance to the minarets of the madrasa of Mahmud Gawan (d. 1472) in the same city (fig. 25).34 If a connection between the two structures were proven, ‘Ali Barid Shah’s pseudo-minarets would be a significant early example in the Deccan of the direct referencing of an iconic Islamic monument within Islamic micro-architecture, just as the Dholka mosque’s pseudo-minarets appear to allude to those at the Ajmer mosque.

These early Deccani examples already constitute an interesting contrast to western India. The lintels of doorways and, with a few notable exceptions, mihrabs, do not appear to have been loci of micro-architectural additions. Instead, micro-architecture is overwhelmingly focused at roof level and engages a number of typical practices, such as the use of generic elements such as finials, self-imaging, and allusions to iconic buildings.

‘Adil Shahi micro-architecture in Bijapur

From the later sixteenth century onwards, ‘Adil Shahi architecture shows a keen interest in micro-architectural forms, both in the capital of Bijapur and across its provinces.35 Micro-architectural elements are placed not only on façades, to emphasize main axes, but also around the entire roof perimeter. We generally find variations on generic, multistoried, domed pavilions, although specific instances of architectural self-imaging appear later.

The chronology of ‘Adil Shahi architecture is relatively poorly understood. However, one structure often held to be among the finest examples of the new vogue for exquisite carved detail is the Malika Jahan Begum mosque, which is believed to have been built by Ibrahim II sometime between 1586 and 1605.36 The front parapet of the mosque is marked by two micro-architectural qubbas. Represented here in almost perfect architectural detail is a pair of two-storied qubbas, their large, arched entrance gates visible on the ground floor. Projecting eaves supported by ornate brackets separate these from
the first floors, and the onion domes with their petal-adorned drums are flanked by domed finials (fig. 26). It is impossible not to compare these two-storied qubbas to the circa 1620 gateway of the later Mihtar Mahal mosque in the city (fig. 27), although it is clear that they cannot be copies of a later structure. Underlining the axial role of this micro-architecture in a mosque context, one can note that the façade of the Mihtar Mahal mosque was itself marked by a pair of two-storied octagonal domed pavilions, while the rear corners had square qubbas.37

By the first quarter of the seventeenth century, increasingly developed micro-architectural rooflines can be seen. The Naw Gumbad mosque at Bijapur (ca. first quarter of the seventeenth century) featured a pair of multistoried towers at the center of its façade and micro-architectural domed squares at its four corners.38 The potential of micro-architectural elements to encircle a building’s entire roofline, as explored in the Damri mosque, finds full expression in the Ibrahim Rawza (fig. 22). Two-storied domed squares are placed around the entire parapet of Ibrahim ‘Adil Shah II’s mausoleum and around the base of its central dome (fig. 23). As in the Damri mosque, each individual qubba is linked by a continuous arcaded parapet, creating the effect of a miniature urban landscape above the mausoleum itself. In contrast to the competing axes of

the Naw Gumbad mosque, on the mosque that faces Ibrahim’s mausoleum, micro-architectural qubbas are restricted to the front parapet, where they highlight the main axis of the building.

Although ‘Adil Shahi micro-architecture tends towards generic types, the interest in self-imaging is apparent in a small number of micro-architectural elements. The Shahpur Darwaza at Bijapur has already been mentioned, and other clearer examples belong to the last third of the seventeenth century, during the period of Mughal rule in the Deccan. For example, the parapets of the octagonal mausolea of Amin al-Din (d. 1664–65) and Khan Muhammad Khan Khanan

Fig. 20. Façade of the Damri mosque. Ahmednagar, Maharashtra, 1568. (Photo: Elizabeth A. Lambourn)

Fig. 21. Detail of micro-architectural finial and parapet on the Damri mosque. Ahmednagar, Maharashtra, 1568. (Photo: Elizabeth A. Lambourn)
Fig. 22. View of the mosque and tomb of Ibrahim 'Adil Shah II, the so-called Ibrahim Rawza. Bijapur, Karnataka, 1626–33. (Photo: Elizabeth A. Lambourn)

Fig. 23. Detail of the micro-architectural qubbas around the dome of the mausoleum of Ibrahim ‘Adil Shah II. Bijapur, Karnataka, 1626–33. (Photo: Elizabeth A. Lambourn)
(d. 1686) at Bijapur each carry eight miniature domed octagons. The articulation of the façades of these miniature qubbas, the shape of the domes, and the fringed lotus leaves that surround the drum of the domes suggest that the qubbas are meant to be miniature representations of the very mausoleum that supports them (fig. 28). In one exceptional instance, micro-architecture was freed from its rooftop location and brought into the Bijapur palace grounds. The so-called Jal Mandir is a small, jewel-like structure set at the center of a pool in the area between the Sat Manzil palace and the Gagan Mahal, built by ‘Ali ‘Adil Shah around 1561 as an audience hall and royal residence (fig. 29). The structure has always fascinated visitors and yet has proved remarkably resistant to explanation: too small to actually serve as a garden pavilion and, without easy access, lacking any other obvious evidence of its original function. It is proposed here that it might therefore be regarded as another example of micro-architecture. In important new research on the topography and state apparatus of Bijapur, Mark Brand has suggested that the Jal Mandir may have been intended as a reliquary to house two hairs of the Prophet that were brought to Bijapur during the reign of Ibrahim ‘Adil Shah II (r. 1580–1627), probably before 1591. Discussions of the housing of this relic have previously focused on its eventual placement in the Athar Mahal, believed to have been built around 1646 under his successor, Muhammad (r. 1627–56), and on the ceremonies that surrounded it at this location, particularly the celebration of the birth of the Prophet. The creation of a stone building housing such a significant relic might, at the very least, have stimulated an interest in micro-architectural forms, while, at the other
end of the spectrum, it might also have engendered a multitude of micro-architectural homages.\textsuperscript{43} This interest in represented architecture appears to have even affected mihrab design at Bijapur. The central mihrab of the Friday mosque was painted and gilded in 1636 with an architectural surround showing a complex “landscape” of domed buildings topped by minarets and finials. The buildings feature multiple arched openings that contain suspended lamps; elsewhere on the wall, painted niches feature trompe l’oeil vases and books (fig. 30).\textsuperscript{44}

\textit{Qutb Shahi micro-architecture at Golconda and Hyderabad}

A more ambiguous micro-architecture pervades structures built for the Qutb Shahis (1518–1687). The monuments of the Qutb Shahi capitals of Golconda and Hyderabad have not yet received the meticulous attention that Henry Cousens devoted to Bijapur, and the discussion of their architecture is complicated by this dearth.\textsuperscript{45} This is a task that I will leave to other researchers, though I would like to take the opportunity to signal some of the key ideas seen in Qutb Shahi micro-architecture, in so far as it is accessible at present.

As on the Damri mosque in Ahmednagar, many Qutb Shahi finials receive a micro-architectural treatment and are developed into distinctively Qutb Shahi domed octagons.\textsuperscript{46} The feature appears as early as the 1591 Char Minar in Hyderabad, where one such \textit{qubba} finial marks the roof of the mosque situated at the upper level of the structure. Magnificent domed \textit{qubbas} are also found on the prayer hall façade of the 1597 Friday mosque in Hyderabad. The feature can be seen particularly clearly on the mausolea of Muhammad Qutb Shah (d. ca. 1626).
and his son 'Abdullah Qutb Shah V (d. 1672), outside the citadel at Golconda (fig. 31).

However, Qutb Shahi architecture also weaves more subtle and perhaps deliberately ambiguous micro-architectural allusions across its façades. Although the evolution of the Qutb Shahi façade is difficult to trace at present due to the complexities of later restoration work, it is clear that by the later seventeenth century, religious structures had developed high and ornate parapet-façades that almost rivalled their ground-level ones. In structures such as the late seventeenth-century Friday mosque at Gandikota, a Qutb Shahi fortress south of Hyderabad, the mosque appears to bear a complete miniature façade above its ground story. The triple arcades framed by finials recall, though they do not exactly copy, the triple arcades of the mosque with its framing minarets (fig. 32). Repeated around the whole roof of the mosque, the parapet creates a second micro-

Micro-architecture and mi'dhana in the Shi'i Deccan

The focus on the roof level seen in Deccani Islamic religious architecture might be related to the importance of the roof for the call to prayer in Shi'i Islam. At different times and places, many of the Deccani sultanates either openly adhered to Shi'i Islam or tolerated and promoted Shi'ism. From the eighth century onwards, the emergent Shi'i branches of Islam opposed the use of tower minarets for the call to prayer as innovations and impure departures from the earliest, correct Islamic practice. This stance was supported by various versions of a hadith attributed to 'Ali, the Prophet's son-in-law and spiritual successor, as well as the figurehead of all branches of Shi'i Islam. According to different versions of the hadith, 'Ali had either ordered a tall mi'dhana...
This broader context of Shi'i ritual practice is important to bear in mind when looking at the Deccani material. The paucity of tower minarets in the architecture of the Deccani sultanates on the whole suggests that this most characteristic of Shi'i practices may have continued, and we may wish to revise accordingly our interpretation and nomenclature of the many prominent mosque gateways and rooftop kiosks seen in the Deccan. There is no reason to dismiss these structures from the corpus of micro-architecture if they reveal themselves to have a real use, since micro-architecture is not necessarily non-functional. Indeed in medieval European studies, the term encompasses church furniture and urban monuments such as fountains, crosses,
and even pillories. Many of the rooftop elements in the Deccan noticeably attempt to replicate the elevations and decoration of far larger monuments in a manner that is quite different from the simpler rooftop chhatris found in Gujarat.

More significantly, we might regard these rooftop elements as belonging to a larger discussion within Shi'i Islam regarding the locations deemed suitable for the call to prayer. In spite of what I have just said, there was never a strict and clear divide between Sunni and Shi'i practice in this matter; what developed was a more complex and nuanced dialogue between the new idea of a tower minaret and other architectural forms for the adhān (call to prayer). Jonathan Bloom argues that the visual and symbolic power of the tower minaret was such that Shi'i mosques eventually did include them, thereby benefitting from their visual and symbolic impact, while making alternative provisions for the actual call to prayer. Thus, later Safavid architecture incorporates at roof level both fine, paired tower minarets and small pavilions, known as guldastas, from which the call to prayer was actually given. We might also look at the Deccan’s many finials and micro-architectural elements as another formal compromise between the urge to mark the mosque with a tower minaret, versus the prohibition on this within Shi'i Islam. Technical and financial considerations may also have played a part, as it was undoubtedly cheaper and quicker to erect a mi'dhana or pseudo-minarets than real tower minarets. Where monumental tower minarets do exist, as for example in the Char Minar in Hyderabad, it is largely for their symbolic impact. We have good evidence that alternative provisions were made for the actual call to prayer. Thus, the mosque that occupies the roof level of the monument has its own separate kiosk (mi'dhana) for this purpose. Against this background, the grafting of micro-architecture onto standard roof-level elements such as the chhatri or finial might be seen as another unique architectural response to the question of the adhān in Shi'i Islam. However, micro-architectural qubbas and other structures do not appear only on mosque roofs and it is clear that they do not have a single, easily definable role.

Fig. 31. Mausoleum of 'Abdullah Qutb Shah V (d. 1672) in Golconda, Andhra Pradesh. (Photo: Elizabeth A. Lambourn)

**Portable micro-architecture in the Deccan: The ta’ziyeh**

As with the relationship between Gothic religious architecture and the portable shrines or reliquaries it often housed, it is impossible to look at the examples of Deccani micro-architecture without being aware of the presence of more ephemeral micro-architectural traditions in their midst. The development of micro-architecture in the Islamic Deccan cannot be considered without also taking into account the development of *ta’ziyehs*—micro-architectural models of the mausolea of venerated Shi’i martyrs that are borne in procession during Muharram commemorations. The phenomenon has principally been known and studied through an anthropological lens, with the result that the best-documented examples are relatively recent. Work on the deeper history of Muharram practices in India is very scant at present, although the body of research into practices and architecture in the Awadh region of northern India during the nineteenth century is growing. The much-repeated claim that Muharram celebrations were first introduced to South Asia by Timur (d. 1405) are largely unsubstantiated, and it is likely that such events were introduced at different times and in different locations by multiple Shi’i communities.

As explained by Muhammad Ayyoub, “quite early in the development of the Muharram cultus, people felt the need for some concrete symbol or representation of the events of Karbala.” A horse carrying a bloodied shroud, biers, and later cenotaphs (*tābūts*) were paraded through the streets in a recreation of the Imam Husayn’s death and burial. Largely similar processions are described by foreign travellers to Iran in the Safavid period. What is significant in South Asia is the conceptual leap from simply parading a bier or coffin in commemoration of the martyr to processing a micro-architectural shrine. The difference is perhaps subtle but results in a clearly different outcome. The term *ta’ziyeh* derives from the Arabic *ta’ziya*, meaning “lamentation.” However, in South Asia in particular it came to designate a micro-architectural representation of the shrine of one of the Shi’i martyrs or imams. The key question is when and where this change occurred. The earliest references to Muharram celebrations in the Deccan go back only to the reign of Abdullah Qutb Shah (r. 1626–72), who apparently revived the practices of the reign of his grandfather, Muhammad Quli (r. 1580–1611), but it is unclear whether micro-architectural *ta’ziyehs* existed in the Deccan in this period.

Even if we cannot locate *ta’ziyehs* and micro-architectural elements as contemporary features, it is clear that they later co-existed, creating a seamless continuity between permanent and ephemeral micro-architecture. The manufacture and procession of micro-architectural *ta’ziyehs* in the Deccan are well documented from at least the late eighteenth century, and we should think of these micro-architectural models as processing through an urban landscape itself filled with micro-architectural representations and cross-references.
THE MEANINGS OF MICRO-ARCHITECTURE

Micro-architecture offers a fresh and highly productive way of looking at, and thinking about, Islamic religious architecture in South Asia, both at the level of individual buildings and in terms of regional styles and other groupings. Explorations of what I have proposed to call “micro-architecture” are now relatively advanced in relation to the subcontinent’s temple architecture and the present article has begun to sketch out some of the principal regional traditions of Islamic religious architecture in which micro-architecture also plays a role. Having opened this perceptual box, this article will hopefully stimulate future research into what is certainly a widespread and complex phenomenon. Many regional micro-architectures still require in-depth documentation and analysis, and early Ghurid architecture and Islamic religious architecture in the sultanates of Bengal and Jawnpur (late twelfth to late fifteenth centuries) might benefit from a fresh analysis in this light. In many cases, too, this work would be well served by a parallel examination of temple architecture and Islamic religious structures, since the dialogue is complex and by no means unidirectional. It seems clear that the Deccan and the Tamil region further south will be especially important areas of research, as they have multiple, permanent micro-architectural clusters and are also documented as early centers of experimentation with ephemeral micro-architectural forms (e.g., *ta’ziyeh*). Just as important is the question of the distribution of Islamic micro-architecture across South Asia. The apparent density of examples in western India and the Deccan will also require further attention.

However, the truly stimulating questions that remain to be answered lie in untangling the making and reception of micro-architecture. The representation of architecture—in any number of dimensions and whether as a complete “small building” or through a significant part of one—prompts us to question and reflect upon a wide range of phenomena such as mimesis and the relation between originals and copies, generic types and individual renditions. Micro-architecture plays with scale and often coexists with other illusionistic interests. The concluding sections of this article begin this process, although pinning meanings to micro-architecture remains a difficult task, complicated by the paucity of sources for the period under study, as well as by the limited nature of personal commentary about architecture found in contemporary sources in this period.

Meaning and micro-architecture

Work on micro-architecture in Indic temples has naturally addressed the question of its significance and iconography. What did micro-architecture mean and what did it do? Much of the existing discussion of micro-architecture in a temple context has focused on its place in architectural practice, as evidence for a largely internal dialogue among and between architects and sculptors. For M. A. Dhaky, the great scholar of Indic temple architecture, micro-architecture is physical evidence of architects’ awareness of, and interest in, the larger tradition of Indic architecture within which they worked. For Gerard Foekema, these examples were manifestations of an intergenerational dialogue among architects. For Ajay Sinha, represented architecture is evidence of the “architect’s process of seeing and knowing.” Textual support for these ideas, in *śastric* literature for example, is scant and we have no documents that reveal the intentions of individual architects or carvers. However, the idea that architects and carvers communicated through architecture remains persuasive. Communication does not have to be textual, or even verbal: contemporary designers explore and develop ideas through models and sketches, without necessarily leaving written evidence for their creative process, and it seems only fitting that several of the scholars who have responded to this phenomenon in Indic architecture, notably Adam Hardy, should be architects by training. We will return to this idea shortly in relation to Islamic religious architecture.

Religious architecture and abode

In terms of specific micro-architectural iconographies, many interpretations have been explored, although all struggle to find support in *śastric* literature, foundation inscriptions, and other sources. The one idea that is consistently expressed by contemporary inscriptions and other sources is that the temple superstructure should resemble or recall the Himalayas or Mounts Meru or Kailasha, the abodes of the Hindu gods. In these sources, the massing of temple superstructures has been likened to foothills rising towards a central
mountain peak.61 This notion does not immediately seem to aid our interpretation of Islamic micro-architecture. However, the key idea to single out here is that of the temple as the abode of the deity, likened here to the Himalayas, an idea that seems to open up other interpretative possibilities. The metaphor of the temple as abode is reinforced by the daily rituals performed around the waking, washing, and entertainment of the deity’s image. Temples are quite literally the deity’s home. Perhaps, then, the idea of temple as abode might also serve to explain the evocations of physical shelter that micro-architectural elements elicit in a temple context. It has been noted that in Southern Indian temple design, the temple superstructure explicitly adopts the forms of palatial architecture to create a palace abode for the deity.62

The very different conception of the space of the mosque in Islam and the very different practices of worship in Islam mean that these ideas do not necessarily translate smoothly to the context of Islamic religious architecture. Nevertheless, we are exceptionally fortunate to have at least some evidence for the fact that architects and craftsmen in western India continued to understand the mosques they built in terms of abodes for the deity. A unique fifteenth-century Gujarati text, the Vṛkṣārṇava, actually includes a chapter on the construction of the Rehmana-Surālaya (Abode of the God Rehmana),” i.e., Allah.63 The chapter sets out general specifications for mosque design—regarding direction and decoration, for example—but the very fact that a mosque is described as the abode or dwelling place of Allah only underlines the extent to which, at least for the non-Muslim architects and craftsmen of fifteenth-century Gujarat, the space of the mosque was understood, in decidedly Indic terms, as the place where the divinity Allah resided and was made manifest. It is difficult to gauge the degree to which Muslim patrons and worshippers in western India also read mosque architecture in these terms. Clearly, however, the large numbers of converts from Hinduism would have been aware of the notion of the temple as the home of the deity and sensitive to the ideas of divine manifestation implicit in temple architecture. As Muslims never formed a majority of the population in Gujarat and processes of conversion were ongoing, this very fundamental aspect of Indic religious architecture may have enjoyed a long lifespan. This understanding of mosque space cannot have been unique to western India, although to date we have no written evidence as compelling as this for other regions.

Potent micro-architectures

If the idea of abode perhaps offers a general interpretative context for Indic micro-architectures, the diversity of types and their applications still raise the question of specific iconographies. In his study of the medieval temples of Karnatak in the Deccan, where micro-architecture sometimes forms the primary decorative mode, Ajay Sinha has suggested that micro-architectural temple forms represented the divinity. He writes that, as in all Indian architecture, Vesara’s bhadra [central projecting wall-offset] shrines convey the manifesting divinity into the worshipper’s space...[T]he iconic unit is the garbha [womb chamber], not the figural image. The pavilion, kūṭastambha and cell become iconographically potent.64

Unfortunately, the chapter on the Rehmana-Surālaya gives no specifications about the use of micro-architectural elements in mosque construction; it simply specifies that vegetal designs are preferable and that the abode of Allah has no statue of the deity. However, Sinha’s thesis suggests interesting angles for interpreting micro-architecture in an Islamic context. Although the texts are quite clear that Allah could not be represented, could “iconographically potent” elements of his religious architecture be used instead to represent his presence? Should we read the miniature mihrabs and minarets at Dholka in this way? The architectural quotations spread across the building’s main axis might be seen as attempts to represent the force of al-Rahman (the compassionate one) expanding into the worshipper’s space. The selective transfer of micro-architectural elements in western India during the fourteenth century, which has been examined earlier, appears to support this idea. We also see a preference for more neutral architectural forms such as māndapas and, eventually, the development of a distinct Islamic micro-architecture generated from Islamic religious architecture. The diversity of solutions indicates just how complex the translation of micro-architecture to an Islamic context was in Gujarat in the fourteenth century.
However, by the time of the first Islamic micro-architectures in the Deccan, apparently from the early to mid-sixteenth century onwards, temple-specific forms appear to have been long forgotten. Indeed, it is unclear whether the generic micro-architectural forms found there—domed squares, domed octagonal towers, and so on—carry any “faith charge” at all. By this period, Islamicate forms such as domes and pointed arches had permeated the architecture of all the Deccani polities, as has been well studied, for example, in the palace architecture of Vijayanagara. It may be that what we see in the Deccan in this period should be read as a generically palatial micro-architecture, rather than an Islamic one. The nature of this shift appears to be confirmed later, in the seventeenth and eighteenth centuries, in Maratha temple architecture, where domed squares were found on the śikhara, in preference to by then old-fashioned trabeate temple forms. A similar shift is possibly also visible in the later, fifteenth-century architecture of the Ahmad Shahis in Gujarat, where the micro-architectural minaret bases appear to refer to less charged forms such as towers and to a more overtly trompe l’oeil tradition.

More specifically, Islamic iconographies do appear to operate in the development of micro-architectural citation of known Islamic structures, such as the evocation of the Ajmer minarets in Hilal Maliki’s mosque at Dholka and, in the Deccan, through the citation of the minarets of Mahmud Gawan in ‘Ali Barid Shah’s funerary mosque at Bidar. These South Asian micro-architectural copies contrast markedly with the notion of the pars pro toto copy developed and explored by Richard Krautheimer in his now-famous article, “Introduction to an ‘Iconography of Medieval Architecture.’” Krautheimer’s article focused on the pars pro toto evocation or referencing of a particular building, in this case the Holy Sepulcher, through the repetition of a significant architectural feature of the prototype. Krautheimer identified a phenomenon in which representations of buildings in architecture and painting “show the disintegration of the prototype into its single elements, the selective transfer of these parts and their re-shuffling in the copy.” The idea has subsequently been explored in a South Asian context by Ebba Koch in her article “The Copies of the Qutb Minar,” in which she proposes that a number of structures “cite” the Qutb through the inclusion of stellate elements recalling the minār’s distinctive falanged exterior. These “quotes” from the Qutb, she proposed, were made by rulers wishing to “transfer the significance of the prototype, which had become the landmark of the establishment of Muslim rule in India, onto their own constructions.”

I would differentiate the micro-architectural citations discussed here from this type of copying precisely because significantly more than one feature is repeated and the constituent elements retain their original architectural sequence. Although Ebba Koch’s proposed “citations” of the Qutb Minar have been excluded from the present discussion, they might well benefit from fresh investigation as a micro-architectural subtype.

Nevertheless, generic micro-architectural forms may have served as useful canvases on which to overlay more specific connotations, as and when desired. It is perhaps one of the singularities of Islamic art that although the Koran vividly evokes the architecture of Paradise—its pavilions and gardens—and in spite of a large body of related hadith literature, representations of paradisiacal architecture never found a prominent place here, certainly nothing comparable to the focus on the representation of the Heavenly Jerusalem in Christian art. Still, in a number of cases in South Asia, inscriptional programs appear to act as catalysts for the interpretation of micro-architectural decoration. The foundation inscription on the Friday mosque at Cambay carries a well-known hadith to the effect that “Whoever builds a mosque for the sake of God, even in the size of a bird’s nest for her eggs, God will build a home for him in Paradise.” This hadith is relatively common in mosque inscriptions in Gujarat but, in this particular context, it suggests that the mandapas above the mosque’s mihrabs and those around the central chhatri in the courtyard might have been intended to be read with a specifically paradisiacal meaning. Although this was perhaps unintended, the metaphor chosen to illustrate the idea that the foundation of any mosque, no matter how small (“even in the size of a bird’s nest for her eggs”), brings spiritual rewards, also neatly reinforces the micro-scale of the micro-architecture represented.

The extraordinary “architectural landscape” on the main mihrab of the Friday mosque in Bijapur is also complemented by an extensive program of inscriptions. A calligraphic grille positioned in the upper center of
the wall bears the Āyat al-Nūr (Koran 24:35), in which the light of God is famously described as being “like a niche (mishkāt) within which is a lamp (miṣbāḥ), the lamp enclosed in glass, the glass as if it were a pearly star (kawkab durri).” Across the rest of the wall, historical inscriptions record the patronage of the work, while numerous smaller cartouches contain, among others, hadith about the mosque of the Prophet in Medina. The whole program clearly deserves a study of its own, but even at this stage it is sufficiently clear that these references to the mosque of the Prophet and to the light of God within its niche set up multiple interpretative frameworks for the reading of the entire architectural composition. Mark Brand goes further and suggests that the micro-structures on the mihrab relate again to the cult of the Prophet and so represent his mausoleum and the reliquary of the hairs.

**Bounding, focusing, and framing**

The task of pinning specific iconographies on Islamic micro-architecture in South Asia is in its early stages and we should not overlook the role micro-architecture plays in the general reinforcement of the main structural axes. In almost all the mosques examined here, micro-architectural elements, whether placed at roof level or around gateways and above mihrabs, emphasize the qibla axis. By contrast, in most mausolea their placement around the whole perimeter of the structure reinforces the central plan and the use of these spaces for circumambulation. This important signalling role of micro-architecture ties in with a similar phenomenon observed in late antique and early Islamic architectural representations. In *The Mediation of Ornament*, Oleg Grabar introduces “Architecture” as a category of Islamic ornament alongside the more conventional categories of “Calligraphy,” “Nature,” and “Geometry.” Entitled “The Mediation of Architecture,” the fourth chapter opens with a meditation on the different interpretative viewpoints and contexts through which to read the two magnificent and justly famous architectural compositions on parchment discovered in the Great Mosque of San'a in the late 1970s, which are believed to have been frontispieces to a large Koran, possibly of the eighth century. Grabar suggests that “represented architecture used as ornament” served two functions: to bound, that is, to separate, space and to focus and frame the main subject. In all these cases, I want to argue,” he says, “separating and wrapping for announcing are the central function of the architectural decoration” and serve to amplify the main subject. In contrast to late antique and medieval Christian art’s clear interest in the representation of the Heavenly Jerusalem or the Holy Sepulcher, Grabar’s Islamic micro-architecture defiantly resists single and easy interpretations, and he is forced to conclude that, in ways that belong to yet uncharted aspects of perceptual intelligence, the intimation of building or of a building provides a force of presence and a solidity of power or of authority that is transmitted to whatever is connected to it.

Such a description seems also to apply to micro-architecture in South Asia.

**The viewer and micro-architecture**

Grabar’s observation brings this discussion squarely back to the role of the viewer and user of architecture in the experience of micro-architecture. Here more than anywhere, we lack sources that reveal the premodern viewer’s perspective and the following remarks are necessarily conjectural in the extreme. Grabar underlines micro-architecture’s role in amplifying the authority and presence of the main subject, but we should also not forget its recurrent playfulness and deliberate appeal to the viewer’s imagination. In the Damri mosque or at the mausoleum of Ibrahim ‘Adil Shah, a simple change in scale allows architects to evoke entire walled cities or palace complexes in the space of a single rooftop, in a manner very close to trompe l’oeil. In the Cambay mihrabs, micro-architecture is found side by side with overtly illusionistic niches containing “suspended” marble lamps, which appear to have been designed to fool and quite simply dazzle the viewer. In Hilal Maliki’s mosque at Dholka, micro-architecture weaves cross-references across the building’s main axis. With self-imaging, viewers find themselves caught up in a seemingly infinite tunnel of increasingly smaller representations of the main monument or mihrab. The experience and enjoyment of these aspects of micro-architecture are open to even the most untrained eye and appear to function at a level different from that of the architects’ learned citation...
of styles and types, as suggested by Foekema, Dhaky, and Sinha. Perhaps at its most basic, micro-architecture was there to provoke amazement and wonder in the viewer. The power of the miniature to elicit pleasure and delight has certainly been noted in the writings of modern theorists such as Gaston Bachelard and Claude Lévi-Strauss, both of whom see these emotions as deriving from the greater ease with which the small can be apprehended and the feelings of dominance or possession this creates. It remains to be seen whether these ideas can be directly transposed to medieval South Asia. Further research into aesthetics in the different regions of South Asia where micro-architecture is found—for example, courtly interests in literary punning and allusion and in the adornment of the human body in court dress and jewellery—may perhaps help to unlock our understanding of contemporary responses to micro-architecture.

For the Deccan, the undeniable ambiguity, trompe l’oeil, and visual pun seen in much of this micro-architecture seem to fit, at least generally, with what we know to have been a sophisticated court audience. There can be no doubt that micro-architectural elements responded to the expectations of a refined court milieu, where connoisseurship was de rigueur and visual and verbal wit was prized. The very elusiveness of meaning in this micro-architecture reminds us of the ‘Adil Shahi concept of nauras, a term of multiple meanings including “nine flavors,” “nine rasas (moods [with respect to traditional Indian music]),” and “new arrival,” that inspired artistic circles under Ibrahim ‘Adil Shah precisely because of its elasticity. As always, the problem is in finding written evidence to correlate these interpretative frameworks to specific architectural features; the rich area of Deccani courtly culture and aesthetics will hopefully yield results.

No doubt the ability to puzzle and amaze also reflected favorably on the architect and carver. In several regional traditions, micro-architecture is seen alongside other designs that aim to showcase technical virtuosity and this association suggests that micro-architectural forms might also have become loci for overt technical display. Cambay’s mihrabs are justly famous for their sculpturally carved and highly illusionistic niches featuring lamps apparently suspended from stone chains. As at Cambay, micro-architecture in Bijapur is also part of a wider culture of conspicuous technical display within architecture. Micro-architectural parapets are accompanied by eaves that bear intricately carved stone chains, which are extremely complex to carve in any medium and, even today, remain virtuoso feats. Although the genre has not been studied in detail, an early example illustrating the importance of the motif is the single stone chain hanging within the throne apse of the eighth-century Umayyad palace of Khirbat al-Mafjar in Palestine. Together with the stone chains and intense, jewel-like carving that characterize later ‘Adil Shahi architecture, micro-architecture allows the carver to showcase his art.

Micro-architecture in architectural training and the process of design

We opened this discussion with a brief reference to architectural historians’ interest in regarding micro-architecture as a medium for commenting on the architectural profession. As Ajay Sinha expressed it, represented architecture is evidence for the “architect’s process of seeing and knowing.” In this final section, it is worth developing the implications of this interpretation of micro-architecture in more detail.

Indic micro-architecture does appear to be a phenomenon found largely in architecture; micro-architectural elements and represented architecture are only minimally present in other media such as metalwork or textiles, although there was undoubtedly some overlap with traditions of two-dimensional architectural representation in mural and miniature painting. The architectural focus of micro-architecture in South Asia certainly contrasts with the profusion of micro-architecture across media in late antique and Gothic material culture, and this perhaps provides further support for the idea of micro-architecture as part of an internal dialogue among architects and stone carvers.

The relative importance of Indic micro-architecture within the architectural profession raises obvious questions about the significance of micro-architecture in the training of craftsmen, the transmission of designs, and ultimately the development of architecture itself. In spite of the vast śastric literature on architecture, we know very little about the training of architects and craftsmen in South Asia, although it seems probable that various forms of copying, including
possibly model making, must have constituted an essential part of learning. If self-imaging encouraged skills of direct observation and copying, generic micro-architectural forms would have allowed craftsmen to practice designing key architectural types. The interest in direct observation and copying seen in much Indic micro-architecture, be it through “self-imaging” or the representation of other iconic structures, emerges clearly when contrasted with late antique practice, where prototypical architectural types predominated and relied on written labels to make them specific. As Oleg Grabar states in his analysis of late antique represented architecture, “the building is only very rarely identifiable, and when it is, the mechanism of identification is an inscription.”82 The phenomenon of architectural citation requires further examination but several Islamic micro-architectures appear to make reference to known buildings and so provide evidence for what M. A. Dhaky has called architects’ awareness of, and interest in, the larger tradition of Indic architecture. The question of how much viewers also participated in this architectural citation is also important but possibly even more difficult to answer.

We might even ask whether micro-architecture presented craftsmen with unique opportunities for formal experimentation, freed from real-life structural constraints. In his 1976 article on “Micro-Architecture as the ‘Idea’ of Gothic Theory and Style,” François Bucher suggested exactly such a role for micro-architecture in the development of openwork spires during the Gothic period.83 The finials of the Damri mosque at Ahmednagar can be read not only as slightly elongated domed octagons, but also as micro-architectural minarets with suspended balconies, an early experiment with the type of monumental tower minaret with a suspended encircling balcony seen barely twenty years later in Hyderabad. Further research is needed to explore these aspects of micro-architectural practice but the richness of this viewpoint needs no further elaboration.

This study has only begun to open what I see to be a complex and exciting perceptual window into the Islamic architecture of South Asia. Many ideas presented here are preliminary in the extreme and now await refinement. Much material remains to be discovered and many new approaches undoubtedly require exploration. The volume and complexity of micro-architecture in Islamic South Asia make this a task for scholars across many fields and I hope this study will stimulate crossdisciplinary collaborations. Micro-architecture’s versatility is a fundamental part of its fascination, but just as interesting is its continued ability to command attention and fire the imagination. This study has been a long time in the writing and yet I still do not tire of gazing at these “small models of large buildings.” I can only conclude with a quote from Gaston Bachelard that captures something of this power: “Miniature is an exercise that has metaphysical freshness; it allows us to be world conscious at slight risk. And how restful this exercise on a dominated world can be! For miniature rests us without ever putting us to sleep. Here the imagination is both vigilant and content.”84

Faculty of Art and Design, De Montfort University
Leicester, United Kingdom

NOTES

Author’s note: I would like to thank the many people who have discussed these ideas with me and proofed the present article over the course of its production. Crispin Branfoot provided early criticism and encouragement, and, more recently, I have benefited from the comments of the two readers at Mugarnas. Other contributors are too numerous to cite but I would like to express particular thanks to George Michell for his invaluable feedback and insights. All errors are, of course, my own.

1. The phrase comes from James Fergusson’s History of Indian and Eastern Architecture and is one of the first references in Western architectural history writing to this phenomenon. While discussing the Martand temple in Kashmir, he refers to the fact that both at Ajanta and “everywhere else in India, architectural decoration is made up of small models of large buildings applied as decorative features wherever required.” James Fergusson, History of Indian and Eastern Architecture (London, 1876), 285.


4. Ibid., 324.


7. Karnatakas’s particular focus on micro-architectural forms, sometimes to the total exclusion of other forms of decora
tion or iconography, explains its important place within the studies of Hardy, Foekema, and Sinha (see n. 5 above).


9. The Great Stupa at Amaravati in south India and its many adjacent votive stupas provide good examples of this phe


10. Technically, kâtabamkha refers to only one type of micro-

architectural element, but in many cases it is used to refer to micro-architecture as a class of decoration.


13. See M. A. Dhaky, “The Genesis and Development of Mâru-

Gurjara Temple Architecture,” in *Studies in Indian Temple

Architecture: Papers Presented at a Seminar Held in Vara-


15. The earliest example is at the 1414 Bhadra mosque of Ahmad Shah I: see James Burgess, *The Muhammadan Architecture of Ahmadabad*, 2 vols., Archaeological Survey of Western India 7 (Bombay, 1900–1901), vol. 1, pl. XIV.


19. Early photographs of another Cambay mihrab, the Lar mihrab, also show that its top arch was originally framed by two rectangular lanterns, similar to those represented on the mihrab image: see photograph in R. Howard, “The Lar Mihrab,” *Art and Archaeology Research Papers* 9 (1976): 24–25.

20. Similar, though simpler shrines can be seen on some of the subsidiary mihrabs in the 1333 Friday mosque founded by the Tughluq noble Hilal Malik in the nearby town of Dholka.


22. At Ajmer, the main mosque was completed in 1199, but it was another thirty years before the prayer hall was given a façade screen by Sultan Ilutmish (r. 1211–36), in around 1229–30: J. Horovitz, “The Inscriptions of Muhammad ibn Säm, Qutbuddin Aibeg and Ilutmish,” *Epigraphia Indo Moslemica* (1911–12): inscr. XXXII, 30. M. A. Dhaky has suggested that Ajmer provided the model for the Dholka micro-minarets: M. A. Dhaky, “The Minarets of the Hilal Khan Qazi Mosque. Dholka,” *Journal of the Asiatic Society of Calcutta* (1972): 19–24.

23. For a discussion of this aspect of Cambay marble carving, see Elizabeth Lambourn, “Carving and Communities: Marble Carving for Muslim Communities at Khambhat and around
24. There are certainly well-established precedents for painted sculpture in western India in this period: see a longer discussion in ibid., 113 n. 61.

25. On Cambay’s marble export market, see ibid., 122–26. Fragments of similar mihrabs have been identified at Cambay and in Mogadishu, confirming that such mihrabs were manufactured as a standard type, no doubt during the first half of the fourteenth century, based on stylistic evidence and a few foundation inscriptions.

26. See the photograph in Howard, “Lar Mihrab.”

27. For a full discussion of the genesis of this motif, see Lambourn, “Carving and Communities,” 113–14.

28. Burgess, Muḥammadan Architecture of Ahmadabad, vol. 1, pl. XXVIII.

29. The phenomenon was observed by Henry Cousens and is repeated in the work of Ziauddin Desai, and, most recently, Deborah Hutton. See Henry Cousens, Bijāpūr and Its Architectural Remains, with an Historical Outline of the ‘Adil Shahī Dynasty, Archaeological Survey of India, Imperial Series 37 (Bombay, 1916); Z. A. Desai, “Architecture,” in History of Medieval Deccan, 1295–1724, ed. H. K. Sherwani and P. M. Joshi, 2 vols. (Hyderabad, 1974), 2:279; Deborah Hutton, Art of the Court of Bijapur (Bloomington, 2006), 120–46. John Burton-Page was uniquely sensitive to this aspect of Deccani architecture, although he never wrote about micro-architecture as a phenomenon, or even referred to it as such: see John Burton-Page, Indian Islamic Architecture: Forms and Typologies, Sites and Monuments, ed. George Michell (Leiden, 2008), esp. s.v. “Minarets” and “Bijapur.” The period during which micro-architecture appears in the architecture of the Deccani sultanates may be linked to the defeat in 1565 of Vijayanagara, the seat of Hindu power since the fourteenth century, by a coalition of Deccani sultanates. The defeat of Vijayanagara not only provided the Deccani sultanates with the booty and new territory to fund extensive architectural campaigns, but also mobilized architects and groups of craftsmen, both of which substantially reconfigured the architecture of the Deccan.

30. Ghulam Yazdani, Bidar: Its History and Monuments (Delhi, 1995), pl. LXIX.

31. A similar idea was continued in the tombs of some of Ahmad Shah Bahmani’s successors and courtiers, and occasionally in mosque architecture; see Yazdani, Bidar, 130–32, for the tomb of ‘Ala’ al-Din Bahmani, which is illustrated in the same volume. Similar tentative explorations can be seen in early ‘Adil Shahi architecture. In the Asen Beg mosque at Bijapur, also known as Yusuf’s old Friday mosque and believed to date to 1512, the four corner chhatris are almost perfect miniature domed qubbas; their elongated drums and domes perfectly reproduce the form and proportions of the mosque’s own central dome: Cousens, Bijāpūr, fig. 9; Elizabeth Merklinger, Indian Islamic Architecture: The Deccan, 1347–1686 (Warminster, 1981), fig. 71. In several other cases, rooftops are marked by architecturally inspired kiosks (chhatris), as well as finials, but the brick and plaster of these early constructions no doubt hampered the size and amount of detail these rooftop elements could bear and thus their relationship to architectural prototypes. Almost contemporary with the Bijapur samples are a number of early experiments in the architecture of the Nizam Shahis of Ahmednagar. Early architecturally-shaped finials can be seen on the parapet of the mausoleum of Ahmad Bahri Nizam Shah (ca. 1509): see Gordon Johnson, C. A. Bayly, and John F. Richards, eds., The New Cambridge History of India (Cambridge, 1987–2006), pt. 1, vol. 7, Architecture and Art of the Deccan Sultanates, ed. George Michell and Mark Zebrowski, fig. 50.

32. The Mecca mosque at Ahmednagar, traditionally dated to 1525 and attributed to the patronage of Rumi Khan, bears traces of badly damaged micro-architectural elements on its façade, although these could be subsequent additions. Much later examples come from the mausoleum and mosque of Malik Ambar (ca. 1626), a vizier of the ruler of Ahmednagar, at Khuldabad in the northern Deccan, which features micro-architectural qubbas: Michell and Zebrowski, Architecture and Art of the Deccan Sultanates, fig. 53; for the mosque, see an 1860 photograph by J. Johnston in the British Library, Photo 303/1 (112), Item no. 112.

33. Hutton, Art of the Court of Bijapur, fig. 2.3.

34. Ghulam Yazdani remarks that the minarets resemble “in certain features the minarets of the Madrasa of Mahmud Gawan”: Yazdani, Bidar, 159, pl. XCIII.

35. Other examples of ‘Adil Shahi micro-architecture are found at Bijapur; the Gol Gumbad, the mausoleum of Ibrahim’s successor Muhammad (d. 1656), also incorporates similar elements at roof level: Cousens, Bijāpūr, pls. XC, XCII. Other examples include the Afzal Khan mosque, constructed before 1659, as well as the tombs of Ikhlas Khan (d. 1597), Yaqut Dabuli, Amin al-Din (ca. 1664–65), and Khan Muhammad Khan Khanan (d. 1686): see Merklinger, Indian Islamic Architecture, figs. 99, 29, 81, 31, and 30, respectively. See also the late seventeenth-century Mecca mosque in Michell and Zebrowski, Architecture and Art of the Deccan Sultanates, fig. 64. The façade of the so-called mosque of Kowars Khan is also marked by a pair of micro-architectural elements: see the sketch by Alexander Nash executed in 1844 and preserved at the British Library, WD2095, Item no. 8.

Micro-architectural experimentation was by no means confined to the ‘Adil Shahi capital, and an early and significant example appears to be the Sampgaon mosque, dated on epigraphic grounds to the third quarter of the sixteenth century, which has domed micro-architectural qubbas at the center of its façade: Merklinger, Indian Islamic Architecture, p. 120, cat. 104, fig. 87. The 1617 Kaúl mosque and gateway at Lakhmeshvar make an interesting distinction between two- and multistoried domed qubbas, placing twinned multistoried qubbas, which almost resemble towers, at the center of the gateway façade and a pair of two-storied domed qubbas at the center of the mosque façade: Cousens, Bijāpūr, 69, and pls. XLI, XLII; see also Merklinger, Indian Islamic Architecture, figs. 69, 158. Other examples can be seen on the Afzal Khan mosque at Afzalpur (before 1659) and the mid-seventeenth-century Afzal Khan mosque at the dargāh of...


37. These details can be seen in an old nineteenth-century photograph preserved in the British Library. Photograph by H. H. Cole, dated 1885, Photo 1003/(1856), Item no. 10031856.


39. See Merklinger, *Indian Islamic Architecture*, cat. 163, figs. 30 and 31. On the Mecca mosque at Bijapur, the two sides of the façade are marked by two micro-architectural motifs showing an arced ground floor with five openings, topped by a ribbed dome on a high drum and corner domed finials, which recall essential features of the mosque itself: Michell and Zebrowski, *Architecture and Art of the Deccan Sultanates*, 64.

40. In studies of medieval European micro-architecture, large pieces of church furniture such as pulpits, as well as urban elements such as fountains and crosses, are all classed as micro-architecture when they have micro-architectural forms. See, for example, Timmerman, “Poor Sinners’ Cross and the Pillory,” where the Jal Mandir might thus be seen as a micro-architectural reliquary rather than as a building.


42. Accounts of the arrival of the relic at Bijapur are given in Firishta’s *Ta’rikh-i Firishta*, written for Ibrahim ‘Adil Shah II (r. 1580–1626) and presented at court in 1606 (though updated afterwards, since events up until 1626 are included). For the Athar Mahal, see Cousens, *Bijápūr*, 89–95.

43. Mark Brand also showed a number of simple carved stone lamps housed in various buildings at Bijapur (e.g., the mausoleum of Muhammad ‘Adil Shah [r. 1627–55], the Ibrahim Rawza, the Friday mosque, and the Athar Mahal) that are micro-architectural in form. Although none of these lamps can be precisely dated at present, Brand considers the majority to be of ‘Adil Shahi date. They represent a rare example in India of lamps being given an explicitly architectural form. See Brand, “Re-Creating Islam in the Seventeenth Century” and personal communication, 25 March 2010.

44. The mosque itself was built in 1576 during the reign of ‘Ali I (r. 1558–80). The historical inscriptions are published in M. Nazim, *Bijapur Inscriptions*, Memoirs of the Archaeological Survey of India 49 (Delhi, 1936), 29–30. The mihrab of the Mecca Masjid, also at Bijapur, reprises this idea in carved stone: see Cousens, *Bijápūr*, pl. CII.

45. Marika Sardar’s doctoral dissertation on Golconda is an important new contribution to Qutb Shahi architecture, and I would like to thank her for making it available to me, as well as for taking time to answer my questions: see Marika Sardar, “Golconda through Time: A Mirror of the Evolving Deccan” (PhD diss., Institute of Fine Arts, New York University, 2007). Omar Khaldi’s work on Hyderabad indicates the paucity of existing studies of the city’s Islamic monuments: see Omar Khaldi, *A Guide to Architecture in Hyderabad, Deccan, India* (Cambridge, Mass., 2009).

46. Others *qubbas* appear on the four corners of the *baradari* (a type of large single-storied pavilion) in the Inner Fort of the Bala Hisar at Golconda, and on the 1671 Toli mosque at Hyderabad: see Michell and Zebrowski, *Architecture and Art of the Deccan Sultanates*, 70.

47. I am grateful to Marika Sardar for highlighting the problems with early structures such as the Taramati mosque in the Bala Qila at Golconda, an early example of Qutb Shahi religious architecture attributed to the reign of Ibrahim Qutb Shah (r. 1550–80), which displays in its present state a developed micro-architectural parapet (personal communication, n.d.); see also Desai, “Architecture,” 296. The earliest micro-architectural elements in Qutb Shahi architecture may be the four pillars that mark the ends of the 1518 Friday mosque built by Sultan Quli at Golconda.

48. Large micro-architectural parapets are a prominent feature of the later eighteenth- and nineteenth-century Islamic religious architecture of several parts of southern India. With the extension of ‘Adil Shahi and Qutb Shahi control to the ports of the Coromandel coast and subsequent Mughal and Maratha conquests in these areas, prominent parapet façades can be traced in the architecture of the Sultans of Mysore in what is now southern Karnataka, as well as in the architecture of the Nawabs of Arcot, or Walajahis, in northern and eastern Tamil Nadu.

49. Jonathan Bloom, *Minaret: Symbol of Islam*, Oxford Studies in Islamic Art 7 (Oxford, 1989), 99. The two examples cited by Bloom come from a Zaydi and a Fatimid source. It would be interesting to see whether these hadith are included in Deccani hadith collections and, if so, how they are discussed.

50. For a discussion of Fatimid responses to this tradition, see ibid., 99–124, and 125–44.

51. For a detailed overview of locations used for the call to prayer and particularly the history of the early Islamic use and development of types of staircase minarets, see ibid., 28–35. Well into the modern period, Sunni congregations used the roofs of mosques for the call to prayer, sometimes with mi’rânas to shelter the muezzin, in places where there was no structural or financial capability to construct tower minarets or where this was not a strong regional tradition. The Hilal Khan mosque at Dholka in Gujarat, which was discussed earlier, is a perfect example of this type of arrangement and typical of many pre-Ahmad Shahi mosques in western India.

52. See ibid., 179, figs. 120 and 129.


54. The story of Timur’s introduction of Muharram practices to India in 1398 is widely repeated, based on the early nineteenth-century source by Ja‘far Sharif, *Islam in India, or the Qānūn-i-Islām: The Customs of the Musulmāns of India,*
Eng. trans. G. A. Herklot (repr. New Delhi, 1972), 164. The later editors of the text appear to have added a source for this statement, linking it to an entry in the 1874–1904 Gazetteer of the Bombay Presidency. However, the South Asian history of Muharram remains far from clear at present and two recent articles that attempt to broaden our understanding of it are found in Knut A. Jacobsen, ed., South Asian Religions on Display: Religious Processions in South Asia and in the Diaspora (London, 2008): see the brief historical summaries by Mariam Abou Zahab, “Yeh matam kayse ruk jae?” (‘How Could This Matam Ever Cease?’): Muharram Processions in Pakistani Punjab,” esp. 106 n. 6, and Hugh van Skyhawk, “Muharram Processions and the Ethicization of Hero Cults in the Pre-Modern Deccan,” 127-28.


57. Dhaky alludes to a “healthy curiosity concerning knowing about architectural forms other than their native [ones]”: M. A. Dhaky, The Indian Temple Forms in Kārnāṭa Inscriptions and Architecture (New Delhi, 1977), 41.

58. Foekema, Architecture Decorated with Architecture, 10.

59. Sinha, Imagining Architects, 27.


64. Sinha, Imagining Architects, 179, 181.


66. Ibid., 14.


68. Ibid., 101.

69. See Flood, Great Mosque of Damascus, for the most recent bibliography on this iconographic program and related material.


71. The historical inscriptions are published in Nazim, Bijapur Inscriptions, 29–30.


73. Oleg Grabar, Mediation of Ornament, 155–94.

74. Ibid., 186.

75. Ibid., 189.

76. Ibid., 190.


78. Daud Ali, Courtly Culture and Political Life in Early Medieval India (Cambridge, 2004).

79. Hutton, Art of the Court of Bijapur, 110–11. For a particularly successful study of literary and visual metaphor in Spanish courtly culture during the Ta‘if period, see Cynthia Robinson, “Seeing Paradise: Metaphor and Vision in Ta‘ifa Palace Architecture,” Gesta 36, 2 (1997): 145–55. Robinson’s description of the third category of metaphor, known as isti‘āra, recalls some of the processes hinted at in the creation and reception of micro-architecture in Islamic South Asia. She describes it as “much more subtle, and comprehensible only to possessors of superior powers of perception. This category of metaphor entails the poet’s discovery, and the listener’s comprehension, of hidden similarities” or involves the viewer in active “participation in the unraveling of the visual puzzle or metaphor”: Robinson, “Seeing Paradise,” 153, 154. One is tempted to substitute “architect” and “viewer” for “poet” and “listener” so that the passage reads: “this category of metaphor entails the architect’s discovery, and the viewer’s comprehension, of hidden similarities.” Indeed, Robinson argues that such metaphors also operated in the reading of palace architecture as a visual equivalent of Paradise.


81. Sinha, Imagining Architects, 27.

82. Grabar, Mediation of Ornament, 178.


The Alhambra is famed for its beautiful site, commanding views of the fertile Granada plain and the snowy Sierra Nevadas, and for its architecture, the fourteenth-century Nasrid palaces of Comares and the Lions (Palacio de Comares and Palacio de los Leones), as well as the Renaissance palace of Charles V (r. 1516–56). Linked with this renown are efforts to explain how those structures were occupied, a critical concern given the Alhambra’s siting in a climate of extremes. While there has been much speculation about this issue, the architecture itself reveals a great deal. The Nasrid palaces illustrate a wealth of passive strategies to cope with climate, providing insight into how the palaces were inhabited and the lifestyles they reflect. The Alhambra’s later occupation by the Roman Catholic conquerors who came to inhabit Granada is a counterpoint, highlighting salient Nasrid palace features. Studying how the Alhambra was used by two successive and competing cultures leads to a better understanding of Nasrid architecture itself, as well as of the reasons for Charles V’s construction of his “new quarters” and Renaissance palace.

When the Nasrids won control of Granada, the Alhambra was greatly expanded as a royal precinct. The focus became the Comares and Lions palaces, which were constructed during the reigns of Yusuf I (r. 1333–54) and Muhammad V (r. 1354–59 and 1362–91), respectively. These works define a phase of intense construction during the Nasrids’ 260-year rule, and the palaces were the dynasty seat until their 1492 surrender to Queen Isabella I of Castile and King Ferdinand II of Aragon, commonly known as the Catholic Monarchs (r. 1474–1516). Isabella and Ferdinand added the Comares and Lions palaces to their other Spanish residences and essentially inhabited them as they were, but when their grandson, Charles V, rose to power in 1516, he had to balance his charge to preserve the Nasrid palaces with other concerns, such as his larger, more cosmopolitan court and greater status as Holy Roman Emperor. His new palace, on which construction began in 1533, was conceived as a more appropriate residence for his visits to Granada; “new quarters” were built for use until the palace was completed.

The Alhambra’s tangled past is the result of distinct, overlapping cultures, each with its own architectural vocabulary. It is necessary to address not only the Nasrids’ Comares and Lions palaces, but also the question of how those structures were occupied and found lacking by Charles V. Linked with these issues is Granada’s climate: winter–summer temperature swings, ranging from -13 to +43 degrees Celsius, demand consideration. The Nasrids themselves recognized these severe conditions, as did those who followed them. As early as 1600, Luis del Mármol considered climatic issues in relation to the habitation of the palaces, writing that the Comares Palace contained the “summer rooms,” while the Lions Palace was “where the sultans lived in winter.” Although there is no architectural basis for this summer and winter dichotomy, Mármol’s outlook has nonetheless been consecrated, repeated through the centuries. Other speculations—such as the suggestion of a Nasrid “winter palace” razed for the Palace of Charles V, itself completed over the course of four hundred years, shrouding architectural intentions and leaving questions about its potential occupation—further complicate serious discussion.

The efforts to explain how these palaces were inhabited, however, reveal the issue’s import. With only scant documentation most references to the Alhambra’s inhabitation are anecdotal and have not been subject to rigorous analysis. Even with the Nasrid Alhambra’s
continuities with other architectural traditions, it has no existing parallels on the same scale, pre-dating or contemporary, that provide clues as to how it was occupied.7 The data gathered while monitoring some key rooms of the Comares and Lions palaces during both summer and winter illustrate the effectiveness of Nasrid passive environmental strategies, suggesting various occupation patterns and adding to the general discussion of Nasrid architecture. Monitoring the Renaissance palace is not possible because it houses offices and a museum, but by studying it and the “new quarters” through other means, as well as by examining how the conquerors occupied the Nasrid palaces, certain issues become readily apparent. One sees that despite cultural differences, both the Nasrids and those who succeeded them used, in the broadest sense, similar strategies in designing and inhabiting spaces, although they applied them in profoundly different ways.

THE NASRID PALACES OF THE ALHAMBRA

Like other peoples, the Nasrids coped with climate through the use of seasonal wardrobes and room furnishings such as tapestries and rugs, dressing themselves and arraying their rooms to maximize comfort. Braziers, with the warmth of burning embers in winter, and pools and basins, with their evaporative cooling effect in summer, were additional measures to moderate temperature.8 In addition to these interventions, which only help to temper the environment, Nasrid rulers had palaces throughout the region, where they could enjoy the benefits of different environs.9 This is seen in the Generalife, a summer retreat with surrounding gardens and greenery, only slightly uphill from the Alhambra palaces, yet far removed from the precinct’s confines and dense building mass (fig.1).

Besides traveling to more seasonal locations or moderating a room’s habitability, the Nasrids sought
to make their surroundings more comfortable through the design of the architecture itself. To fully understand the palaces, it is imperative to consider the architectural means—building level, orientation, room size, wall apertures—employed to confront climatic concerns. Mindful of these factors, one sees seasonal components in the Comares Palace: the Nasrids created rooms of different character for use in the summer as opposed to the winter. In the Lions Palace, the rich variety of spaces—its wealth of varied salas, miradors, and unique alcoves, all around an arcaded patio—illustrates another means to address Granada’s climate of extremes. It becomes clear that these palaces encompassed a range of spaces with distinct environmental conditions.

**Nasrid courtyard dwellings**

The Comares and Lions palaces today form the heart of the Alhambra, but as the complex is really a small city, dwellings are scattered throughout. In the extant palaces and the foundations of humbler houses one sees constants creating a consistent vocabulary—basic building blocks of residential architecture—despite a wide range in dwelling scale. A courtyard, focused on a water element such as a pool, basin, or fountain, anchors the typical two-level dwelling. The courtyard/patio defines the home’s core: the stair to the upper floor originates from it and all rooms open onto it. In fact, exterior wall openings are limited. Few if any windows look outward to the street, the courtyard providing air and light to all rooms. While admitting variations, the courtyard formed the basis of the Nasrid dwelling vocabulary, further developed in the typical room—a narrow, multifunctional space. Through the use of portable furnishings, the Nasrids easily adapted these neutral spaces to serve a variety of daily needs—sitting, dining, sleeping.

The Nasrid courtyard dwelling has antecedents in the traditional Roman house. Outside of Italy itself, Iberia was the most Romanized region of the ancient empire. Muslim constructions in al-Andalus—the Aljafería of Zaragoza, the Castillejo de Monteagudo in Murcia, and the Patio del Crucero (Patio of the Crossing) in Seville, to name a few notable examples—followed Roman courtyard typology. The Nasrids’ Generalife and other houses in Granada’s Albaicín quarter, such as the Dar al-Horra (House of the Princess), Casa de Zafra, Casa de Lorenzo el Chapiz, and Casa en la Calle del Horno del Oro share Roman sensibilities. These Nasrid examples are on a smaller scale than the Alhambra palaces, but they share a similar architecture—a rectangular patio surrounded by elongated rooms. In fact, this pattern is so prevalent that the Tower of the Captive (Torre de la Cautiva) and the Tower of the Princesses (Torre de las Infantas), two residential structures, are the only notable exceptions in the Alhambra. In short, Nasrid architectural elements are defined and repeated in all buildings, as are its decorative and construction techniques—muqarnas (a system of projecting niches used for zones of transition and for architectural decoration) and plasterwork, masonry walls and wood roofs, mosaics and tiles.

Similar environmental strategies are also evident in Nasrid and other Hispano-Arab dwellings: the thermal mass of masonry construction minimizes temperature extremes, and water elements contribute to evaporative cooling. Another critical constant is orientation. Mosques and oratories face Mecca, but residential buildings typically develop along a north–south axis with the principal courtyard rooms facing south. Examples include those structures cited above, along with the Alhambra palaces—the Lions Palace a notable exception with its east–west elongation and patio arcade. On a grander scale, orientation dictated the planning of Madinat al-Zahra, the royal city sited on the Guadalquivir River. The general disposition is north–south, with south-facing chambers such as the Salón Rico and the Salón de la Casa del Ejercito. Variants to the preferred north–south axis inevitably result from topography or urban situation, as in the Cuarto Real de Santo Domingo, which bestrides Granada’s city walls. The principal room faces southeast, toward the surrounding terrain and away from Granada, allowing sweeping vistas: visual considerations thus supplanted orientation.

The fourteenth-century Almerian Ibn Luyun (d. 1349) confirms the ideal of the north–south orientation. In his Kitāb Ibdāʾ al-malāʾah wa-inhāʾ al-rajāʾah fi usṣul sināʿat al-fīlāḥah (Book on the Principles of Beauty and the Purpose of Learning Treating the Fundamentals of the Art of Agriculture), he offers advice, both prosaic and profound, on an Andalusian dwelling:
A house amidst gardens should be located in a dominant position for reasons of defense and vigilance. It should face the midday sun, the entrance at one side, and a well or a pond should be placed on the upper part; or instead of a well, better a canal running underneath the shade.\textsuperscript{13} In writing of water and plants—which contribute to evaporative and evapo-transpirative cooling, respectively—Ibn Luyun mentions typical Nasrid dwelling elements. He also highlights the impact of orientation on comfort and habitability. At Mediterranean latitudes a building should, as Ibn Luyun notes, ideally face the midday sun. In summer, the high sun can easily be controlled with a portico or arcade. This design element accentuates the south face, rendering the east and west façades less important. Indeed, given the summer sun’s extremely low morning and evening inclination—making shading very difficult on the east and west sides—those façades should be de-emphasized. In this sense, Ibn Luyun’s recommendation that the garden enclosure should be “longer than wider” is sound. Courtyards were typically elongated on the north–south axis, as prescribed.

In the majority of Hispano-Arab buildings, the most important room lies to the north, with its courtyard façade facing south. Additionally, the large openings associated with this prime chamber might be sheltered by a portico or arcade—a typological element that, as mentioned above, protects the room from the high summer sun, yet conversely allows the low winter sun to enter and provide warmth and light. East and west rooms, on the other hand, have small openings, essentially just enough to illuminate and ventilate the space, and the walls might be of light color to better reflect the sun’s rays and thus limit solar gains. On the east and west elevations, then, the objective is to reduce the low sun’s impact. Aperture size and the narrow courtyard geometry thus impede the sun’s penetration into both rooms and patio at dawn and dusk. Solar radiation can be advantageously harnessed, but it also must be tempered, a fact recognized in Ibn Luyun’s writings and embodied in Hispano-Arab dwellings.\textsuperscript{14}

The Comares Palace

Nasrid architectural elements were not devised, nor were environmental strategies utilized, solely for noble and royal spaces. They were used throughout the continuum of Nasrid society. The universality and versatility of these architectural devices translates into a sense of ambiguity. Even in the most sumptuous hall it is difficult to ascertain function; with simple fittings and furnishings each space could be transformed. The Comares Palace thus shares features with Nasrid residential architecture, albeit with a difference in scale and grandeur and the important addition of public spaces juxtaposed with more private rooms (figs. 2 and 3). Just outside the palace, for instance, is the Mexuar, a council chamber where the sultan and his advisers would meet. The imposing principal façade of the Cuarto Dorado (Golden Chamber) provided a backdrop against which the sultan might administer justice and also served as the entrance to the Comares Palace: the space functioned as both a courtroom and a palace gateway. Beyond it lies the Hall of the Ambassadors (Sala de los Embajadores), which, as epigraphic evidence suggests, was both a throne room and a reception hall—a grand chamber crowning a series of public spaces (fig. 4).\textsuperscript{15} Intertwined are the more private zones. Starting with the Sala de la Barca (Hall of the Ship), the components of the sultan’s apartment are evident. The Sala itself has a centered entry, with alcoves defined by arches at either end of the room. In the thickened zone between the Sala de la Barca and the Hall of the Ambassadors, an oratory to the east faces Mecca and stairs to the west provide access to upper-level rooms. Both the latrine just west of the Sala and the palace bath to the east met hygienic needs. The sultan’s wives might also have been at hand, housed along the palace’s east and west sides, in narrow upper and lower apartments, each identical, in accordance with the Koranic prescription to treat one’s four spouses equally.\textsuperscript{16}

The multifunctional upper and lower chambers of the private quarters of the sultan and his wives suggest seasonal winter and summer spaces. This duality is perfectly manifest in the Comares Tower, with its sophisticated development of the sultan’s rooms (fig. 5): the Sala de la Barca, more appropriate for warmer weather, lies below a smaller room, similarly barrel-vaulted, more suitable for cooler weather and embedded in the tower’s masonry. An arcade/portico shades the Sala—the high summer sun cannot strike its walls (fig. 6). In contrast,
Fig. 2. The ground floor of the Comares and Lions palaces as they existed during Nasrid rule, under Muhammad V in the latter half of the fourteenth century: A) Patio de Comares, B) Patio de los Leones, 1) Sala de la Barca, 2) wives’ quarters, 3) Hall of the Ambassadors, 4) Hall of the Two Sisters, 5) Lindaraja Mirador, 6) Hall of the Abencerrajes, 7) Hall of the Kings, 8) Hall of the Mocárabes, 9) bath of the Comares palace, 10) Cuarto Dorado, 11) Mexuar. (Drawing: Todd Willmert)

Fig. 3. Patio de Comares, looking north, with a view of the south face of the Comares Tower. (Photo: Jean Laurent y Minier, courtesy of Special Collections, Fine Arts Library, Harvard College Library)
the principal upper room is exposed to the full arc of the sun’s path. The Sala de la Barca is wedded to the relatively constant coolness of the tower masonry, with its habitable spaces, the alcoves, defined by masonry walls. Its counterpart above, however, is spatially insulated on three sides. The Hall of the Ambassadors shelters the upper room to the north. Two auxiliary chambers, seemingly carved from the massive tower wall, also insulate the upper room from above and below. Air within these three spaces helps to moderate the upper room’s environment. Volumetrically, the upper quarter is small, easily warmed by braziers as well as by other furnishings and fittings, while the lower room is over twenty times as large.17 The window in the upper room offers sunlight and a view. The wall openings of the Sala de la Barca, on the other hand—three small, ventilating windows above a large door opening, a size reflecting the scale of the Hall of the Ambassadors—serve other needs.

Fig. 4. The Hall of the Ambassadors as seen from the Sala de la Barca. (Photo: Garzón, courtesy of Special Collections, Fine Arts Library, Harvard College Library)
Orientation, level, and insulating spatial buffers, together with room size, shading, and window vocabulary, effectively define the summer and winter rooms of the Comares Palace. On an average sunny summer day, the Sala de la Barca registers temperatures—the most important factor determining habitability in Granada’s climate—about three degrees Celsius cooler than those in the upper room, a significant difference. In sunny winter conditions, the differences are even greater—with the upper room warmer by four or more degrees. Cloudy skies, more common in winter, create more stable temperatures, limiting temperature swings and the thermal difference between the chambers (fig. 7; see the data for February 8, 9, and 10, three cloudy days). Regardless of the conditions, what is obvious is the moderating effect of the masonry’s thermal mass, which flattens daily temperature swings. These properties are advantageously utilized in the narrow upper room—the sultan’s “winter” quarters. Only two meters wide, the room’s east and west sides are thus minimized. The only real exposure is the favorable southern one, with the potential warmth of this south wall’s thermal mass especially welcome on a cool night. The Sala de la Barca, on the other hand, is more habitable in summer, given its shade-providing arcade and thermal coupling with the ground and tower mass, among other factors.

Linking temperature with relative humidity, the prime determinants of “comfort,” the full impact of these strategies becomes apparent. The Comares Palace’s environmental data, when juxtaposed with the ambient weather and the matter of the “comfort zone” (see Appendix), point to the utility of summer and winter chambers. Diurnal temperature and relative humidity extremes lie well outside of the comfort zone, oscillating widely throughout a typical summer or winter day (figs. 8a and 8b). In contrast, the room masonry and other environmental factors confine the chambers’ temperature and humidity to an extremely narrow range, as evident in the diagram. The Sala de la Barca is clearly within the comfort zone throughout a typical summer day, while the upper winter chamber lies outside the zone. In winter, the upper room is significantly closer to the comfort zone than is the Sala, where less hospitable conditions are more easily remedied with seasonal clothing, furnishings, and braziers. Such supplemental measures could make the upper room even more comfortable, especially in comparison with its summer counterpart, whose large volume limits the effectiveness of such means.

The wide range of seasonal strategies employed within the sultan’s quarters hinges on many factors, two of which—the extreme volumetric difference between his summer and winter chambers and the arcade shading the summer room—are lacking in the wives’ quarters. Other factors are unique to the wives’ rooms—for instance, the insulating effects of the winter chambers being directly above their summer counterparts. Although the apartments of the sultan and his wives vary in some respects, their common aspects—i.e., room form and aperture vocabulary—readily reveal the strategy behind inhabiting these seasonal rooms.
Fig. 7. Graph of summer and winter temperatures in the Comares and Lions palaces. The data illustrate that outside temperature fluctuates widely throughout the day, typically about twenty degrees, except during overcast conditions, as on Feb. 8, 9, and 10. (See Table II [in Appendix] for cloud cover data.) In contrast, interior spaces remain relatively stable, varying only about two to four degrees. The summer and winter ranges illustrate that the upper room of the Comares Palace is the warmest space in either season, while the Sala de los Secretos in the Lions Palace is the coolest. Of the five rooms monitored, the temperatures of the Sala de la Barca lie between these two extremes. The upper mirador was the warmest room monitored in the Lions Palace, while the Lindaraja Mirador was consistently cooler, with temperatures between those of the upper mirador and the Sala de los Secretos. (Graph: Todd Willmert)
For instance, the narrowness of the wives’ ground-floor rooms in the Comares, as well as their centered entries, are exploited to create lateral alcoves, and above each door are two or three small, high openings that ventilate the space but offer no view and admit little light (fig. 9). During the hottest summer days, with the door closed, darkness complements the coolness of the floor and masonry walls, augmented by the chambers’ thermal coupling with the earth. In contrast, the upper rooms are entered on end, directly from stairs, with windows near the floor to offer both a view and sunlight. The central windows of the upper rooms focus the space, much as the lateral alcoves do in the rooms below.

Complementing the private domestic chambers of the Comares are the ceremonial Hall of the Ambassadors and courtyard, the core of the palace’s public sec-
tion. This throne chamber (qubba), an Alhambra tower, is the key feature elevating the building from a mere residence to a palace. Each of the three exposed sides of the Hall of the Ambassadors has three floor-level openings—nine camaritas within the tower’s three-meter-thick walls, with high windows above, all to facilitate ventilation. To the south of the Hall, a large opening leads to the Sala de la Barca, which in turn leads to its arcade/portico and the courtyard of the Comares, defined by its pool. Approximately 250 square meters in area and 1.3 meters deep, water occupies nearly one third of the courtyard, its significant surface area aiding evaporative cooling—an effect easily exploited given the low humidity of the site. The high thermal mass of the pool’s water also absorbs solar radiation and the water is typically cooler than the daytime summer air in the courtyard. The net effect is that the pool helps reduce the patio’s air temperature.

Taken together, the “public” spaces of the Comares facilitate cooling. In this sense, the Hall of the Ambassadors functions as a ventilation tower, encouraging palace air movement. Cross ventilation though the Hall’s openings fosters airflow, but more important is a wind-driven stack effect (fig. 10). High openings in
the tower allow stratified warm air to escape, especially when propelled by the south and southeast winds dominant in Granada or by breezes sweeping down from the Sierra Nevada range. To replace the evacuated warm air, the Hall draws from the patio air itself cooled by the courtyard’s vegetation and, more importantly, water. The link, or hinge, between the patio and tower of the Comares Palace is the Sala de la Barca and its arcade/portico. The large openings of the Sala foster air movement between the qubba and the courtyard, with the portico protecting the tower’s south wall from the sun, creating a thermal buffer between interior and exterior to temper incoming air. The combination of all these architectural elements—courtyard, portico, and tower—in conjunction with the thermal and physical effects of air movement, helps to ameliorate hot summer conditions. Airflow from the patio through the portico and escaping from the tower, in turn, helps to cool the palace’s dwelling chambers.

The environmental effect of ventilation is subtle. Breezes are required to effectively drive air circulation, and a narrower or more restricted tower, with higher apertures, would better facilitate the stack effect. The impact of ventilation should not be overstated; though minor air movement can help to make conditions more comfortable (as evident in fig. 8b), it is clearly just one factor, among many, contributing to the environmental design of the Comares Palace. Furthermore, the palace benefits from the cumulative impact of its multiple environmental strategies. The thermal mass of masonry positively influences habitability, as does the courtyard’s water mass; both wall openings and overhangs control solar gains, as do palace geometry and orientation. It is the amalgam of multiple strategies, not discrete and isolated environmental factors, that contributes to comfort and habitability.

Environmental strategies might in fact compete or conflict with other concerns. The domestic chambers of the Comares Palace, lower summer and upper winter, are both whitewashed. The reflective color is advantageous for the summer chambers, but not for their winter counterparts—uniform façade color here takes precedence over other concerns. In short, the totality of the Nasrids’ manipulation of daylight and decoration, of color and texture, and of the sound of the water and the smell of the plants contributed to their aesthetic attainments, all within a broad, expansive context. The environmental achievements of the Comares Palace must be evaluated with a cumulative, holistic perspective, an outlook that reveals the import of climatic considerations, which were an integral part of the Nasrids’ high architectural accomplishments.

The Lions Palace

As the Comares Palace mirrors Nasrid residential architecture on a grand scale and neatly crowns a complex entry sequence from Granada below, one view posits that this was the “official” palace. In contrast, the Lions Palace was the casa de recreo (house of recreation), owing to its unique form in residential typology. Other interpretations suggest that each palace was “official,” with Muhammad V’s Lions Palace supplanting the father’s Comares. These views hint at the differences between the two independent dwellings “so close to one another, that only a wall divides them.” The key, at least for this essay, is that the Comares and Lions palaces are separate structures, serving different functions and needs, as reflected in their distinct designs (fig. 11). As opposed to the summer–winter duality evident in the chambers of the Comares Palace, the spaces in the Lions Palace are more varied. Starting with rooms off the Hall of the Two Sisters (Sala de las Dos Hermanas), the contrasts between the two structures become readily apparent (fig. 2). Just north of the Hall of the Two Sisters, the Lindaraja Mirador epigraphy alludes to Muhammad V’s presence and the vistas and breezes he would enjoy there (fig. 12). Inscriptions compare the sultan to both “sun” and “shade”: he is like the sun in his importance, with his good works providing his people with shade. Sheltered by the Hall of the Two Sisters to the south, the Lindaraja Mirador is shaded from the sun. When Muhammad V sought repose there, he was the figurative sun in the space and did not have to compete with the literal sun. In the upper level of the Hall of the Two Sisters, another mirador offers views, through the Hall of the Two Sisters and the Lindaraja Mirador, identical to those seen from the Lindaraja Mirador itself (figs. 13 and 14). The paired miradors share vistas: the contained courtyard of the palace to the south and, to the north, the open Lindaraja Garden with the Albacin
Fig. 11. View of the Lions Palace, showing the patio and arcade. (Photo: Garzón, courtesy of Special Collections, Fine Arts Library, Harvard College Library)

Fig. 12. The Lindaraja Mirador as seen from the Hall of the Two Sisters. Bildarchiv Foto Marburg, no. 54675. (Photo: courtesy of Art Resource, N.Y., and Special Collections, Fine Arts Library, Harvard College Library)

Fig. 13. The Lions Palace, section. The shaded areas—the upper mirador, the ground-level Lindaraja Mirador, and the Sala de los Secretos, under the Hall of the Two Sisters—were monitored. The section illustrates the relationship of the twin miradors, each enjoying vistas of the palace patio as well as of the adjacent Lindaraja garden to the north and the landscape beyond the Alhambra precinct. (Drawing: Todd Willmert)
beyond. However, the two miradors have different orientations. The upper one suggests a winter space. It faces south, and while the same size in plan as its twin, it has a much lower ceiling—making it volumetrically smaller—and the courtyard shelters it from the wind. Meanwhile, the Lindaraja Mirador is oriented north and, in the Nasrid epoch at least, was open to breezes and broad vistas.

Beneath the Hall of the Two Sisters is the Hall of Secrets (Sala de los Secretos), another space with distinct environmental characteristics. Its location next to the long-lost bath of the Lions Palace suggests that the space may have been part of the entrance to the bath, or simply a luxurious adjunct to it; the hall’s proximity to the Lindaraja Garden suggests other possible uses related to that outdoor space. The ground below and the Hall of Two Sisters above insulate the Hall of Secrets. These buffers create a cool summer space, a counterpoint to the Lindaraja Mirador and the upper mirador. During the extreme seasons, the temperatures in these three chambers vary significantly, reflecting their distinct characteristics: the Hall of Secrets very enclosed and insulated, and the two miradors more open, but with opposing orientations. Juxtaposing the data on the Comares Palace with those on the Lions Palace, the environmental variety of the Alhambra’s spaces is further illustrated, the data also indicating that each palace had both summer and winter spaces, refuting Mármol’s position that the Comares Palace was a summer residence and the Lions Palace a winter one (fig. 7).

In examining the wealth of spaces immediately adjacent to the Hall of the Two Sisters, it is easy to neglect the room itself. Its qualities are clearly manifest, however, when it is compared with its counterpart across the patio, the Hall of the Abencerrajes (Sala de los Abencerrajes). The former is an open hall, connected to adjacent spaces. The Hall of the Abencerrajes, by contrast, is smaller and more contained, its only apertures a door and small, high openings surrounding the ceiling. In my examination of the architecture of the Comares Palace, it became clear that the more “closed” spaces were summer areas: for example, as noted earlier, when the doors to the wives’ summer chambers were shut, the two small openings above each door provided fresh air while limiting light, thus creating a “closed” chamber (see fig. 9). The similarly “closed” nature of the Hall of the Abencerrajes suggests that it, too, was perhaps intended as a summer room, an outlook reinforced by the fountains of the two salas. Both the Hall of the Two Sisters and the Hall of the Abencerrajes have central basins, yet the water surface area in the latter is almost three times as great, to better facilitate evaporative cooling. These twin pavilions, while sharing some design features—such as their highly articulated ceilings—are distinctly developed, making them more appropriate for different seasons, days, or even parts of the day.

Fig. 14. Opening to the upper mirador, from the Hall of the Two Sisters. The palace patio is visible from the lower door opening. Institut Amatller d’Art Hispanic, MAS G 5850. (Photo: courtesy of the Institut Amatller d’Art Hispanic, Barcelona, and Special Collections, Fine Arts Library, Harvard College Library)
Despite these differences, both the Hall of the Two Sisters and the Hall of the Abencerrajes facilitate air movement in the Lions Palace—similar to the Hall of the Ambassadors in the Comares Palace. The spaces exhaust warm air through high openings, drawing it from the courtyard and thereby increasing air circulation throughout the palace. In other environmental strategies, the two palaces diverge. Consider their respective approaches to evaporative cooling. In contrast to the Comares Palace’s static, placid pool, the water of the Lions Palace bubbles and flows. Multiple fountains and jets spray water to increase its surface exposure and, thus, evaporation. Water is also constantly circulated and replenished to lower its temperature. The Comares and Lions palaces thus manifest distinct perspectives on how to utilize water, the former harnessing surface area and thermal mass, the latter movement. We must also keep in mind that the Lions Palace, with its east–west orientation, does not adhere to the standard Nasrid north–south axis—as evident in the Comares Palace. The solar control strategies typically manifest in Nasrid dwellings do not apply to the Lions Palace. The sun’s impact, however, is addressed by its courtyard arcade, and other means (fig. 15). Only 2 meters deep on the north and south sides, the arcade is 3.5 meters deep on the palace’s east and west sides, a depth augmented by the small projecting pavilions integrated with the arcade. The minimized east–west elevations, deep arcade, and pavilions help temper the low early morning and late afternoon sun.

The Lions Palace possesses, among other traits, a rich, sensual variety of open and closed chambers, miradors, and outdoor spaces, all of differing sizes and orientation. This gamut—for which the Lions Palace is renowned—contributes to varying environmental characteristics. The four different exposures of the courtyard arcade, for instance, allow occupants to seek shade or sun throughout the day. Variety is also found in the two gardens: the four sunken planting beds enclosed by the courtyard arcade, and the Lindaraja Garden, north of the Lions Palace, overlooking the Albaicín. Occupants could retreat to the Hall of the Kings (Sala de los Reyes) or the Hall of the Mocárabes (Sala de los Mocárabes [an ornament design similar to muqarnas]), which are on the patio’s east and west sides, respectively, both opening directly onto the arcade. Unlike the Hall of the Two Sisters to the north and the Hall of the Abencerrajes to the south—enclosed, more private chambers fitted with doors and windows—the Hall of the Kings and the Hall of the Mocárabes are fully integrated with the arcade and patio. Their geometry, long and narrow, further differentiates them from the Hall of the Two Sisters and the Hall of the Abencerrajes, both domed, square salas centered on basins.
Nasrid palace room articulation and fittings and furnishings

Though its elongated room volume is not unusual for the Alhambra, nevertheless the Hall of the Kings is atypical. Opening onto the patio, the Hall is defined by a series of alcoves along its east wall. Unlike most alcoves, which define the end of a closed, narrow room, these alcoves face the courtyard. The open alcoves of the Hall are distinct, their uniqueness amplified by their leather vaults. For instance, the middle alcove’s vault, painted with portraits of ten seated dignitaries, actually echoes how the space was used, with the images above reflecting the occupants seated below.32

An alcove encourages repose. Antonio de Lalaing himself suggested as much when, in 1502, he observed that: “[T]he moorish king used to lie in the Hall to be cool and he had his bed on one side of the Hall and his queen had hers on the other.”33 The series of alcoves in the Hall of the Kings, each a zone defined by three masonry walls, would offer relief during the hottest summer days, like the alcoves in the lower wives’ quarters of the Comares Palace. Though the latter are not as distinctive as their counterparts in the Hall, their subtle development points to the import placed on this architectural component. The four wives’ rooms are themselves only 3 meters wide and approximately 4 meters high. Alcoves, defined by a non-structural arch and raised 6 centimeters, are found at each end of the room (fig. 16). East–west wood joists bridge the 3 meters between the room’s long masonry walls, except at the alcove. Here, north–south joists span its 2-meter depth, supported by the room’s short masonry walls and a large wood beam, concealed in the alcove’s arch.

Thus, the masonry walls, the arch, the raised floor, and the joists all serve to articulate the alcoves of the Comares Palace: simple and subtle means create definition. The notion that alcoves are primarily ground-level summer elements is reinforced in view of the development of the Comares Palace, where the focus of the upper, winter rooms is a window, rather than an alcove at the end of a room. In fact, in other dwellings the lower-level alcove finds a corollary in architectural elements unique to the upper level—cantilevered bays or balconies.34 An alcove is aligned with and focuses a ground-floor chamber; bays or windows serve a similar purpose on the upper floor. Given space limitations, alcoves were likely occupied year round in most Nasrid dwellings. Indeed, their use in winter is suggested by the niches found within the masonry platforms of some alcoves.35 Warming elements or braziers may have been inserted into these niches to heat the alcove. These masonry platforms perhaps echo the wooden ones (sing. tarima) typically used in alcoves.36 Heating devices placed below the tarima could also discreetly add warmth, with comfort further enhanced by cushions, rugs, and fabrics.

Hypocaust heating was extensively utilized in baths, but not elsewhere—especially as an alcove’s dimensions,
only a few square meters, closely matched a brazier’s limited effective range. In fact, this heating range is alluded to in a late eleventh- or early twelfth-century Córdoban poem that describes a brazier as a “mother’s breast” or “a great cup of wine from which we all drank” for those gathered around it. Huddled under blankets to fend off the “scorpions of cold,” some alternately draw near the brazier while others move away, so that all might share in its warmth. The reference to blankets underscores that braziers are, of course, best utilized in conjunction with fabrics. The rugs and tapestries that complete the multifunctional spaces of the Alhambra were crucial elements, and would be used along with braziers, as the blanket was in the poem.

A Nasrid poem describing December mawlid festivities at the Alhambra touches on the fabric furnishings: the floor is covered with matting and cushions, and the walls are lined with fine, beautiful cloth. Such elements could transform Nasrid spaces, as the poem indicates. The Nasrids’ recognition of the import of braziers is also captured in poetry. The term for brazier in Arabic, kānūn, also means “January.” One poet from Granada, Ibn al-Jayyab (d. 1349), some of whose verses grace the Alhambra’s walls, made use of this double entendre in a poetic riddle:

What is the name of two homonyms not of the same class?
Though when one comes, I always am aware of the other.
One has no price, the other costs a few cents.
One originates from the earth, the other [from] the sun...

The poet plays with the idea that come January, one lights fuel and uses the brazier. With Granada’s cold and the Sierra Nevada’s year-round snow, it is perhaps not unusual that a native poet would allude to winter, and a means to assuage its cold, by highlighting their latent linkage in Arabic.

While the Granada winter was united metaphorically with the brazier, and certainly the Alhambra has winter spaces, its design features ultimately manifest a greater concern with addressing summertime conditions. Given the prominence of water in Nasrid architecture, harnessed symbolically as well as for evaporative cooling, this should be expected. Similarly, windows, with stained glass and other shading elements, were additional means to counteract the sun and heat, to say nothing of alcoves and other architectural measures and strategies. One soon sees the merit in Washington Irving’s observation that the Alhambra “possesses retreats graduated to the heat of the weather.” Irving and other nineteenth-century Romantics, so instrumental in making the Alhambra world-famous, were certainly captivated by the sensuality of its rich spatial variety, a sensibility that forged an environmentally diverse architecture.

The Nasrids created spaces—a framework for habitation—where figurative and literal concerns overlapped. In Granada, the Zirid poet Abu Ishaq (d. ca. 1067) recognized the difficulty in simultaneously resolving the practical and the profound:

If it were not for winter, for the heat of summer, for fear of thieves, to preserve food and because women need to be hidden, I would build myself a house of spider webs.

The poet longs to live in a fanciful house of cobwebs, a yearning impeded by mundane concerns, such as being sheltered from the seasonal climate extremes of winter and summer. Written in the eleventh century, well before the Nasrids rose to power, the poem foreshadows the construction, at the height of their reign, of the Comares and Lions palaces—the architecture of which does not recognize a poetic/prosaic dichotomy.

THE ALHAMBRA’S “NEW QUARTERS” AND THE PALACE OF CHARLES V

The post-conquest occupation of the Alhambra

The Nasrid Alhambra supported that dynasty’s lifestyle, one that was alien to Charles V and his court, despite the fact that the Christians used similar means, such as tapestries, braziers, and seasonal wardrobes, to make their surroundings more comfortable. They had residences throughout their realm, as did the Nasrids, and could thus take advantage of favorable environs to the extent feasible. Indeed, the same strategies exploited by the Nasrids to create a habitable architecture were advocated in non-Muslim treatises and manifest in architecture from Roman times to the Renaissance.
methods for coping with Granada’s climate foreshadow the ones used by those who came to occupy the city after them. Nevertheless, despite these common threads, each culture interpreted those methods in a way that mirrored or reflected its traditions and mores.

Non-Muslim European travelers viewed the Nasrid conception of public and private space as odd and alien to their sensibilities. When the German Hieronymous Münzer visited in 1494, he described neighborhoods full of narrow streets, many of which “Ferdinand had ordered widened.”

Granada was a city of average-size houses, at least according to one Arabic source, but Münzer saw them as:

…almost all small, with such tiny rooms…that a Christian house occupies more than four or five Moors’, which are so intricate and labyrinthine that they appear like swallows’ nests.

Münzer also commented on the Nasrid notion of façade and interior space. While Nasrid homes had running water and “very clean” interiors, the compact and dense Nasrid city did not support a “Western” sense of façade. That the homes were “dirty outside” highlights this fact. Visiting the Conde de Tendilla, the well-educated, well-traveled governor of Alhambra, in his palace, Münzer related that he “made us sit on silk cloth” and that they spoke in Latin. This Christian official occupied the spaces as a Nasrid might, sitting on the floor. The Conde must have recognized that most Nasrid spaces did not readily accommodate non-Muslim furnishings.

Isabella and Ferdinand constructed no royal residences during their reign, living itinerantly in refurbished Moorish castles or quarters added to monasteries. Like their Alhambra governor, they inhabited the Nasrids’ architecture largely as they found it. At the Alhambra, for instance, it is suspected that they occupied upper rooms in the Cuarto Dorado, at least on their second and third Granada visits. Yet even though the Catholic Monarchs refurbished Nasrid dwellings, the architecture remained alien to them. For instance, their Santa Fé residence, constructed near Granada during their final conquest, was unlike any Nasrid dwelling in that it had no patio; instead, the windows looked outward and were ordered to create a façade. Even though the dwelling was “temporary,” they put much care into creating a building befitting their station and reflecting their culture’s architecture, one distinct from that of the Nasrids.

During Charles V’s 1526 stay, a “honeymoon” after his Seville wedding, his court members made comments about Granada and Nasrid housing that underline the clash between Nasrid architecture and non-Nasrid expectations. The Albaicín and the Alcazaba were characterized by the Venetian Andrea Navagero as “densely populated and full of small houses, because the Moors are used to living in narrow, tight” quarters. This simple observation, directly addressing Nasrid housing, only hints at part of the problem, as echoed in the complaints of others. Dantisco, for example, did not specifically describe accommodations, but expressed general concern about their high cost and inadequacy, and complained of scarce supplies and the weather in early December. Once the conquest was complete, reforms were undertaken in Granada and throughout Andalusia: streets were widened and houses transformed, combined, and enlarged to meet the needs of their new occupants. The captivating qualities of the Comares and Lions palaces—evident to all commentators—were not sufficient compensation for Granada’s housing inadequacies.

The decision by Isabella of Portugal (d. 1539) to leave the Alhambra reflects this housing problem. Charles V and his court arrived in June—thereby avoiding the summer heat in Seville—and remained until early December, but before their stay was over, Charles V’s wife had left for the presumably more comfortable convent of San Jerónimo. Even though the Catholic Monarchs had refurbished her Cuarto Dorado rooms, they remained unsatisfactory. Charles V, too, had other expectations. Raised in Northern Europe, with a different idea of court life and accommodations, he desired familiar surroundings befitting his high station, not only as the Spanish king, but also as the Holy Roman Emperor. With Granada the center of a tenuously gripped, newly conquered territory, Charles V found the Alhambra’s compound aspect welcoming; nevertheless, more suitable accommodations were needed.

**Post-conquest construction in the Alhambra**

With the need to maintain a royal presence in Granada—to show support for the local population and illustrate the defeat of Islam on the continent—the remedy was a
new palace, whose planning started shortly after Charles V’s visit in 1526. However, construction of the palace only commenced in 1533, as the first project was the “new quarters”—six rooms and a glazed corridor—to be used until the palace was completed (fig. 17).63 That work started on these rooms, instead of the palace proper, perhaps best illustrates how unsatisfactory the typical, alcove-based Nasrid chamber was to Charles V and his court. In fact, the contrast between a Nasrid room and the squarish geometry of Charles V’s “new quarters” could not have been more striking. Charles dined in the Hall of the Two Sisters, a larger “ceremonial” space that he evidently enjoyed.64 Inhabiting the typical, more elongated, reduced Nasrid chambers, however, was another matter.

The differences between the “new quarters” and a typical Nasrid room do not stop at geometry, although that is the most prominent distinction. The Nasrids did not use stoves or fireplaces, but fireplaces with ornate mantelpieces anchor two rooms of the “new quarters.”65 The Nasrids’ successors even installed some form of large heating elements in the Alhambra rooms, as indicated in images of the Comares Palace from the mid-1800s (fig. 18).66 The wall-opening vocabulary varied as well. The windows of the “new quarters” fuse view, light, and ventilation, similar to those in the upper rooms of the Comares Palace. There were no small ground-floor openings above doors to provide air and light, such as the ones favored by the Nasrids. Windows were at some point punched into the Nasrid palace’s ground-floor walls, in the Sala de la Barca and elsewhere, perhaps an indication of how cramped the long, narrow rooms felt to those who came after the Nasrids; it also reflects a poor understanding of how the alcove-based rooms were meant to be occupied (fig. 19).67

While the “new quarters” were raised—by means of a ground-level arcade—the motivation was not to create elevated winter rooms, even though their fireplaces, and the glazing in some spaces, might suggest otherwise. As Spanish royalty were more likely to visit in the summer or intermediate seasons, the Catholic Monarchs’ 1492 post-conquest stay excepting, winter quarters were not critical. Probably for this reason, the Nasrid palaces shade the “new quarters,” to create rooms more favorable for occupation in summer. Given the seasons in which the post-conquest royalty normally visited the
Alhambra, fireplaces would have combated summer’s morning chills and inclement weather conditions in the intermediate seasons. To otherwise keep the cool weather at bay, one might enjoy the afternoon sun in the glazed west-facing corridor closing the “new quarters” courtyard. Thus, the “new quarters” were not elevated to create winter rooms; rather, they were built level with the principal Nasrid palace ground-floor rooms, to keep them adjacent with the existing spaces. The “new quarters” were thus shoehorned between the two Nasrid palaces, the Torre del Peinador de la Reina, and the Alhambra’s fortification wall.

The odd angles and idiosyncrasies of the “new quarters” contrast radically with the strict geometry of Charles V’s Renaissance palace. The latter, attributed to Pedro Machuca (d. 1550), who studied in Italy, recalls other royal palaces in its emperor and empress quarters, reinforced with distinct façade frontispieces (portadas), vestibules, grand staircases, and service

Fig. 18. Lithograph showing the chimney that was added to the Comares Palace. (After Joseph Philibert Girault de Prangey, *Monuments arabes et moresques de Cordove, Séville et Grenade* [Paris, 1837], pl. XV)

Fig. 19. Lithograph showing the windows added to the Sala de la Barca in the Comares Palace. (After Girault de Prangey, *Monuments arabes et moresques*, pl. XXI)
courtyards, the last elements planned but not constructed (fig. 20). With a sophisticated entry sequence leading to the upper level and its special rooms above the vestibules behind the *portadas*, the palace’s principal spaces are on the upper level, with the lower level and the two unbuilt courtyards devoted to service areas. Bedrooms would have been found in the palace’s south-east quadrant, a telltale sign being the “secret stair” that often signaled the private chambers. The royal couple was united physically in that corner and metaphorically in their separate tribunes on opposite sides of the octagonal chapel. The activities of their respective households unfolded between the bedroom and chapel, his along the west and north sides of the palace and hers along the south and east.

The upper-level *piano nobile* (the main floor of a large house) in the palace of Charles V carries important environmental ramifications, suggesting that the palace was designed primarily for winter occupation. The upper-level fireplace and the extensive glazing in the empress’s south *portada*, to cite two elements, reflect obvious environmental concerns, reinforcing this notion. However, environmental issues were ultimately of negligible importance, as is best illustrated by the palace’s patio, whose round form is the building’s most salient feature (fig. 21). Though commonly utilized to introduce light and air to its surrounding rooms and as a circulation zone between rooms, the patio in Charles V’s Granada palace does not serve these uses. In fact, raised roughly 1.5 meters above the ground-floor

---

Fig. 20. The palace of Charles V shown in relation to the Nasrid palaces, after an unsigned, undated plan attributed to Pedro Machuca, ca. 1528. The two outer forecourts to the palace were not constructed. Charles V’s “new quarters” are also indicated, just north of the Lions Palace and east of the Comares Tower. (Drawing: Todd Willmert, after the plan in the Archive del Palacio Real de Madrid)
level, it cannot perform its typical roles. The sixteenth-century architect Lázaro de Velasco (d. 1585), versed in a patio’s traditional role, remarked that the “round patio is so useless for rooms and halls that it will never amount to anything.”71 The palace patio has perplexed commentators, who have offered various suggestions as to its intended uses, ranging from a secret garden to a bullfight plaza.72

The round courtyard, in conjunction with the square building block, makes a striking architectural scheme, but the long period it took to construct the palace and the lack of supporting documents make it impossible to ascertain the builders’ original intentions. It is often acknowledged that the palace of Charles V, juxtaposed with its Nasrid predecessors, is “misplaced”; nevertheless, the purity of its platonic forms captivate. This view explains how one nineteenth-century visitor could find the juxtaposition of the palaces “disgust[ing],” yet still hold that the Renaissance structure itself “is in every way adapted to the climate; and its interior, which is of a circular form, unites convenience and splendour.”73 A cursory look at the extant palace plans and the features of the building itself reveals unresolved aspects, such as partition walls colliding with window openings and the neglect of poche space. Perhaps details regarding the habitability of the palace were not resolved either, despite comments to the contrary.

Although there are no direct clues or documents regarding the consideration of environmental concerns in the construction of Charles’s Granada palace, certainly the dwelling could be adapted for use in any season. As political needs—not climate, seasons, or weather—dictated royal movements and travels, a residence might be occupied at any time of year. However, Charles V’s retirement “villa” at Yuste, built in the mid-1550s adjacent to the Jerónimo monastery near Plasencia, directly addressed climatic concerns. Yuste was a year-round dwelling from which Charles V never planned to leave. This represented a change from his peripatetic reign and was a factor influencing the design of various quarters so as to help moderate the severe winters and scorching summers characteristic of
Spain’s Extremadura region. The summer and winter apartments and miradors, as well as the fountain and pond to the villa’s south, among other features, encompass a range of architectural elements intended to confront environmental issues (fig. 22). Inventories show braziers and other portable warming elements, as well as tapestries, rugs, and various furnishings that would complement the passive strategies employed to create habitable rooms.

Yuste served basic needs, all reflected in its design and development, as well as in its appointment. The most prominent features of the villa are its four winter rooms—each with a fireplace—and four similar summer rooms constructed below them, only one of which had a fireplace, presumably to combat summer chills. Interestingly, the dimensions of the eight main Yuste rooms correspond to the four principal rooms in the Alhambra’s “new quarters,” built in the late 1520s, as well as to a series of rooms constructed in Brussels in 1533. Each is roughly square, between 5 and 8 meters in either dimension. This “typical” chamber, often with a focal fireplace, whose warming range influenced room form and volume, certainly offers a radical contrast to the typical elongated, narrow, alcove-based Nasrid room. Both Charles V and the Nasrid rulers might construct summer and winter chambers and embellish rooms with fabric fittings, thus sharing environmental strategies. But cultural factors had an impact on room size and shape, with important ramifications—as becomes clear when we compare the room volumes favored by Charles V versus those of the Nasrids.

Yuste manifests a wealth of well-established approaches to controlling the environment within its compact design. Other features, however, were unique, specifically designed to address Charles V’s infirmities. Yuste’s prominent ramp, for instance, allowed the aging ruler to ascend with ease by foot, litter, or horseback. His upper winter bedroom enjoys a view of the monastery chapel altar, permitting him to hear and see Mass while lying in bed. Additionally, the room is particularly

Fig. 22. Plan of Charles V’s residence at Yuste, where an upper winter level was added to an existing monastery. The “villa” was his final residence, from 1557 until his death in 1558. The stove room, added to the dwelling’s southeast corner, was built in 1557. Two cloisters lie to the north of the church. 1) the emperor’s bedchamber, with a view of the altar, 2) chambers, 3) miradors, 4) stove room, 5) balcony, 6) arcade with fountain, 7) stair to lower summer level, 8) ramp. (Drawing: Todd Willmert)
well sheltered by the chapel to the north and by one of the villa’s chambers to the south, helping to moderate the winter’s cold. After his first year in residence, Charles built a tiny room that could be superheated by a stove. Located in the villa’s southeast corner, on the upper winter level, the stove room was yet another architectural means to help to alleviate Charles’s gout.77 These and other similar environmental measures taken at Yuste contrast to Charles’s Granada palace, only one of many residences in Spain and the rest of Europe where symbolic issues took precedence. As a retirement villa, environmental concerns and comfort could come to the fore at Yuste, the trappings of court ceremony, protocol, and symbolism being not as critical in the isolated Extremadura location.

Charles V’s sister, among other advisers, had suggested that he retire to a more benign climate.78 Their arguments did not dissuade the emperor, who made a preliminary visit to Yuste, expressing pleasure with the “villa’s” design and its beautiful location. He reportedly believed that it was cold in winter and hot in summer throughout Spain, obviating the need to search for some ideal spot.79 Perhaps because of this attitude, environmental issues were regarded as critical at Yuste. Charles V’s grandfather had counterintuitively put forth that “one ought to pass summer in Seville and winter in Burgos.”80 As one should logically summer in northern Burgos and winter in Seville, Ferdinand’s insight highlights that the architecture of Burgos was designed to counteract the winter’s cold and that of Seville the summer’s heat. Charles V, too, appreciated that architecture could respond to climate.81 Yoking disparate architectural elements at Yuste was an attempt to tackle the region’s climatic extremes.

CONCLUSION

The juxtaposition of the Comares and Lions palaces of the Nasrids with the palace of Charles V suggested specific occupation patterns to Juan Velázquez de Echeverría. Writing in the 1760s, he concluded that the palace of Charles V “was made only for winter habitation, leaving the Arab palace for summer.”82 The idea that the Nasrid palaces served as summer residences—given their more “open” nature—and that Charles V constructed a more “closed” palace for winter occupation is an interesting outlook, but one lacking in merit. Similar environmental strategies were employed by the Nasrids and those who inhabited the Alhambra after them. Velázquez de Echeverría thus posited a simplistic dichotomy. The advantageous utilization of orientation, building level, and material, among other factors, had an impact on comfort and habitability across cultures, as is evident in the Nasrid palaces and Charles V’s residences.

Variations in the application and interpretation of environmental principles and strategies helped to create the notable architecture that struck Velázquez de Echeverría and other Alhambra commentators. With the Alhambra palaces devoid of furniture and fittings, it is difficult to imagine what they were like when the Nasrids and their successors lived there. Braziers, tapestries, and other portable furnishings, however, complemented and completed the architecture, which is only a framework for creating a habitable space. Though aspects remain shrouded in mystery, considering the Comares and Lions palaces in light of environmental concerns highlights their salient architectural features. The post-conquest occupation as well offers insight, the commentary and construction of the Alhambra’s later occupants magnifying how two successive and rival cultures inhabited the Alhambra. Taken together, this broad study highlights the passive strategies utilized at the Alhambra to confront Granada’s climate of extremes.

Research Fellow,
Center for Sustainable Building Research,
University of Minnesota, Minneapolis, Minn.

APPENDIX

Notes on monitoring and assessing “comfort” in the Alhambra

The buildings of the Alhambra lack many of their windows and doors, nor are Nasrid room furnishings in place. Although it is not possible to replicate Nasrid conditions exactly, their basic environmental strategies can still be studied. Tinytalk-Temp loggers (with an accuracy of ± 0.2 degrees Celsius) and Tinytalk-RH
generally falls within a range that limits its influence. The fact that cooler air holds less moisture than warmer air is reflected in the RH. As the temperatures fall, the RH conversely rises. This is reflected in the humidity data in Table II, which also includes a description of sky conditions each day, expressed as a percentage of available sunlight. The total potential sunlight, the time between sunrise and sunset, relates to the actual sunlight hours. A low number reflects overcast conditions, a high number clear weather.

Nasrid Alhambra architecture is distinguished by its use of walls, as seen in its narrow rooms and alcoves. Since walls define occupiable space, it was appropriate to locate the monitors near them. It must, however, be recognized that the temperature monitored is that of the layer of air adjacent to the wall, which in turn is certainly influenced by the wall temperature itself. One might take the air temperature of a room in a pyramid’s center, but given the thermal inertia and mass of all the surrounding stone, the temperature will not measurably vary, especially in contrast to the outside air temperature, which in most climates oscillates widely from day to night. The intertwined nature of air and radiant temperatures makes it extremely complicated to unravel specific temperature influences. Thus, in order to show a general, relative difference between spaces, monitoring consistency is of the utmost importance.

In many buildings, one detects environmental differences caused by temperature stratification between levels and the impact of orientation. Beyond this, the issue of comfort comes into play. One’s comfort level is typically framed by six parameters, four particular to a given space—dry-bulb air temperature, humidity, radiant temperature, and air movement—and two particular to an individual—activity level and clothing. At a basic level, radiant temperatures are assumed to approximate dry-bulb air temperature. While the two most important components—air temperature and humidity—are emphasized, a room’s fittings also have an impact on its comfort level, as does the presence of breezes or calm, sun or shade. While the influence of the sun’s warmth on a room and its furnishings might be minor, environmental changes are still readily apparent. For instance, studies have illustrated an individual’s capacity, each quanti-
fied differently, to perceive very small variations in air and radiant temperature. The environmental changes that the Nasrids attained through passive strategies are notable: their architecture helped them to inhabit Granada’s extreme climate. The monitoring done for this study begins to attach some quantitative values to this achievement within the Alhambra’s palaces, aiding in the monument’s interpretation and reinforcing its architectural significance.

NOTES

This work was made possible by a Fulbright scholarship that I held between 1993 and 1995. At the Universidad de Sevilla, Jaime López de Asián Martín, José María Cabeza Lainés, and Jaime Martínez Davison must be singled out both for their hospitality and for sharing their knowledge of Spanish architecture. I note the innovative modeling and monitoring of the Alhambra by Benito Jiménez Alcalá of the Escuela Politécnica Superior, Universidad San Pablo-CEU (Madrid), as well as his important insights. At the Alhambra, Rocío Liñan, Jesús Bermúdez López, and Catalina Johnson were most helpful. My work also profited from the close readings of Jesús Escobar, Robert Ferguson, Vicente Lleó Cañal, and John Reynolds.


2. Guillermo Yáñez Parareda, Energía solar, edificación y clima: Elementos para una arquitectura solar, 2 vols. (Madrid, 1982), 1:583–84, gives climatic data. In Granada, the average temperature is 15.3° C, with average maximum 22.2° and minimum 9.4°; the average relative humidity is 60%. See Table I (in Appendix). See also Todd Willmert, "The

4. Luis del Mármol Carvajal, *Rebelión y castigo de los Moriscos* (orig. pub. as *Historia de la rebelión y castigo de los Moriscos del reino de Granada* [Málaga, 1600]; repr. Málaga, 1991), 38. Gallego y Burín, *La Alhambra*, 113 n. 191, believes that in describing the Lions palace as the winter residence, Mármol refers only to its upper level, citing Antonio de Lalaing’s 1502 statement concerning the Hall of the Kings, where “the moorish king used to lie in the Hall to be cool and he had his bed on one side of the Hall and his queen had hers on the other.” Based on this anecdote, Gallego y Burín posits that the Hall of the Kings was a ground-level summer space, with Mármol’s thought supporting the idea that the palace’s upper-level rooms were winter quarters. See Antonio de Lalaing, “Primera Viaje de Felipe el ‘Hermoso’ a España,” in *Viajes de extranjeros por España y Portugal*, ed. José García Mercadal, 3 vols. (Madrid, 1952), 1:429–599, 475.


8. There are several extant Alhambra braziers (*braseros*): see Leopoldo Torres Balbás, “Los braseros de la Alhambra,” *Al-Andalus* 2 (1934): 389–90; Antonio Fernández Puertas, “Braseros hispanomusulmanes,” *Cuadernos de la Alham bra* 8 (1972): 77–86. Water at the Alhambra is considered in articles such as Leopoldo Torres Balbás, “Letrinas y bacinces,” *Al-Andalus* 24 (1959): 221–34. The wintertime use of wood, or its derivative, charcoal, in a brazier is clear, but less evident perhaps is the effect in summer of water in a basin, fountain, or pool. In this respect, evaporative cooling merits mention. While the Alhambra climate is not extremely hot or arid, evaporative cooling is nonetheless effective there, given the site’s relatively low humidity. (See Table II [in Appendix] for the relatively low humidity levels during summer afternoons.) Evaporative cooling relies on the principle that when moisture is added to the air, relative humidity increases while temperature decreases, thereby creating a cooling effect.


14. Victor Olgyay, Design with Climate: Bioclimatic Approach to Architectural Regionalism (Princeton, 1963), 53, notes that in winter, at a 40° latitude, close to Granada’s 37°, “a southern exposure receives nearly three times as much total sun energy as the east or west sides; while in summer the radiation falling on south plus north sides is only half of that absorbed by the east plus west elevations.” At Granada’s latitude, a south-facing façade maximizes winter solar energy benefits. If properly protected with an arcade or portico, summer heat is minimized. Another common way of avoiding summer’s excessive solar gains is to use white or light colors on building surfaces to reflect the sun’s rays, thus absorbing less solar energy (see pp. 113–14). In any case, the most effective method of solar control is the general orientation of the building with respect to the sun and proper façade development.


16. See Koran 4:3: “If ye fear that ye shall not be able to deal justly with the orphans, marry women of your choice, two or three or four; but if ye fear that ye shall not be able to deal justly (with them), then only one, or (a captive) that your right hand possess, that will be more suitable, to prevent you from doing injustice.” The fact that dignitaries would have had to traverse the sultan’s private quarters to reach the throne room might have created protocol problems, but in general the sequence of spaces and rooms is well conceived. Aside from the possible wives’ quarters on the east and west sides, the smaller rooms adjacent to the baths were probably for bath attendants. In the Comares Palace, the room to the south, only the façade of which remains, the rest destroyed in the construction of Charles V’s palace, probably “was reserved for service and concubinage,” as posited by Dickie, “Palaces of the Alhambra,” 140–41. The Comares Tower has suffered much damage, from earthquakes and from subsequent inhabitants, as noted in Gallego y Burín, La Alhambra, 85–88, and Leopoldo Torres Balbás, “Pasadizo entre la Sala de la Barca y el Salón de Comares, en la Alhambra de Granada,” Al-Andalus 2 (1934): 377–80. In examining historic plans and sections, one sees that the stair and oratory were altered, as were the tower’s winter rooms. For drawings of the late 1760s, see those by Villanueva and de Hermosilla in Rodríguez Ruiz, La memoria fragil, pls. VI, VI-2a, VII. See also Joseph Philibert Girault de Prangey, Recuerdos de Granada y de la Alhambra (Paris, 1837; repr. Madrid, 1887), pls. XXIX, XXX. Accurate drawings of the Alhambra can be found in Carlos Vilchez, La Alhambra de Leopoldo Torres Balbás: Obras de restauración y conservación, 1923–1936 (Granada, 1988). In a personal communication, Jesús Bermúdez López suggested that the tower’s upper room might have had windows looking into the Hall of the Ambassadors, making them more luxurious. Dickie misstated that the upper-level rooms of the Comares Palace were for summer, the lower for winter: Dickie, “Alhambra: Some Reflections,” 137, 139, and James Dickie, “Toward an Aesthetic of Granadine Art,” Oriental Art 26 (1980): 322–31, 331 n. 5. This misinterpretation is not found in Dickie, “Palaces of the Alhambra,” 139–41. See also Emilio García Gómez and Jesús Bermúdez Pareja, La Alhambra: La casa real (Granada, 1967). Both authors have brief essays in this short, unpaginated picture book. In his short essay, Bermúdez Pareja postulates that the Comares Palace had summer–winter wives’ quarters.

17. The Sala de la Barca is 24 meters long by 4.35 meters wide by 12 meters high. Its southern wall is about 85 centimeters thick. Gallego y Burín, La Alhambra, 83, gives the room’s dimensions. Its height was determined from drawn sections. The vaulted upper room is 10 meters long by 2.2 meters wide by 3.4 meters high at the top of the barrel vault. A door opening on the west end of the room is 1 meter wide by 1.3 meters high, and there is a center window, double-arched, approximately 1 meter wide by 1.2 meters high. The southern wall of this room is approximately 80 centimeters thick.

18. See the camaritas described in Gómez Moreno, Guia de Granada, 1:53.

19. See Gallego y Burín, La Alhambra, 74, for dimensions. With a row of hedges contributing to evapo-transpirative cooling on either side of the pool, about half of the patio surface area is occupied by water or plantings.


21. See particularly Dickie, “Palaces of the Alhambra,” 142–43, 146; Dickie, “Alhambra: Some Reflections,” 132. The text to M. Jules Goury and Owen Jones, Plans, Elevations, Sections, and Details of the Alhambra: From Drawings Taken on the Spot in 1834 by the Late M. Jules Goury and in 1834 and 1837 by Owen Jones, Architect, 2 vols. (London, 1842–45), 1: pl. XV, pl. XV, posits the private Lions Palace/public Comares Palace dichotomy: “The Hall of the Two Sisters appears to have formed a portion of the private apartments of the Moorish Kings. The alcoves, or sleeping rooms, on either side of the Hall, with the charming suite of apartments on the upper story, give it more the character of a residence,
than the Hall of Ambassadors, which was, doubtless, as its traditional name implies, destined only for public receptions.” Albert Calvert, *The Alhambra: Being a Brief Record of the Arabian Conquest of the Peninsula with a Particular Account of the Mohammedan Architecture and Decoration* (London, 1906), 66–67, echoes this interpretation. Both Márormol, *Rebelión*, 39, and Simonet, *Descripción del reino de Granada*, 43, 46, refer to buildings as *casa de recreación* or *sitios de recreo* (houses or places of recreation or retreat).


23. Márormol, *Rebelión*, 38. Luis Seco de Lucena, *Plano de Granada árabe* (Granada, 1910), 63, similarly describes the Nasrid palaces. The Lions and Comares palaces were separate in the Nasrid era, each having its own bath. The demolished bath in the Lions Palace was in the northeast corner of the palace, situated similarly to the extant bath in the Comares. Dickie, “Alhambra: Some Reflections,” 135.


26. The Hall of Secrets is called “a cool cryptoporticus” by Dickie, “Palacios de la Alhambra,” 144.

27. The Lindaraja Mirador is approximately 3.5 meters long by 2.25 meters wide. The arched doorway is 2.6 meters wide by 3.3 meters high. The north window is double arched, measuring 2 meters wide and 1.45 meters high. The windows on the east and west sides are both 1.45 meters high and about 1 meter wide. The upper mirador is approximately 3.5 meters long by 2.25 meters wide. The room has a pyramidal wood vault—the ceiling height varies between 4 and 5 meters. There is a large, south-facing triple-arched window, about 2.5 meters wide by 1.5 meters high, above which are four smaller arched windows, each 0.4 meters wide by 0.6 meters high. Pairs of these smaller windows are also found on the mirador’s east and west sides. The door opening to this mirador runs almost the entire width of the room, stepping down to a corridor ringing the Hall of the Two Sisters. In this way, the room is extremely open. The Hall of Secrets, about 15 meters by 15 meters, has three door openings: the main one, under Lindaraja, is arched, measuring 1.8 meters wide by 3.2 meters high; two smaller ones, on the room’s north and east sides, are both 2 meters high and, respectively, 1 meter wide and 1.3 meters wide. Given the room’s masonry vaulting, its height varies, but is roughly 3 meters. Measurements were taken on site, except for the global dimensions of the Hall of Secrets, which were determined from plans.

28. To Dickie, the closed nature of the Hall of the Abencerrajes suggests a winter room: see Dickie, “Palaces of the Alhambra,” 144.

29. The radiiuses of the basins are approximately 110 and 65 centimeters, respectively.

30. See Jiménez Alcalá, “Natural Cooling in Hispano-Moslem Residential Architecture.” In fact, since the Hall of the Two Sisters and the Hall of the Abencerrajes are narrower and more restricted than the Hall of the Ambassadors, they better facilitate air movement in the rooms. Jiménez Alcalá’s ideas inform my arguments in this paragraph.

31. In the Nasrid epoch, the planting beds were 80 centimeters below their present level. Elevated walkways and sunken planting beds were common in Islamic gardens: James Dickie, “The Islamic Garden in Spain,” in *The Islamic Garden*, ed. Richard Ettinghausen and Elisabeth MacDougall (Washington, D.C., 1976), 89–105, at 100. De Laaing, “‘Primer viaje de Felipe el ‘Hermoso’ a España,’” 475, reports that the orange trees in the planting beds provided cooling shade.

32. Jerriylyn Dodds, “The Paintings in the Sala de Justicia of the Alhambra: Iconography and Iconology,” *Art Bulletin* 61, 2 (1979): 186–97, at 195–96, postulates that the portraits might be of Muhammad V and his ancestors, especially since he was Granada’s tenth Nasrid monarch.


35. This treatment of a masonry platform is seen in an Alcazaba residence. In smaller dwellings, the lower level was likely used year round, with the upper level used for storage or shops as well as living quarters. That a home’s upper level has a specific name in Spanish, *algorfa*—from the Arabic *al-ghurfa*—hints at its importance in the architecture. The upper level might also have served as a retreat for women when male guests entered the house. Ibid., 181–85.

36. The Spanish word *tarima* was adopted directly from the Arabic.

37. In the Alcazaba, the fire of the neighborhood oven was evidently utilized to heat part of a house as well, using hypocaust principles, but braziers were the heating standard. See

38. See the poem by Ben Sara de Santarén (d. 1123), as translated by Emilio García Gómez, Poemas arábigoandalusces, 4th ed. (Madrid, 1959), 79. García Gómez describes the poet, who was from Córdoba, as an “enemy of cold” (p. 35).


42. On the stained glass, see Leopoldo Torres Balbás, “Ventanas con vidrios de colores en los edificios hispanomusulmanes,” Al-Andalus 14 (1949): 197–201.


44. Emilio García Gómez, Cinco poetas musulmanes: Biografías y estudios, 2nd ed. (Madrid, 1959), 125. Abu Ishaq was born in the late tenth century, writing and working in the eleventh: see García Gómez, Cinco poetas musulmanes, 102–5. The spider web imagery certainly makes one think of the unique ceilings of the Lions Palace. Calvert, Alhambra, 100, uses the word “cobwebs” to describe Nasrid design elements. The image of a house of spider webs depicts fragility in the Koran 29:41: “The parable of those who take protectors other than Allah is that of the spider, who builds (to itself) a house; but truly the flimsiest of houses is the spider’s house; if they but knew.”

45. Ibn Khaldun distinguished between the primary purpose of architecture as a protective screen against the elements, and secondary concerns, such as the display of wealth, power, or even sensual aspects. In general, there is a progression from necessities to conveniences to luxuries: Ibn Khaldun, Muqaddimah, 1:lxiii–lxxii, 249–50; 2:111, 357–59. The Koran 76:13 in part considers this theme, characterizing paradise as a luxurious, sensual place, and, more practically, with neither the intense heat of the sun nor the cold of the moon: “Reclining in the (Garden) on raised thrones, they will see there neither the sun’s (excessive heat) nor (the moon’s) excessive cold.”

46. The anecdotes of court members illustrate the necessity of seasonal wardrobes in Granada. See Juan Dantisco (Jan Dantyszek), “El embajador polaco Juan Dantisco en la corte de Carlos V,” in Mercadal, Viajes de extranjeros, 1:789–834, esp. 792, 794, 805. Tapestries were a portable means of decoration as well as insulation: see Barbara von Barghahn, Age of Gold, Age of Iron: Renaissance Spain and Symbols of Monarchy, 2 vols. (Lanham, Md., 1985), 1:49–50; Jonathan Brown and John H. Elliot, A Palace for a King: The Buen Retiro and the Court of Philip IV (New Haven, 1980), 148. In discussing the Buen Retiro in the early 1600s, Brown and Elliot illustrate that many of the same environmental strategies were utilized in the seventeenth century: braziers are mentioned (p. 2); summer and winter apartments were furnished differently according to their use (p. 89); and tapestries were used in winter for insulation, paintings being substituted in warmer months (pp. 105–6). Braziers are listed in the royal inventories cited in Francisco Iñiguez Almech, Casas reales y jardines de Felipe II (Madrid, 1952), 33. Lastly, a 1626 document describing Spanish royal residences throughout the country mentions seasonal apartments within specific palaces and how royalty took advantage of them: Juan Gómez de Mora (1586–1648): Arquitecto y trazador del rey y maestro mayor de obras de la villa de Madrid (Madrid, 1866), 379–97, esp. 381, 383, 386, 389–90, 391, 397.

47. See Patricia Waddy, Seventeenth-Century Roman Palaces: Use and the Art of the Plan (New York, 1990), chap. 2, “Comfort,” in which architectural strategies and the writings of Vitruvius, Palladio, and Alberti, among others, are considered in depth.

49. Simonet, *Descripción del reino de Granada*, 50, cites an account in Arabic describing Granada’s houses and buildings as neither “muy grandes ni muy pequeños.”


51. Ibid., 358.

52. Münzer, “Relación de viaje,” 353–54. Münzer traveled with three companions (pp. 327–28), thus his use of the plural. He met the governor, apparently in his palace, a structure built in the early 1400s. When the hereditary office was suppressed in the early 1700s, the palace became redundant and was destroyed. Dickie, “Palaces of the Alhambra,” 148–49.

53. In 1492, there might not have been enough time to prepare rooms, as the palaces were in ill repair. See Leopoldo Torres Balbás, “Los Reyes Católicos en la Alhambra,” *Al-Andalus* 16 (1951): 185–205, at 188, 190–91; Juan Antonio García Granados and Carmen Trillo San José, “El Conde de Tendilla, primer alcaide de la Alhambra,” *Cuadernos de la Alhambra* 6 (1970): 21–50. The practice of sitting on the floor was observed away from Granada, long after the conquest. Brown and Elliott describe theatrical events that took place in 1836 at the Buen Retiro, during which many in attendance sat on the floor: Brown and Elliott, *Palace for a King*, 204.

54. Eladio de Lapresa Molina, “La Casa Real de Santa Fé a través de documentos de la Alhambra y otros archivos,” *Cuadernos de la Alhambra* 7 (1971): 57–80. In this article, archives are used to “reconstruct” the royal residence. As Johannes Lange wrote in 1526, Santa Fé was more than a military encampment. During the six-year final conquest, Ferdinand “constructed a town called Santa Fé” (construyó un pueblo llamado Santafé). See Lange, as cited in Antonio Gallego Morell, “La corte de Carlos V en la Alhambra en 1526,” in *Museológica de estudios*, 1:274.

55. Events such as the capitulation of Granada and discussions with Columbus occurred there. The Alhambra was occupied the first week of 1492, the rendition signed in Santa Fé the previous October. The Monarchs left Granada in late spring and stopped briefly in Santa Fé, meeting Columbus there in April. See de Lapresa Molina, “La Casa Real de Santa Fé,” 58, 63; Torres Balbás, “Los Reyes Católicos en la Alhambra,” 189.


57. Dantisco, “Embajador polaco,” 811–12. That these concerns came from someone well disposed to Charles V illustrates the severity of the situation, as perceived by the Alhambra’s new occupants. See also A. Paz y Meliá, “El embajador polaco Juan Dantisco en la corte de Carlos V,” *Boletín de la Real Academia Española* 11 (1924): 54–69, at 63–64; Earl Rosenthal, “El programa iconográfico-arquitectónico del palacio de Carlos V en Granada,” in *Seminario sobre arquitectura imperial* (Granada, 1988), 159–177. On page 169, Rosenthal notes that members of the court were housed “in the Moorish style, ‘to which they were not accustomed, resulting in much inconvenience’” (“a la morisca ‘a que no estaban acustumbrados[y] y le[s] resulta muy incómoda’”). The source of this quote is not revealed, nor was it located in the course of my research.


59. See Münzer’s comments in “Relación de viaje,” 354, as well as those of others, such as Navagero, in Brothers, “Renaissance Reception of the Alhambra,” 80–81.

60. See Frederick Wernstedt, *World Climatic Data* (Lemont, Pa., 1972), 227, 229. In June, July, August, and September, the average monthly temperatures are, respectively, 22°, 25°, 25°, and 22°C in Granada, and 25°, 28°, 28°, and 25° in low-lying Seville. In December, January, and February, temperatures average 7°, 7°, and 8°, respectively, in Granada, and 11°, 11°, and 12° in Seville. The Catholic Monarchs, too, took advantage of the climatic differences between Granada and Seville. During their second and third stays, in 1499 and 1501, they summered in Granada, wintering in warmer Seville. Torres Balbás, “Los Reyes Católicos en la Alhambra,” 189–90.

61. See E. Rosenthal, *Palace of Carlos V*, 4, 22–45. See also Bermúdez Pareja, “Obras en el Cuarto Dorado”; Gallego Morell, “La Corte de Carlos V.” The convent was sponsored by the Catholic Monarchs and occupied a few years before the royal visit in 1526.

62. Charles V’s court had 4,000 members, against his grandparent’s 1,000 to 1,500. For background on the courts and royal residences, see E. Rosenthal, *Palace of Carlos V*, 3–4, 31–33. See also Vicente Lampérez y Romea, “Los palacios de los reyes de España en la Edad Media,” *Arte Español* 3 (1914): 213–35; Fernando Chueca Goitia, *Casas reales en monasterios y conventos españoles* (Bilbao, 1982).


66. See Girault de Prangey, *Recuerdos de Granada*, pl. XV, from 1832–33. See also *La imagen romántica del legado andalusí* (exhibition catalogue) (Barcelona, 1995), 177, 186. The lithograph on p. 177, which is from 1850, looks north, and shows a chimney on the west side of the Comares Palace, near the Sala de la Barca. The image on p. 186, a drawing from 1829, looks south and shows a chimney on the east side. This
67. See Girault de Prangey, *Recuerdos de Granada*, pl. XV.


69. Ibid., 22–45.

70. For a discussion of the fireplace and south rooms near it.

71. Lázaro de Velasco, as quoted in Manuel Gómez-Moreno, *Recuerdos de Granada*, 219–22, suggests a secret passage, takes a circular form, is spacious and splendid. In its chief case of the Alhambra’s decorative program, a globe. Charles V’s interest in planning Yuste’s gardens. According to Stirling-Maxwell, *Cloister Life*, 88, Gaspar de Vega drew the villa’s plans, “it is said, from a sketch drawn by the Emperor’s own hand.”

72. E. Rosenthal, *Palace of Carlos V*, 219–22, suggests a secret garden. Ford felt that the patio was “well contrived, if the emperor meant to use it as an arena for bull-fights”: Ford, *Hand-Book for Travellers*, 1:371, believed that the plan “cut up with a disproportioned Doric circular Patio...must destroy the proportions of all rooms near it.”

73. James Cavanah Murphy, *The Arabian Antiquities of Spain* (London, 1815), 8. He further relates: “In any other situation but this, the palace of Charles V. would excite admiration: but here it is misplaced, and produced only disgust...” Similarly Calvert, *Alhambra*, 364, writes: “It is, in every way, adapted to the climate; and its interior, which, in its chief feature, takes a circular form, is spacious and splendid. In any other situation the Palace of Charles V. would justly excite: but here it is misplaced. With all its grandeur and architectural excellence, Washington Irving could only look upon the structure as ‘an arrogant intrusion.’” (The Irving quote is from the chapter “Interior of the Alhambra” in *Tales of the Alhambra.*) Henry Swinburne wrote: “The magnificence, the unity of this whole pile, but, above all, the elegance of the circular court, quite transported me with pleasure, on the first view, and I have ever since found my admiration increase in proportion to the number of visits.” See his *Travels through Spain in the Years 1775 and 1776*, 2 vols. (London, 1787), 1:275. Even today, climatic concerns receive attention: “The circular court of King Charles V’s addition to the Alhambra, with its two storeys of colonnade, provide a continuous space to track or avoid the summer or winter sun.” Eoin O’Coigfhaí, John A. Olley, and J. Owen Lewis, *The Climatic Dwelling: An Introduction to Climate-Responsive Residential Architecture* (London, 1996), 26.


77. Martín González, “El palacio de Carlos V en Yuste,” 40, describes the stove room, constructed after the first year in residence; Stirling-Maxwell, *Cloister Life*, 224, cites a new stove. In Madrid’s Alcázar, another of Charles’s residences, tiny rooms for easy heating, mentioned as the chimenea de alcobas (alcoves’ chimney) and estufa (stove) in plans, might have been precedents for the Yuste stove room. Veronique Gerard, *De castillo a palacio: El Alcázar de Madrid en el siglo XVI* (Bilbao, 1984), 18, 27.
78. Stirling-Maxwell, Cloister Life, 92, cites the comments of the queen of Hungary “entreat him to think twice before he settled in a spot ‘so unhealthy as Yuste.’”

79. Lafuente, Historia general, 9:124–25. The passages on Yuste are based on letters from the Archivo de Simancas. The villa’s detractors argued that at least the monastery’s chapel sheltered the cloisters, while Charles V’s quarters were subject to the full force of the sun. Charles V’s decision to retire to Yuste, out of all his European territories, has never been satisfactorily explained. Its proximity to hunting grounds might have been a factor: Stirling-Maxwell, Cloister Life, 75–77. Yuste’s isolation from political activity might also have been an issue: von Barghahn, Age of Gold, 1:43.

80. Navagero, “Viaje por España,” 851. As the Venetian diplomat was in Charles V’s court, Ferdinand’s statement was evidently repeated after his death.

81. Charles V died one and a half years after retiring to Yuste. Given his infirmities, as evidenced by the stove room constructed after the first winter, perhaps it is not unusual that the lower level was scarcely used. Martín González, “El palacio de Carlos V en Yuste,” 33.

82. Juan Velázquez de Echeverría, Paseos por Granada y sus contornos, 2 vols. (Granada, 1764; repr. Granada, 1993), 1:9. The author refers to the two Nasrid palaces as one palace (Palacio Arabe), similar to the reference of the Academia de San Fernando to the “Palacio Arave” and the “Palacio del señor Carlos V”: see Rodríguez Ruiz, La memoria fragil, 285.

83. The loggers are small, battery-powered devices that track either temperature or humidity at regular intervals. This information is later downloaded to a computer. In the Comares Palace, monitors were placed in the southeast corner of the Sala de la Barca and in that same corner in the upper room. In the Lions Palace, the device monitoring the upper mirador was located in the southeast corner. In both the Lindaraja Mirador and the Hall of Secrets, loggers were placed in the northeast corner. Other factors merit attention. The monitors were in the shade at all times during their operation and located in room corners, away from openings as much as possible, to lessen the impact of room air changes. All the monitored spaces were either buffered by patios, to limit air movement through them, or were very enclosed, experiencing few air changes despite a lack of windows or open doors.

84. Wernstedt, World Climatic Data, 227. The data were compiled over a thirty-year period.

85. Olgyay, Design with Climate, 117–18, considers the difference between a light wood structure and one with nine-inch-thick brick walls, both construction systems having equal insulation values and both in a Baghdad housing development. The wood building’s heat transmission curves show a time lag of two hours, those of the brick structure a lag of ten hours. The heat flow curve of the brick structure is nearly flat in July, while that of the wood building nearly mirrors the radical outdoor temperature swings. See also Baruch Givoni, Man, Climate and Architecture, 2nd ed. (London, 1976), chap. 7, “The Thermal Effect of Building Materials.”

86. Dry-bulb temperature measures the ambient mixture of air and water vapor in the normal way with a simple thermometer. In contrast, wet-bulb temperature is that shown by a thermometer with a wetted bulb. At 100% relative humidity, dry and wet bulb temperatures are equal.

87. Of these factors, it is especially difficult to determine the mean radiant temperature of a space’s surfaces. To bypass the difficulty in balancing radiant and air temperatures, the operative temperature—essentially an average of a space’s air and surface temperatures—is often used. See Benjamin Stein and John Reynolds, Mechanical and Electrical Equipment for Buildings, 9th ed. (New York, 2000), 42, which touches on the complexities involved in determining mean radiant temperature. Chapter 2 of that work, “Comfort, Climate, and Design Strategies,” considers relevant issues, such as the insulating values of clothing, metabolic rates, and other factors that define comfort.

88. In the comfort zone, dry-bulb air temperature and air velocity have the greatest impact on an individual’s skin temperature. Only at high temperatures does the wet-bulb temperature, related to humidity, become significant. Givoni, Man, Climate and Architecture, 49–50.

89. Givoni, Man, Climate and Architecture, 55–56, cites studies in which the thermal sensation is graded according to the severity of cold or warmth, 0 being unbearably cold and 9 unbearably hot. On this scale, people can distinguish not only between 4, comfortable, and 5, slightly warm, but also intermediate levels such as 4.2, not entirely comfortable but definitely not slightly warm; 4.7, less than slightly warm but definitely not comfortable; and 4.5, which is somewhere in between. Every individual has his/her own scale, meaning that thermal sensation is extremely subjective, although each person is consistent within his/her own evaluations. Cultural factors are also important. Olgyay, Design with Climate, 17, notes “that the British comfort zone lies between 58° to 70°F; the comfort zone in the United States lies between 69° and 80°F; and in the tropics it is between 74° and 85°F; with the relative humidity between 30 and 70%.” Psychological factors, the cooling or warming suggestion of a fountain or burning embers, also merit attention, as does acclimatization. See also S. Olesen, P. O. Fanger, P. B. Jensen, and O. J. Nielsen, “Comfort Limits of Man Exposed to Asymmetric Thermal Radiation,” in Thermal Comfort and Moderate Heat Stress: Proceedings of the CIB Commission W45 (Human Requirements) Symposium (London, 1973), 133–48. In one experiment, room air temperature remained stable while the temperature of one room surface was elevated. When the wall temperature was raised 5°C, a majority of subjects noticed a minor change in the average radiant temperature.
Long before the caliph Harun al-Rashid (r. 786–809) sent Charlemagne (r. 768–814) his famous gift of an elephant named Abu 'l-Abbas in 802, rare and valuable goods—fine garments and precious stones, slave-girls and stallions, relics and eunuchs—had played an important role in diplomatic relations. The artfully chosen gift is an eloquent envoy, capable of imparting a multitude of messages and of engendering diverse and even contradictory sentiments: deference and admonition, allegiance and bravado, submission and disdain. For as long as embassies have visited foreign capitals, gifts have been used to establish and solidify bonds between empires. They also display the magnanimity and fortunes of their givers and compel responses in kind from their recipients.

The exchange of gifts was a significant aspect of the relations between the burgeoning Ottoman empire and the aging Mamluk state, from the earliest contacts between the two polities in the late fourteenth century until the Ottoman conquest of Egypt in 1517. A period of great flux in the eastern Mediterranean, “the long fifteenth century” witnessed momentous shifts in political and military hegemony, diplomatic and cultural relations, and patterns of trade and migration. The history of the relations between the two empires has been the subject of much scholarship in recent years, revealing the intricacies of a complex bond between two Muslim polities that were continuously engaged in a process of self-definition and legitimization vis-à-vis the other. To shed further light on the formation, development, and deterioration of this bond, it is necessary to examine the political and ideological discourses through which it was expressed and that often depended upon the “language” of gifts.

This study addresses the following questions: Did gift exchanges take place between the Ottoman and Mamluk sultans during the fifteenth century? If so, what shape did the flow of gifts take as the century progressed? Did it proceed in fits and starts, abating during periods of conflict and resuming during periods of entente? What kinds of gifts were sent by each side, and what might this suggest about the availability of, and attitudes toward, different kinds of commodities and materials? Finally, what kinds of diplomatic messages can be distilled from the choices of specific gifts on certain occasions?

In order to answer these questions, I have compiled a corpus of data from six late medieval Arabic historical chronicles and one collection of diplomatic correspondence: Hawādith al-duhūr fī madā ’l-ayyām wa ’l-shuhūr and al-Nujūm al-zāhira fī mulūk Misr wa ’l-Qāhira by Ibn Taghribirdi (d. ca. 1470); Nuzhat al-nufūs wa ’l-abdān fī tawārīkh al-zamān by Ibn al-Sayrafi (d. 1495); Mufākahat al-khillān fī awādith al-zamān by Ibn Tulun (d. ca. 1546); Münše ’s-selāťin by Feridun Ahmed Beg (d. 1583); Badā’i ’al-zuhūr fi waqa’ā’i al-duhūr by Ibn Iyas (d. 1524); and al-Sulūk li-ma’rifat duwal al-mulūk by al-Maqrizi (d. 1442). With the exception of Feridun Ahmed Beg’s collection of Ottoman diplomatic correspondence, the remaining works are chronicles written by scholars in the Mamluk empire.

Taken together, these texts provide a wealth of information about the world of diplomatic courtship—such as the dispatch and reception of envoys, the gifts they bore from their patrons, and the language of official letters—allowing us to reconstruct a history of gift
exchange over an extended period. Our sources make reference to a total of sixty-six encounters between Ottoman and Mamluk envoys and rulers during the period under examination (an average of one every two years). About two-thirds of these references contain explicit mentions of diplomatic gifts, often with accompanying descriptions. On the basis of these descriptions—tantalizingly brief though they often are—it is possible to discern some broad trends of exchange, and to make some observations about the ways in which each empire projected a certain political identity on its sometime ally and rival.

The following pages present the corpus of diplomatic visits assembled from the sources listed above. I have included every mention of a gift, including the few cases where all efforts to decipher the object in question have been in vain. The analysis that follows aims, firstly, to provide a bird’s-eye view of the flow of gifts and diplomatic encounters as the Ottoman–Mamluk political relationship evolved. Secondly, it attempts to isolate patterns of gift giving and evidence pertaining to the availability and popularity of different commodities and materials in the fifteenth century.

THE CORPUS OF DIPLOMATIC VISITS AND GIFT EXCHANGES

Below is a list of all sixty-six diplomatic encounters mentioned in the historical sources surveyed. Proceeding on the assumption that an official envoy would not likely have appeared in a foreign court without a gift—an insult that, if intended, would probably have been remarked upon by contemporary chroniclers—I have also listed every encounter not accompanied by a mention of gifts. Each record in the list contains the names of two rulers, with an arrow indicating the direction in which the letter and/or gift traveled. This is followed by the date of the encounter (or the date of the official letter), and a description of the gift, if one is supplied. The gifts are emphasized in bold type.


4. Bayezid I → Barquq (Dhu ‘l-Qa‘da 795 [September 1393]): “News came of the arrival of the envoy of the King of Rum, Abu Yazid ibn ‘Uthman, bringing with him gifts (taqādim) for the sultan. The reason that he came was...to inform the sultan about Timur Lank and to warn him...He also sent a request to the sultan for a skilled doctor (tabib ḥādiq) and medicine suitable for his illness (adwiya tuwāfiq maraḍahu), for he was suffering from joint pain (darabān al-mafāṣīl). When the sultan read Ibn ‘Uthman’s letter...he appointed [the doctor] al-Rayyis Shams al-Dīn ibn Saghir to him, and sent two loads of medicines that suited his malady, as well as a grand gift with his envoy.”

5. Bayezid I → Barquq (Sha‘ban 796 [June 1394]): “Next arrived ambassadors of the Ottoman sultan Yıldırım Bayezid, ruler of Asia Minor (Rūm), stating that he was sending 200,000 dirhams as assistance for al-Zahir, and that he would await the sultan’s reply so that he might act accordingly...Letters of praise and thanks were written to all three rulers, stating the wishes of the sultan.”

6. Bayezid I → Faraj (r. 801–15 [1399–1412]) (15 Dhu ‘l-Hijja 803 [27 July 1401]): “And on this day, a large group of envoys arrived from Ibn Yazid [sic] b. Murad b. ‘Uthman, the King of Rum. Their most senior member was one called Amir Ahmad, and he was one of Ibn Yazid’s eminent princes. He was received by the office of the chamberlain...and they lodged him in the home of Amir Qushtamar al-Mansuri, in Bab al-Barqiyya.”
And on [16 Dhu ’l-Hijja], the envoys of Abu Yazid b. ’Uthman— the King of Rum—presented a gift, consisting of ten slaves (mamlūk), ten horses (khayl), ten lengths of broadcloth (qiτa’ min al-jūkh), two silver cups (sharbatān min al-fiτa’), ten pieces of silver plates, and other things (qiτa’ fidda mā bayna atbaq wa-ghayrāhā)—and several gifts for the nobles….”

7. Mehmed I (r. 816–24 [1413–21]) → al-Mu’ayyad Shaykh (r. 815–24 [1412–21]) (middle of Dhu ’l-Hijja 817 [February 1415]): “We have sent to you…intended as a gift, five qūzāt of various Rūmī fabrics (aqmisha), three qūzāt of European (Ifranjī) fabric, and four qūzāt of Indian and Alexandrian wares (al-amti a’l-Hindiyya wa ’l-Iskandariyya)….”

8. al-Mu’ayyad Shaykh → Mehmed I (Sha’ban 818 [October 1415]): “We have sent two fine horses (khayl), and two saddles (sarjayn) made of gold and silver, and five qūzāt of Egyptian fabric (aqmisha), and four qūzāt of Indian and Alexandrian wares (al-amti a’l-Hindiyya wa ’l-Iskandariyya)….”

9. Mehmed I → al-Mu’ayyad Shaykh (7 Safar 823 [22 February 1420]): “On Thursday…envoys from Kirishji [Mehmed I] arrived and they had with them thirty slaves (mamlūk), birds (uyūr), many beasts of prey (jawāri), silk clothes (thiayāb arīr), and other things…On Monday, 25 Safar, the Portico Hall [īwān] was in the service of the envoys…and the sultan bestowed a robe of honor upon the chief emissary.”

10. al-Mu’ayyad Shaykh → Mehmed I (17 Safar 824 [21 February 1421]): No gifts mentioned.

11. Murad II (r. 824–48 [1421–44]; 850–55 [1446–51]) → Barsbay (r. 825–41 [1422–38]) (27 Sha’ban 826 [5 August 1423]): “A large group arrived from the lands of Ibn ‘Uthman, and among them was a man named Umur…And they had brought with them a gift from Ibn ‘Uthman, the ruler of Bursa, and they presented it to [the sultan]. And he, too, presented to Ibn ‘Uthman things of his own….”

12. Murad II → Barsbay (2 Rabi’ I 831 [21 December 1427]): “A man named Taghrībirdī al-Hijazi al-Khassaki al-Ashrafi arrived from the lands of Rum. The sultan had sent him to Sultan Murad Beg to affirm his friendship and affection…and because a mighty army had arisen in the lands of Rum and met Murad Beg, and the sultan did not know the truth of the matter regarding this. So he sent the aforementioned emissary to discover the news and also convey greetings to Murad Beg…The emissary was absent for about five months, and upon his return he reported Murad Beg’s victory over the Rum and the infidels. He met Murad in the land of Qustantiniyya and Murad was greatly pleased that the sultan had sent him to inquire about the state of affairs. He bestowed upon him the very cloth that he was wearing (qumāshuhu), and even his turban (imāmatuhu) and his cap (qubba’ahu), which was made of pure gold. The turban was made of silk and very high-quality cloth with gold brocade (kāna qumāshuhu ḥarīrīn wa-jūkhan raft’ān jiddan), and it was said that each cubit cost two dinars.”

13. Murad II → Barsbay (end of Jumada II 831 [mid-April 1428]): “…Envoys arrived from Murad Beg…and they were received by the chamberlains and some of the chief officers…And on 2 Rajab…court service was held in the Portico Hall for the envoys from Ibn ‘Uthman and other Turcoman (turkmān) envoys, and it was a memorable and well-attended day. Then, when the service was over, Ibn ‘Uthman’s gift was presented and it included: fifty Rūmī slaves; a white eunuch (twāshī abyad); fifteen birds and various wild animals, including some that looked like a sable (sammūr), a gray squirrel (sinjāb), a lynx (washaq), and a fox (fanak); twenty velvet garments of European make (al-mukhmal shughl al-Franj na’hwa ʿishrina thawban). The sultan reciprocated by bestowing upon the nobles some slaves and fabrics (qumāsh).”

14. Murad II → Barsbay (Dhu ’l-Hijja 831 [September–October 1428]): No gifts mentioned.
Barsbay → Murad II (undated response): “...And we have sent [with our envoy] as a gift for your Majesty, two Cretan (Chandakī) slaves, one male and one female...”

Murad II → Barsbay (undated, post-conquest of Salonica, Jumada I 833 [March 1430]): In this letter, a feth-nāme of Salonica (announcement of the conquest of Salonica), a gift is mentioned, details about which are found in another letter.

Barsbay → Murad II (undated response): In this letter, Barsbay thanks Murad II for the wonderful gift, but no details are supplied.

Murad II → Barsbay (undated response): No gifts mentioned.

Barsbay → Murad II (undated response): No gifts mentioned.

Murad II → Barsbay (Safar 840 [August–September 1436]): No gifts mentioned.

Murad II → Barsbay (Jumada I 840 [November–December 1436]): Murad’s envoys arrive with a letter and a gift, but no details are supplied by Ibn al-Sayrafi.

Jaqmaq (r. 842–57 [1438–53]) → Murad II (10 Jumada I 842 [29 October 1438]): “You had requested an elephant from Barsbay (may he rest in peace), but it was not so easy to send it during the winter season. However, we have now dispatched it for the service of your throne. Our envoy has placed the elephant on a ship, and it will arrive subsequently, after the winter season, in the land of Turkey...”

Murad II → Jaqmaq (18 Dhu ‘l-Qa‘da 843 [21 April 1440]): “Ibn ‘Uthman’s envoy presented a splendid gift of sixty loads of fabric (shiqaq), from silk (harīr) to sable (samīrū) to miniver (sinjāb) to lynx (washaq), different kinds of garments (malbūs), and thirty slaves (mamālīk).”

Jaqmaq → Murad II (21 Dhu ‘l-Hijja 843 [24 May 1440]): “The amir Shihab al-Din Ahmad b. Inal set out for the ruler of the lands of Rum, who is called Murad b. ‘Uthman, accompanied by [the latter’s] envoy, who had come to Cairo before this date.” (Accompanying this envoy were the following twenty-six gifts. In cases where the vocabulary ranges from ambiguous to indecipherable, I have supplied the full text in Arabic script):


b. Two swords, damascened in gold and silver (السياق ملحوري اثنان سقط ذهب سقط فضة)

c. Gold-encrusted weapon (؟)

d. One steel helmet, inlaid or ornamented with silver (khūd fūlād fi/dşdotbelow/dşdotbelowa wā/hşdotbelowid)

e. Two brigandines damascened in gold (زفلات محمد کاری سقط ذهب اثنان)

f. A suit of horse armor (کپسوان محمد فلمل عبار خاص)

g. Four steel axes (atbār fūlād)

h. Ten turban cloths in a rosette pattern (shāshāh shamsī ‘ashra)

i. Bows made by Ibrahim b. ‘Abd Allah (سمت قوس میل راهی بن عبد الله)

j. Four carpets with gold thread (nakhh mudhahhab)

k. 1,000 pieces of Alexandrian velvet (qumāsh kamkhā Iskandariyya)

l. Fifteen saddles (sarj)
p. Ten garments
q. A golden saddle
r. Four silk kerchiefs (manādīl nakh arba‘a)
s. Seven kerchiefs and twenty-five leather bags (mandil su‘u bhāra xamsa‘a)
t. A golden billhook
u. A golden billhook (mawṣūma)
v. Balsam oil
w. Fourteen shawls, camphor-scented (?)
x. Seven silk garments (tafāsī sīsū)
y. Six garments
z. Three elephants

27. Murad II → Jaqmaq (22 Dhu ‘l-Hijja 848 [1 April 1445]): “One of the emirs of the ruler of Rum arrived with a cortège of European princes who had been defeated (al-umarā alladhīna inkasarū min Bani ‘l-Aṣfar), and they were dressed according to the custom of their country. There were sixteen of them, and their forearms were covered in iron and steel, and on their heads were helmets like basins, and they were on horseback. So the people of Cairo came out to meet them and it was a great day…Murad Beg sent these men to demonstrate his bravery to the Muslims and the Turks, and the bravery of his army. He also sent some of them to Shah Rokh b. Timur Lank, and to the ruler of Tabriz and Baghdad. He sent to Sultan Jaqmaq a splendid gift of fifty exquisite slaves (khamsūna mamlūk min al-ḥisān) and five special slave girls (khams jawārī ‘l-khāsī) and other things like fabrics (qumāsh) and silk (ḥarīr) and velvet (mukhmal)…”60

28. Mehmed II (r. 848–50 [1444–46]; 855–86 [1451–81]) → Jaqmaq (3 Shawwal 849 [2 January 1446]): “A gift arrived from Sultan Muhammad b. Murad Beg ibn ‘Uthman. The occasion for the gift was Murad Beg’s abdication in favor of his son Muhammad, who sent the gift. So they ascended with it to the fortress, [carrying it] in twenty-five crates (aqfās): five crates were full of silver vessels (awānin kulluhā fi dīdā), from bowls (aḍāḥ) to plates (suḥūn) to platters (sakārij), and things of that nature; five crates contained plain clothes (thīyāb /ṣīr); five contained clothes of gilded velvet (mukhmal mudhahhab); five contained pieces of silk covered in floral patterns (shiqaq /ḥarīr muzahharāt). Accompanying the gift were five white Rūmī slave girls (jawārin bī Rūmīyyāt).”61

29. Jaqmaq → Murad II (19 Jumada II 853 [9 August 1449]): “Emir Qanim b. Safar Khuja al-Mu‘ayyadi, known as ‘the merchant,’ set out as ambassador to Ibn ‘Uthman, ruler of Asia Minor (Rūm), in company with Ibn ‘Uthman’s ambassador, who had arrived before this date.”62 No gifts mentioned.

30. Murad II → Jaqmaq (18 Safar 854 [2 April 1450]): “Emir Qanīm al-Mu‘ayyadi, the merchant, came from Asia Minor (Rūm) to Cairo.” No gifts mentioned.63

31. Jaqmaq → Mehmed II (undated): No gifts mentioned.64

32. Mehmed II → Jaqmaq (2 Safar 856 [23 February 1452]): No gifts mentioned.65

33. Mehmed II → Inal (r. 857–65 [1453–61]) (undated, post-conquest of Constantinople): “[We have sent with our envoy] Jalal al-Din al-Qabuni…a gift of prisoners (asārā), slaves (ghilmān), fabrics (aqmisha), and other things described in detail in another letter. And indeed, the relation of these gifts to what is truly incumbent upon us is like the relation of a trickle of water to the ocean….”66
34. Mehmed II → Sharif of Mecca (undated, post-conquest of Constantinople, pre-Dhu 'l-Qa’da 857 [November 1453]): “…[W]e have sent to you personally two thousand florins of pure gold (alfāy aflūrī min al-dhahab al-khāṣṣ al-tāmm al-wazn wa ’l-’iyār), taken as booty from the conquest, and another seven thousand florins for the poor, to be split up as follows: two thousand for the descendants of the Prophet (al-sādāt wa ’l-nuqabā), one thousand for the servants of the two Sanctuaries (al-Haramayn), and the rest for those in need in Mecca and Medina…What is hoped for is that you will divide this between them according to their needs and poverty…and that the poor invoke God’s blessing upon us in their prayers.”

35. Inal → Mehmed II (20 Dhu ‘l-Qa’da 857 [22 November 1453]): This is a congratulatory letter from the Mamluks, on the occasion of the Ottoman conquest of Constantinople. Containing a list much like the one sent by Jaqmaq in 843 [1440], it was presented by Feridun Ahmed Beg in the form of a grid of four columns by four rows: “And we have sent with our envoy a gift, to confirm our love and friendship…:

a. One gold damascened sword (سِيِّف سُقُط ذَهْب وَبِدِّله سَكَائِن مِن سَمْك وَسُوْيَوْلِي مُحَمَّد)
b. Ten units of damask silk, with gold embroidery (بِعْدَا سُقُط ذَهْب عَالَى دَمْبا/سِكَائِن وَمُحَمَّد)
c. Maces and steel axes (دِنْبَت لِردَت غَيْبَات وَأَطَارُ فُوْلِي دِنْبَت)
d. Two hauberks with red velvet and gold embroidery (جَوْلَانَ مُخْلِص أَحْمَر بِسَمَارَ ذُهْبَ)
e. Gold-embroidered red velvet curtain (or tapestry) with gold sequins (سِتْر مُكْحَمَل أَحْمَر بِشَفَفَيْانَ ذُهْبَ)
f. Horse armor with red velvet and gold embroidery (بَرْكُشْتِوْنَ مُكْحَمَل أَحْمَر بِشَفَفَيْانَ ذُهْبَ)
g. A golden saddle with fine brocade (مْسَمَار ذَهْب وَعَرْفَهُ زِرْقَان عَاصِم)
h. One hundred pieces of Alexandrian cloth (تُقْمَاشِ إِسْكَانَارِي)
i. Gold coins (بِنْدٍ فِي لُوْهَا)
j. Carpets (خَطَا)
k. Velvet or damask silk (كَامْحَا)
l. Thirty-one Alexandrian garments or pieces of fabric (تَفَاشِ إِسْكَانَارِي)
m. Two choice stallions (كُحْيَلَ رَحْسُ فَحُل ٢)

36. Inal → Mehmed II (end of Dhu ‘l-Qa’da 857 [end of November 1453]): This letter from the Mamluks was sent just a few days after the previous one with the seventeen gifts. It mentions the arrival in Cairo of the Ottoman envoy to Mecca—who bears an undetermined gift—and assures Mehmed II that “we dispatched your envoy…carrying the florins struck with the excellent new royal seal (العِلَمْ يِلْجَيْدَة أَسْلَمْ) that were sent to the Sharif of Mecca…with an Egyptian convoy….”

37. Sharif of Mecca → Mehmed II (undated): The sharif thanks Mehmed for “the nine thousand new florins with Mehmed’s seal (تِسَّعْتَانِ ذَهْب وَشَعْرَهُ بَيْنَانِ مُحَمَّد)…” As a token of gratitude, the Meccans sent: “the veil of Mecca’s door (?) (بُرْقِاء بَيْبَع الْمُكَأْكَّة)، seven tāqīzāt of different Indian fabrics (الْمُقْمِشَة لْهِنَّيْيَة الْمُتَماْنَوْلِيْة)، and twenty turban cloths (شَشَاشَةُ) soaked in Zamzam water [from the well of Zamzam, located near the Ka’ba], and a dappled mare [as fast as] the pigeon of Mecca….”
38. Mehmed II → Inal (18 Jumada I 860 [24 April 1456]): “The ambassador of Sultan Muhammad ibn Murad Beg ibn ‘Uthman, ruler of Asia Minor, arrived; he was Jamal al-Din ‘Abd Allah al-Qabuni. He went up to the Sultan on Tuesday, bearing the letter of the one who sent him; it contained the tidings of the conquest of Constantinople, and was partly in verse, partly in prose.” No gifts mentioned.  


40. Mehmed II (868 [1463]): No gifts mentioned.  

41. Qansawh al-Ghawri (r. 906–22 [1501–16]) (Jumada I 908 [November 1502]): “The envoy of the ruler (malik) of Rum, Ibn ‘Uthman, arrived at the noble gates and accompanying him was a magnificent gift for the sultan.” Wonderful gifts are mentioned, but no details are supplied.  

42. Bayezid II (r. 886–918 [1481–1512]) → Qa’t Beg (3 Rabi’ I 897 [4 January 1492]): “...[T]he Emir Jan Bulat, who was the sultan’s peacemaking envoy to Abu Yazid b. ‘Uthman, returned to Damascus...[He reported that Bayezid] had honored him and the six people with him, and bestowed upon them robes of honor, slaves (mamālik) and slave girls (jawāri), camels (jimāl), silk fabric (qumāsh), gold (dhahab), and other things.”  

43. Qa’t Beg → Bayezid II (Rabi’ I 899 [December 1493–January 1494]): “And on this day, Ibn ‘Uthman’s envoy left Egypt and returned to Damascus. He had with him many gifts of different kinds, from horses (khayl) to slaves (raqiq) to precious metals (ma’ādin) and jewels (jawāhir), and weapons (silāḥ), and other things...”  

44. Bayezid II → Qansawh al-Ghawri (r. 906–22 [1501–16]) (Jumada I 908 [November 1502]): “The envoy of the ruler (malik) of Rum, Ibn ‘Uthman, arrived at the noble gates and accompanying him was a magnificent gift for the sultan.”  

45. Qansawh al-Ghawri → Bayezid II (undated): Wonderful gifts are mentioned, but no details are supplied.  

46. Qansawh al-Ghawri → Bayezid II (8 Safar 909 [2 August 1503]): “Emir Azbak arrived in Damascus...accompanied by some Egyptian merchants and others. They had with them many goods...including four prize horses for Ibn ‘Uthman, with bales of seeds of Egyptian clover or alfalfa (birsīm) for the horses’ fodder.”  

47. Bayezid → Qansawh al-Ghawri (11 Jumada II 913 [18 October 1507]): No gifts mentioned.  

48. Qansawh al-Ghawri → Bayezid II (19 Muharram 916 [28 April 1510]): A Mamluk envoy returns to Damascus from Istanbul, having been treated well by Bayezid II. No gifts mentioned.  

49. Bayezid II → Qansawh al-Ghawri (Rabi’ I 916 [June–July 1510]): This letter thanks the Mamluks for the wonderful gifts, but no details are supplied.  


51. Selim I (r. 918–26 [1512–20]) → Qansawh al-Ghawri (Jumada I 918 [July–August 1512]): An Ottoman envoy arrives with a letter announcing that Bayezid II has abdicated in favor of his son Selim. No gifts mentioned.  

52. Qansawh al-Ghawri → Selim I (12 Dhu ‘l-Qa’d 918 [19 January 1513]): The Mamluk sultan designates an envoy to visit Selim and congratulate him on his accession. No gifts mentioned.  

53. Selim I → Qansawh al-Ghawri (1 Jumada II 920 [24 July 1514]): “And on that day, Ibn ‘Uthman’s envoy came to the palace to meet the sultan...and he had with him a lavish gift (taqdimah ħāfiḳa) comprising twenty-five porters (hammāl) [bearing] lynx (washaq), sable (sammūr), ermine (qāqum), velvet clothing, and garments from Bursa (athwāb mukhmal wa-Bursāwī), as well as colored pieces of fabric from Samarqand (shīqaq Samarqandī mulawwan). A porter carried
silver vessels (*awānin fidda*), and [the envoy’s] entourage arrived with twenty-five beautiful young slaves (*khamsa wa-*‘ishrīna mamlāk *ṣīghār ḥīsān al-ashkāl*). 


55. Selim I → Qansawh al-Ghawri (29 Ramadan 920 [17 November 1514]): An Ottoman envoy arrived bearing news of Selim I’s victory over Shah Isma’il at the Battle of Çaldıran (2 Rajab 920 [23 August 1514]). No gifts are mentioned. 


57. Qansawh al-Ghawri → Selim I (25 Safar 921 [10 April 1515]): A Mamluk envoy is sent to Selim I to find out whether he intends to enter Mamluk or Safavid territories. No gifts mentioned. 

58. Selim I → Qansawh al-Ghawri (14 Jumada I 921 [26 June 1515]): In this letter, the Ottoman sultan describes the exploits of his forces in eastern Asia Minor, beginning with the conquest of the Qizilbash fortress of Kamakh (5 Rabi’ II 921 [19 May 1515]), followed by the fall of the Dhu ‘l-Qadrid principality (29 Rabi’ II 921 [12 June 1515]) and the execution of its leader, the Mamluk vassal ‘Ala’ al-Dawla, whose head was presented to Qansawh al-Ghawri by the Ottoman envoy. Selim informs al-Ghawri of his determination to continue to fight the Qizilbash forces in the “eastern provinces,” and asks him not to come to their aid. 

59. Selim I → Qansawh al-Ghawri (end of Ramadan 921 [early November 1515] [sic]): An Ottoman envoy brings news of Selim’s defeat of the Persian vassal Qara Khan near Mardin, and presents his head to the Mamluk sultan. 

60. Qansawh al-Ghawri → Selim I (undated): This response congratulates Selim on his defeat of Qara Khan and presents him with an elephant “given to us by the king of the Indian lands (*malik al-bilād al-Hindiyya*)…and some Egyptian wares (*al-amti/a ‘l-Mi/sriyya*).” The letter concludes with a request that the Mamluk envoy be permitted “to purchase wood needed for some of our important interests in Cairo (*ishirā‘ al-khashab al-lāzima li-ba’d mašāliḥīnhā ‘l-muhimma fī ‘l-Qāhira*)” and asks Selim “to dispatch a group of people [who have specialized in] this craft (*irsāl jamm min ahālī tilka ‘l-an/la*).” 

61. Selim I → Qansawh al-Ghawri (beginning of Jumada II 922 [early July 1516] [sic]): Selim provides the Mamluk envoy with the requested wood but apologizes profusely for not being able to dispense with any of his woodworkers, because he is building “one hundred great ships” with which to fight the Christians. 

62. Qansawh al-Ghawri → Selim I (undated): Al-Ghawri informs Selim of his decision to go to Aleppo with his army in order to broker an agreement between the Ottomans and the Safavids (*al-munāsib an nusliha baynakum*), now that the latter have largely been subdued. He asks Selim not to enter the Syrian territories because “most of its inhabitants are Sunnis…[including] the greatest scholars of this umma, and many catastrophes have befallen them in the past, such as the appearance of the Chingizids and the Timurids…” No gifts mentioned. 

63. Selim I → Qansawh al-Ghawri (10 Jumada II 922 [11 July 1516]): When Qansawh reached Aleppo on this date—bringing with him an enormous retinue, including the caliph and the four chief judges of Cairo—there were two Ottoman envoys awaiting his arrival. They presented “a
gift of forty slaves, tunics of sable \((\text{abdān sammūr})\), velvet clothes \((\text{athwāb mukhmal})\), wool clothes \((\text{athwāb šīf})\), Baʿalbaki clothes \((\text{athwāb Baʿalbaki})\), and other things. [Selim] sent to the caliph two tunics of sable \((\text{badanayn sammūr})\), a velvet garment with brocade gloves \((\text{thawb mukhmal bi-kufūf qasab})\), and two fine wool garments \((\text{thawbayn /s+dotbelowūf /lefthalfringālin})\). \(^{106}\)

64. Qansawh al-Ghawri → Selim I (Jumada II 922 [July 1516]): Upon receiving the conciliatory letter borne by Selim’s envoys in Aleppo, Qansawh sent a response in kind to Selim with the Mamluk envoy Mughulbay, along with “one hundred \(\text{qin/tşdotbelowār}\) of sugar and confectionery in large containers” \((\text{mi/righthalfringat qin/tşdotbelowār sukkar wa-/hşdotbelowalwā fī /lefthalfringulab kibār})\), per Selim’s request. No gifts mentioned.\(^{107}\)

65. Qansawh al-Ghawri → Selim I (Jumada II or Rajab 922 [July or August 1516]): Qansawh dispatched a second envoy to Selim, the emir Kurtabay, bearing a lavish gift of ten thousand dinars.\(^{108}\)

66. Selim I → Qansawh al-Ghawri (ca. 20 Rajab 922 [ca. 19 August 1516]): The envoy Mughulbay returns from his visit to Selim after being thrown in prison and humiliated, with the message: “Tell your master to meet me at Marj Dabiq.”\(^{109}\)

ANALYSIS

Two general observations are in order before proceeding with an analysis of the corpus. Firstly, it is necessary to keep in mind that we are analyzing not gifts but descriptions of them, as offered by various authors. Moreover, these descriptions are very rarely rendered in vivid, ekphrastic prose, which poses several challenges for the interpretation of this material. Quite aside from the mundane difficulties of specialized and archaic terminology, manuscript corruptions, and copying errors, there are the conceptual difficulties of picturing what the chroniclers described in words and connecting their descriptions with real objects that remain from the period in question. For the most part, the chronicles provide only general descriptions of gifts, rarely giving away much more than the types and quantities of objects sent. The letters in Feridun Ahmed Beg’s collection are occasionally more elucidatory, since they serve as grandiose introductions to the accompanying gifts. However, much of what we would like to know about the precise nature of a gift is usually impossible to reconstruct on the basis of the description provided.\(^{110}\)

Secondly, there is an empirical dilemma to bear in mind, namely, that the sources utilized are selective in the information that they provide about diplomatic visits. The records for only about half of such visits mention gift exchanges (see table 2 in the Appendix), but the proportion must certainly have been higher, given the unlikelihood of an envoy appearing empty-handed before the Mamluk or Ottoman sultan. Furthermore, of the thirty-six visits that mention a gift exchange, only twenty-seven identify what the gift was, often with only the barest of descriptions. For all we know, there may have been far more visits and gifts than the ones alluded to by the sources utilized in this study.\(^{111}\) Therefore, conclusions of a quantitative nature (e.g., that the Mamluks sent more carpets than the Ottomans, or that the Ottomans sent more slaves than the Mamluks) should be taken with a grain of salt. This is, after all, an inductive process; drawing precise conclusions on the strength of a limited sample is akin to making pronouncements about the nature of a lake’s ecosystem on the basis of what a few nets may bring to the surface. An alternative approach to the material in the corpus is offered below, along with some suggestions for future research.

Setting aside the conceptual, methodological, and philological hazards endemic to this type of study, we remain faced with a long list of curious items that were sent back and forth across the Mediterranean between two imperial courts: fine velvets and silks, swords, axes, turban cloths, money, unguents, elephants, slaves, political prisoners, severed heads, and more. Several questions come to mind, which can be grouped according to two principal themes. First, we might ask what the timeline of visits and gift exchanges reveals about the
development of the Ottoman–Mamluk relationship. Are the visits evenly dispersed or concentrated within certain periods? Do gift exchanges reach a peak or drop off noticeably at any specific points? Is it legitimate to read into the frequency of visits a sign of the subservience or relative status of either the visitor or the host?

Secondly, one might parse the above corpus by arranging the gifts along two axes: (a) typological categories, and (b) giver/recipient. Proceeding from such an arrangement, one can ask: What were the most common types of gifts (according to our sources)? Were there certain gifts that were given regularly by both sides and others that came exclusively from one court? Along these lines, do large imbalances in the categories of gifts suggest that certain materials were exclusively available to one party or another, as a result of trade routes and spheres of influence?

To address questions of the first theme, I have aligned all of the diplomatic visits along a regnal chronology (see table 1 in the Appendix). The period begins with the reign of Bayezid I, who sent five missions to the Mamluks. During the early part of his reign, the joint concern of both courts was the danger presented by Timur, particularly to the frontier territories of eastern Anatolia and northern Syria. The alliance was breached in 1398, when Bayezid conquered several provinces within the Mamluk sphere of influence; this would have grave consequences for the Ottomans once Timur returned to eastern Anatolia. When Faraj came to power, Bayezid sent an envoy with many expensive gifts (see no. 6 in the list above), attempting to reestablish an alliance with him against the Mongols, but Faraj refused. Bayezid was captured by Timur’s forces and died in captivity. A long interregnum ensued, during which there was no contact between the two sides. The Ottomans and Mamluks resumed diplomatic relations during Mehmed I’s short reign, when envoys were sent by both courts, and the tone of the letters exchanged indicates that the situation between the two empires had improved.

The most prolific gift giver of the fifteenth century was undoubtedly Murad II, who sent no less than eight envoys to Barsbay and three to Jaqmaq, receiving a combined nine in return. This period represented the height of the Ottoman–Mamluk diplomatic relationship: united and successful in their struggle against various infidel forces, the two powers rarely infringed upon each other’s territory. These good relations continued during the early part of Mehmed II’s reign, especially after the Ottomans’ successful conquest of Constantinople, but Mehmed’s expansionist policies against the Qaraqunids and Dhu ‘l-Qadrids created friction between him and his Mamluk counterparts, as did his rising status as primus inter pares in the Islamic world. Tense relations prevailed up to and after the Ottoman–Mamluk war between 1485 and 1491, but the emergence of the Safavid threat in the early sixteenth century produced a flurry of diplomatic activity.

Although the Mamluk empire met its demise at the hands of Sultan Selim I, the four years between his accession to power and the Mamluk defeat were full of diplomatic visits and gift exchanges. Indeed, up until the declaration of war, the language of the letters sent remained highly gracious, even as the two sovereigns prepared for a seemingly inevitable conflict. Between 1514 and 1516 in particular, as Selim and Qansawh fought a proxy war in the border territories, their official correspondence nevertheless maintained an air of artificial cordiality. When Selim sent Qansawh the head of ‘Ala’ al-Dawla, the Mamluk-supported ruler of Dhu ‘l-Qadr (and Selim’s own maternal grandfather), claiming that this offering was meant for Qansawh’s “enjoyment” (li-inbisātikum), the “gift” had its desired effect: Ibn Iyas reported that the sultan did not emerge from his quarters the next day, and quaffed some medicine to calm his nerves (see no. 58). When Qansawh met Selim’s envoys in Aleppo and demanded an explanation for their ruler’s aggressive behavior (no. 63), they presented him with a huge gift of forty slaves and various kinds of fine clothing, begging Qansawh’s pardon for any offense, while politely insisting that Selim was determined to finish off Shah Isma’il. The ploy seemed to work, as Qansawh sent Selim a gift of ten thousand dinars, along with several containers of sugar and confectionery (per Selim’s request). Less than two months later, Qansawh was dead and the Mamluk army destroyed.

Turning to the gift exchanges (and bearing in mind the caveats discussed above), we find that certain categories of gifts are mentioned far more frequently in connection with one side than the other (see table 3 in the
Appendix). The Ottomans, for example, sent slaves or prisoners on at least twelve occasions, while there are only three recorded instances of such gifts by the Mamluks. In addition to their great value, gifts of slaves drew attention to the Ottomans’ status as ghazis, and served as fitting accompaniments to letters that brought news of their conquests in Europe and Anatolia. With the Mamluks’ war-making days mostly behind them—and faced with severe economic conditions for much of the period in question as a consequence of multiple epidemics of bubonic plague and Portuguese inroads into the trade with India—the sultans of Egypt were reduced to sending weapons and armor, rather than slaves, as reminders of their once proud warrior past.

Among the most frequently encountered gifts on the Mamluk side are horses, along with gold and silver saddles, horsecloths, and horse armor, objects that do not appear in the Ottoman embassies. The Mamluks also sent elephants, which they obtained from India, while the Ottomans sent animals found in the Anatolian woodlands such as foxes, lynxes, and squirrels. The most popular gifts, given regularly by both sides, were textiles. In this area, the Ottomans sent Persian (‘Ajamī), European (İfranjī), and Ottoman (Rūmī) fabrics, while the Mamluks favored Indian (Hindī) and Alexandrian (Iskandarī) cloths, reflecting the access of the two powers to commodities produced by their respective neighbors, trading partners, and enemies. The Ottomans also seem to have had greater access than the Mamluks to silk broadcloth, as well as to unusual animal pelts such as sable and miniver. The Mamluks, on the other hand, regularly sent decorative household textiles (e.g., carpets, shawls, drapery, etc.). Clothing and silver tableware were types of gifts favored mainly by the Ottomans, who seem to have been particularly fond of velvet garments, and sent them in large quantities (see no. 28). In addition to velvet, silk and wool clothes, as well as tunics of sable (sammūr), are mentioned. In 1428, following a year of raiding in the Balkans, the Ottomans sent a large convoy of gifts (no. 13) intended to project the image of an expanding polity at the edge of Christendom. Accompanying the fifty Rūmī slaves and a white eunuch were “twenty velvet garments of European make.” Similarly, in Selim’s final gift to the Mamluks, a reference to “Ba’albaki clothing” (no. 63) seemed to send a message of encroaching Ottoman hegemony in the Syrian territories that had long been part of the Mamluk empire.117

Two interesting items appear in the sources around the middle of the century. The first was sent by Jaqmaq to Murad II in 1440, one month after Murad’s envoy had arrived bearing “a splendid gift of sixty loads of fabric, from silk to sable to miniver to lynx, different kinds of garments, and thirty slaves” (no. 25). In return, Jaqmaq sent Murad a letter declaring his desire that “both countries be as two spirits in one body,” and providing information about a great gift that he hoped would confirm the warm relations between the Mamluks and the Ottomans: in addition to large quantities of fine turban cloths, several carpet runners with gold embroidery, and one thousand pieces of uncut Alexandrian velvet, the Mamluks sent “the noble Kufic Koran, written in the hand of [the third Rightly-Guided Caliph] ‘Uthman b. ‘Affan” (r. 644–56) (no. 26). Such a gift must have conveyed a message of an entirely different order from the luxury goods that accompanied it. The ‘Uthmanic codex is an artifact of legendary stature in Islamic history. According to the traditionally accepted view among Muslims, ‘Uthman was the architect of the redaction process that led to the establishment of a single Koranic codex during the early years of the Islamic community.118 Tradition holds that he had all the other codices destroyed and instructed his scribes to send copies of the canonical text to the administrative centers of the empire in Syria, Iraq, and the Arabian peninsula. Another tradition claims that he was assassinated while reading his own copy of the Koran, which was spattered with traces of his blood. Such a gift would have contained immense symbolic power, the effect of which would not have been lost upon the Ottomans. When Cairo was established by the Mamluks as the new seat of the Abbasid caliphate, the Mamluk sultan assumed the self-designated role of Custodian of the Two Holy Sanctuaries in Mecca and Medina. The gift of the ‘Uthmanic codex, on the one hand, would have sent a message of Sunni Muslim solidarity in the face of “infidel” aggression. On the other hand, this may have been simultaneously a subtle reinforcement on the part of the Mamluks of the notion that they remained the ultimate arbiters of political legitimacy in the Muslim world. It was one
thing, after all, to send frivolous and exotic paraphernalia gathered from various rampaging conquests in southeastern Europe, as the Ottomans did; it was quite another to send a priceless piece of sacred history, from the birthplace of Islam.\textsuperscript{119}

The second noteworthy gift falls in the momentous year of 1453. When the Ottomans conquered Constantinople, Mehmed II sent an embassy bearing the glorious news to the Mamluk sultan, as well as a separate delegation to the Sharif of Mecca—at the time, a client of the Mamluks. The letter to the Sharif states: “We have sent to you personally two thousand florins of pure gold, taken as booty from the conquest, and another seven thousand florins for the poor...in Mecca and Medina” (no. 34). The evidence from the Sharif’s response to Mehmed (no. 37) suggests that the Ottomans had overstamped these gold coins, as he confirms the receipt of “nine thousand new florins with the seal of Mehmed from the spoils of that great city” (\textit{tis‘at al-\textit{alâf aflûriyyât al-jadîda bi l-sikka al-Muhammadiyya min anfâl tilka l-balda l-‘azîma}). The coins were also noted by the Mamluk sultan Inal, who sent Mehmed a letter after the Ottoman convoy left Cairo for Mecca, expressing his hopes that “the florins struck with the excellent new royal seal” (\textit{al-aflûriyyât al-maskûka bi l-sikka l-jayyida l-jadîda l-sultântiyya}) reach their destination safely (see no. 36).

This gift is significant for two reasons. Firstly, by patronizing the Sharif of Mecca—a role reserved for the Mamluks—Mehmed II was overtly staking a claim for the political leadership of the Islamic world, and his decision to send gold coins taken as booty from Constantinople and overstamped with his seal suggests that he saw himself as the heir to both the Islamic and Roman traditions. Secondly, while it is known that Turkish gold florins and ducats—Ottoman replicas of the Venetian originals—had been produced as early as 1425, the mention of an overstamped florin from 1453 in the two letters in Feridun Ahmed Beg’s collection (nos. 34 and 36) is an indication that the Ottoman sultans had begun to put their names on gold coins well before the minting of \textit{sultânîs} began in 1477–78.\textsuperscript{120}

\section*{Future Lines of Inquiry}

Several additional questions can be raised about the corpus of material presented above, and it is worth gesturing towards a few of these issues by way of indicating some other lines of future inquiry. The approach I have adopted has been to parse the corpus according to different gift categories (textiles, metalwork, slaves, animals, etc.), but one would be equally justified in asking whether there were other assumed hierarchies or typologies of gifts, organized according to different qualitative variables or units of worth. In the bureaucracies of these empires, which structured their diplomatic encounters according to elaborate protocols, was the choice of a gift governed by a set of attitudes about its conventional “meaning”? Do any continuities exist between the “meanings” of gifts in this particular context, and gift exchanges from other geographical and chronological contexts?\textsuperscript{121}

The aim of this article has been to reconstruct a preliminary history of gift exchange between two Muslim polities over the course of the long fifteenth century, based on historical sources and chancery documents. Having established a diplomatic chronology and a “skeleton inventory” of gifts exchanged during this period, the incorporation of further sources (particularly from the Ottoman side) could well shed further light on the gift-giving habits and tastes of different rulers, the ways in which diplomatic messages were communicated in the language of gifts, and the availability of various luxury materials in the fifteenth century.

\textit{Department of Near Eastern Languages and Civilizations, Harvard University, Cambridge, Mass.}

\section*{Appendix}

The tables below sort the data gathered from the historical chronicles by date and reign (table 1), level of detail vis-à-vis gift exchanges (table 2), and gift categories (table 3).
Table 1. Diplomatic Envoys Sent by Ottoman and Mamluk Sultans

<table>
<thead>
<tr>
<th></th>
<th>Ottomans</th>
<th># of envoys sent</th>
<th>Mamluks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayezid I</td>
<td>4</td>
<td>0</td>
<td>Barquq</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>Faraj</td>
</tr>
<tr>
<td>Mehmed I</td>
<td>2</td>
<td>1</td>
<td>al-Mu’ayyad Shaykh</td>
</tr>
<tr>
<td>Murad II</td>
<td>8</td>
<td>5</td>
<td>Barsbay</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>Jaqmaq</td>
</tr>
<tr>
<td>Mehmed II</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>Inal</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>3</td>
<td>Sharif of Mecca</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>Qa’it Beg</td>
</tr>
<tr>
<td>Bayezid II</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>Qansawh al-Ghawri</td>
</tr>
<tr>
<td>Selim</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The numbers in this table refer to instances of envoys dispatched by Ottoman and Mamluk courts.

Table 2: Visits and Gift Exchanges

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diplomatic visits</td>
<td>66</td>
</tr>
<tr>
<td>Visits mentioning gifts</td>
<td>36</td>
</tr>
<tr>
<td>Visits with no mention of gifts</td>
<td>30</td>
</tr>
<tr>
<td>Detailed gift exchanges*</td>
<td>27</td>
</tr>
<tr>
<td>Undetailed gift exchanges</td>
<td>11</td>
</tr>
<tr>
<td>Ottoman gift exchanges</td>
<td>23</td>
</tr>
<tr>
<td>Mamluk gift exchanges</td>
<td>16</td>
</tr>
</tbody>
</table>

* A gift exchange is defined as the act of giving one or multiple gifts by one party to another on a single occasion. Note that there may be more than one gift exchange on a single diplomatic visit, if the visiting envoy presents his gift(s) to the sultan and also receives a gift in return.

Table 3. Categories of Gifts Exchanged

<table>
<thead>
<tr>
<th>Gift Type</th>
<th>Ottomans</th>
<th>Mamluks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slaves &amp; Prisoners</td>
<td>(6) ten slaves</td>
<td>(13) slaves</td>
</tr>
<tr>
<td></td>
<td>(9) thirty slaves</td>
<td>(15) two Chandaki slaves</td>
</tr>
<tr>
<td></td>
<td>(13) fifty Rumi slaves, a white eunuch</td>
<td>(43) slaves</td>
</tr>
<tr>
<td></td>
<td>(25) thirty slaves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(27) prisoners, fifty slaves, five slave girls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(28) five Rumi slave girls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(33) prisoners, slaves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(42) slaves, slave girls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(53) twenty-five slaves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(58) head of ‘Ala’ al-Dawla</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(59) head of Qara Khan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(63) forty slaves</td>
<td></td>
</tr>
<tr>
<td>Animals</td>
<td>(6) ten horses</td>
<td>(8) two horses</td>
</tr>
<tr>
<td></td>
<td>(9) birds, beasts of prey</td>
<td>(24) one elephant</td>
</tr>
<tr>
<td></td>
<td>(13) birds, sable, gray squirrel, lynx, fox</td>
<td>(26) three elephants</td>
</tr>
<tr>
<td></td>
<td>(42) camels</td>
<td>(35) three horses, two elephants, one wild ass</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(37) one horse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(43) horses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(46) four prize horses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(60) one elephant</td>
</tr>
</tbody>
</table>

(Table 3 continued on next page)
<table>
<thead>
<tr>
<th>Gift Type</th>
<th>Ottomans</th>
<th>Mamluks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clothing</strong></td>
<td>(9) silk clothes</td>
<td>(26) ten turban cloths, ten garments, four silk kerchiefs, seven kerchiefs, fourteen shawls, seven silk garments, six sa’diyāt/salāriyyāt</td>
</tr>
<tr>
<td></td>
<td>(12) Murad II’s own clothes, silk turban with gold brocade, pure gold cap</td>
<td>(35) thirty-one Alexandrian garments</td>
</tr>
<tr>
<td></td>
<td>(13) twenty velvet garments of European make</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(25) various garments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(28) five crates of plain clothes, five crates of velvet clothes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(53) velvet clothing, garments from Bursa</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(63) tunics of sable, velvet clothes, wool clothes, Ba’albaki clothes,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>brocade gloves</td>
<td></td>
</tr>
<tr>
<td><strong>Carpets</strong></td>
<td></td>
<td>(26) four carpets with gold thread</td>
</tr>
<tr>
<td><strong>Leather</strong></td>
<td></td>
<td>(35) carpets</td>
</tr>
<tr>
<td><strong>Metalwork</strong></td>
<td>(6) two silver cups, ten pieces of silver tableware</td>
<td>(26) twenty-five leather bags</td>
</tr>
<tr>
<td></td>
<td>(28) five crates of silver vessels</td>
<td></td>
</tr>
<tr>
<td><strong>Saddles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Devotional</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gifts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Textiles</strong></td>
<td>(6) ten lengths of broadcloth</td>
<td></td>
</tr>
<tr>
<td>&amp; <strong>Furs</strong></td>
<td>(7) five ṭaqāzāt of Rāmi fabric, three ṭaqāzāt of European fabric, two bundles of Persian fabric</td>
<td>(8) five ṭaqāzāt of Egyptian fabric</td>
</tr>
<tr>
<td></td>
<td>(25) sixty loads of silk, sable, miniver, lynx</td>
<td>(13) fabric</td>
</tr>
<tr>
<td></td>
<td>(27) fabric, silk, velvet</td>
<td>(26) one thousand pieces Alexandrian velvet</td>
</tr>
<tr>
<td></td>
<td>(28) five crates of silk in floral patterns</td>
<td>(35) ten units of damask silk, a red velvet curtain, Alexandrian cloth, velvet or damask silk (kamkhā)</td>
</tr>
<tr>
<td></td>
<td>(33) fabrics</td>
<td>(37) seven ṭaqāzāt of Indian fabrics</td>
</tr>
<tr>
<td></td>
<td>(42) silk fabric</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(53) twenty-five porters bearing loads of lynx, sable, ermine, colored fabric from Samarqand</td>
<td></td>
</tr>
<tr>
<td><strong>Weaponry</strong></td>
<td></td>
<td>(26) two swords (gold and silver), gold ‘ajanāt, steel and silver helmet, two brigandines, horse armor, four axes, bows, golden billhook, (35) gold sword, maces and steel axes, two hauberks, horse armor with red velvet (43) weapons (silāḥ)</td>
</tr>
<tr>
<td><strong>Unguents</strong></td>
<td></td>
<td>(26) balsam oil</td>
</tr>
<tr>
<td><strong>Money</strong></td>
<td>(5) two hundred thousand dinārs</td>
<td>(35) gold coins</td>
</tr>
<tr>
<td></td>
<td>(34) nine thousand gold florins</td>
<td>(65) ten thousand dinārs</td>
</tr>
<tr>
<td><strong>Precious</strong></td>
<td>(42) gold</td>
<td>(43) precious metals, jewels</td>
</tr>
<tr>
<td><strong>Metals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; <strong>Jewels</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Misc.</strong></td>
<td></td>
<td>(8) Indian and Alexandrian wares</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(60) Egyptian wares</td>
</tr>
</tbody>
</table>

The numbers in parentheses refer to the diplomatic visits in which the gifts were exchanged, as enumerated above.
1. Author’s note: This article was originally written as a seminar paper for Professor Gülru Necipoğlu at Harvard University. It was subsequently presented at the Historians of Islamic Art Association Majlis held in New York City in February 2006. I would like to thank Gülru Necipoğlu and others for their valuable comments: David Roxburgh, Stefano Carboni, Ghada Qaddumi, Wheeler Thackston, Marcus Milwright, Jeff Spur, András Riedlmayer, Lutz Ilisch, and Cihan Yüksel, as well as an anonymous reviewer.


8. Ferîdûn Ahmed Beg, Munseë’tû s-selâêtin, 2 vols. (Istanbul, 1848). Ferîdûn Ahmed Beg was the head of the Ottoman chancery during the reign of Murâd III.


10. Taqî al-Dîn Abu ’l-Abbâs Ahmad al-Maqrzî, Kitâb al-Sulûk li-murâ’fat duwal al-mulûk, ed. Muḥammad Muṣṭafâ Ziyâyâ, 2nd ed., 4 vols. (Cairo, 1934–). In some instances, a letter sent by one party may allude to a gift sent by the other party, so it is not always the case that the sender and addressee are always the giver and recipient, respectively.


13. Ibn Iyās, *Badā/righthalfringi/lefthalfring al-zuhūr*, vol. 1, pt. 2., p. 390. Note that Bayezid I was not yet sultan at the time of this visit, which may mean that the envoy was sent by his father, Murad I. See Muslu, “Ottoman–Mamluk Relations,” 34–35 n. 23, for a discussion of an earlier visit by an Ottoman envoy to Cairo in 1366. Muslu argues that it was probably not sent by the Ottomans, as Ibn Iyas, writing 150 years later, thinks, but rather by Orhan, ruler of Menteşe.


15. Ibid., 1:117–18.


20. Ferīdūn A/hdotbelowmed Beg, *Münše/righthalfringātü ‘s-selā/tşdotbelowīn*, 1:145. The term *taqāzāt* would appear to be a measurement of quantity based on the number nine (*dokuz*). The term *fıranji* does not refer specifically to Franks. This fabric may well have been Venetian or Hungarian, or of some other European origin. As Halil İnalcık notes, this gift-laden visit took place prior to Mehmed’s campaign against the Qaramanids, as the Mamluk sultan was considered one of their protectors. See H. İnalcık, *EI2*, s.v. “Mehmed I.”


22. Ibn al-/Sayrafi, *Nuzhat al-nufūs*, 2:466. The letter accompanying this gift (dated 4 Shawwal 822 [24 October 1419]) is in Ferīdūn A/hdotbelowmed Beg, *Münše/righthalfringātü ‘s-selā/tşdotbelowīn*, 1:164–65. The letter informs us that the chief emissary is Khayr al-Din Khalīl Beg but it does not mention the gifts enumerated by Ibn al-/Sayrafi. Note that in an effort to restrict the scope of my study, I have not included robes of honor among the gifts counted, despite their importance and ubiquity in diplomatic protocol.

23. Ferīdūn A/hdotbelowmed Beg, *Münše/righthalfringātü ‘s-selā/tşdotbelowīn*, 1:165–66. This is a short response to the previous letter sent by Mehmed I.

24. Ibn al-/Sayrafi, *Nuzhat al-nufūs*, 3:28. Barsbay’s gifts are described as “wa-qaddama huwa ayydan li ’bn ‘Uthmān ashya’ā min ‘indahu,” which may suggest that Barsbay sent some of his personal belongings. See the exchange of 2 Rabi’ 1/I 831 (21 December 1427), for an example of this type of gift.


26. Ibn al-/Sayrafi, *Nuzhat al-nufūs*, 3:131–32. This visit is also documented in Ibn Taghrībirdī, *History of Egypt*, 18:55, but with no mention of the gifts: “The Sultan held the court service in the Portico Hall of the Palace of Justice of the Citadel; the ambassadors of Murad Beg Ibn ‘Uthman, ruler of Bursa, Adrianople, and other places in Asia Minor, were brought there. It was a mighty cortège, in which there were the emirs, Sultan’s mamluks, the standing army, and others, in accordance with the usual nature of the elaborate arrangements of the service in the Portico Hall, a service that has not been held in that Hall since the days of al-Malik al-Zahir Jaqmaq; those who knew its arrangements have passed away, so that if any king should wish to perform it, it would not be possible for him to do so.”


28. Ibid., 1:197–98. Chandakī probably refers to the city of Heraklion in Crete, which acquired the name Chandak when it was fortified by surrounding trenches (*khandaq* in Arabic) in the tenth century.


30. Ibid., 1:200–201.

31. Ibid., 1:201–2.

32. Ibid., 1:202–3.

33. Ibid., 1:203–5.

34. Ibid., 1:205–6.

35. Ibid., 1:206.


40. This list appears in Ferīdūn A/hdotbelowmed Beg, *Münše/righthalfringātü ‘s-selā/tşdotbelowīn*, 1:214. The letter is dated 20 Dhu ‘l-Hijja 843, i.e., one day before this envoy departed on his journey. The inventory is laid out in grid-fashion, and many of the terms are difficult to decipher. I have compared the list found in the 1848 printed edition of Feridun Ahmed Beg with the 1858 edition, as well as with two manuscripts of the same work (Istanbul, Süleymaniye, Ms. Fatih 4126; Istanbul, Ms. Ragip Paşa 1521). I am grateful for the assistance of Norman Stillman, Wheeler Thackston, Andráas Riedlmayer, and Ghada Qaddumi in helping me to decode some of the specialized vocabulary.


42. For the term *saqqāt*, see Dozy, *Supplément*, for which he gives the definition: “Damasciner–incruster l’or ou l’argent dans le fer ou l’acier.” See also Mayer, *Mamluk Costume*, 44: “The chroniclers make repeated mention of swords damascened with silver (*musqaqata bi-fidda*) or gold…and inscribed, or inlaid with jewels.” The adjective *mührur* remains a mystery.

43. I have found no definitions for the gold-encrusted item in this entry. Given its placement in the grid, it would appear to be some kind of weapon.

44. This is certainly *qarqalāt*, rather than *farfalāt*. A *qarqal* could refer to one of three things: a gown with no sleeves; a cuirass (Dozy, *Supplément*); or a brigandine, on which see Mayer, *Mamluk Costume*, 40: “At the beginning of the fifteenth century the brigandine was called *qarqal*. This is clear from the definition given by Qalqashandi: the *qarqal*-armor is made of iron laminate covered with red and yellow brocade (*dibāj*). Ibn Taghrībirdī made specific mention of brigandines without sleeves.” The name given, Muhammad Kabari, may refer to the artisan.
45. Dozy, *Supplément*, glosses this word as *caparaçons*, a kind of horse armor. In the case of both this gift and the previous one, the presence of proper names may indicate that the artifact was signed.

46. The meaning of this listing is unclear. The term *mismār* can mean a nail or a peg. The manuscripts consulted do not contain alternatives to the printed edition.

47. One potential reading of this entry is *zarkash* (brocade), although the misspelling, coupled with the term *saqqat* (which suggests something made out of metal), renders it unlikely.

48. *Sādhij* means “plain,” or “unornamented”; this may be the term used to distinguish solid, colored cloth from patterned or printed cloth. Thus, this entry would refer to a gift of plain red cloth. Alternatively, and given that this entry comes directly after a listing of ten turban cloths in a rossette pattern, *sādhij* may refer to turban cloths again, indicating that a single, plain red one was also sent.

49. Here again, we have an artifact possibly associated with a craftsman. A *gaws* is a bow, but the term *gaws* is less clear. One manuscript (Ms. Rağıp Paşa 1521) provides the alternate reading *khaṣṣ*, which makes *khamsa* (five) possible, but given that quantities are always provided at the end of each gift entry, this reading is also unlikely.

50. The manuscripts consulted provide a variant for the first word, which looks like the term *tafsīla* (a generic word for “garment”). The second word would appear to be *shāpārī*, so these may have been some kind of Persian garments. An alternate reading would be *shalwār* (trousers). The rest of the description is a mystery.

51. The entry contains a description of two parts of the saddle, the first of which was covered with gold brocade, while the second was made with a large quantity (600 *mithqāls*) of gold. The manuscripts consulted, while containing some slight variants, are not helpful in decoding the description.

52. *A mandīl* is a kind of a scarf, kerchief, or towel. The term *nakh* can refer to a mat, a rug, or a carpet runner, but is more likely to refer here to a kind of silk fabric with gold brocade. See Dozy, *Dictionnaire détaillé*, 221.

53. Here we have seven towels/kerchiefs, followed by a listing of the quantities. The first word is likely to refer here to a kind of silk fabric with gold brocade (see gift no. 26–q). The manuscripts consulted provide no helpful variants.

54. The manuscripts consulted do not provide variants.

55. The first word is likely to be *māsha*, which means “billhook,” a kind of polearm.

56. The final words in this description may refer to the place of origin of this balsam oil.

57. A *fīta* is a shawl or a scarf, and the word *kāfūr* means camphor, which was regularly used as a perfume. These shawls may have been scented with camphor, just as *mandīls* were regularly scented with musk.

58. The term *tafsīla* can refer to garments or pieces of fabric. See Dozy, *Supplément*, s.v. “tafsīla.”

59. The term *sa’diyāt* may actually be *sallāriyyāt* (with a poorly-written ‘āyn, easily mistakable for a lām-ālīf, and a dāl shaped like a rā’). A *sallāriyya* was a short-sleeved coat popular among the Mamluks; see Stillman, *Arab Dress*, 69–70. An alternative reading would be *sa’diyāt*, in which case it might refer to a kind of garment from Yemen, attributed to Sa’id b. al-‘As, a prominent Companion of the Prophet Muhammad. I am grateful to Dr. Ghada Qaddumi for this latter suggestion.

60. Ibn al-Šayrafi, *Nuzhat al-nufūs*, 4:311–12. See also Ibn Iyās, *Badā’i’ al-zuhūr*, 2:247. The prisoners mentioned may have been taken a few months earlier at the famous Battle of Varna, in which the Ottoman army, led by Murad II, defeated a force of European crusaders. While the source says that the prisoners and the gifts were sent by Murad II, the sultan at the time was officially the thirteen-year-old Mehmed II, who would be deposed a year later, before returning to the throne in 1451.

61. Ibn al-Šayrafi, *Nuzhat al-nufūs*, 4:324. This only accounts for twenty of the twenty-five mentioned crates, unless we assume that the slave girls were put in cages as well and presented to the sultan, which seems unlikely. This gift exchange takes place during Mehmed II’s brief first reign (1444–46). See also Ibn Iyās, *Badā’i’ al-zuhūr*, 2:252.


63. Ibid., 19:125.


65. Ibid., 1:266–68.

66. Ibid., 1:237. These prisoners were, according to other sources, high-ranking Byzantine officials.

67. Ibid., 1:240.

68. Ibid., 1:238–39. In cases of ambiguity, I have compared the printed text with three manuscripts of the same work: Istanbul, Suleymaniye, Ms. Fatih 4070, Ms. Fatih 4126; Istanbul, Ms. Rağıp Paşa 1521.

69. The manuscripts consulted provide the variant *sakākīn* (knives) for the sixth word, but otherwise do not help to decipher the rest of the description.

70. This may be a corruption of *kamkhā*; which refers to Damask silk. The ‘āyn-ālīf is an abbreviation signifying a quantity of ten units.

71. The first term is a corruption of *dabābīs* (plural of *dabbūs*, which means “mace”).

72. A *chuqal* is a mail hauberk; see D. Nicolle, *EI2*, s.v. “Silāh.”

73. See n. 44 above.

74. Here is another reference to a golden saddle, with its (?) *bundūs* made of gold brocade (see gift no. 26–q). The manuscripts consulted provide no helpful variants.

75. The word *bunduq* refers to a gold coin minted according to the standard weight of a Venetian ducat. The word that follows it is presumably an abbreviation of quantity.

76. The second word is likely an abbreviation of quantity.

77. The printed edition contains corruptions for this reference and the following one that are clarified by the manuscripts consulted.


79. This may be a symbol equivalent to bestowing upon someone the “keys of the city.”
84. Ibn Iyas, Badā'yi al-zuhūr, 3:94. Ibn Iyas erroneously says that the envoy was sent to Abu Yazid (Bayezid II) rather than Mehmed II; the former did not accede to the throne until 1481.
85. Ibn Tulun, Mushakhat al-khillān, 1:147. This visit may have been the first consolatory exchange between the two sides following the Ottoman–Mamluk War of 1485–91. I have found no records of diplomatic visits for the eighteen years prior to this one.
86. Ibid., 1:154. It is unclear why Ibn Tulun says that the Ottoman envoy “returned to Damascus” (raja'a 'l ilā Dimashq). The use of the term qāsid Ibn 'Uthmān makes it unlikely that this was actually a Mamluk envoy, and would not avoid the problem of his “returning to Damascus” on the way to Istanbul.
87. Ibn Iyas, Badā'yi al-zuhūr, 4:46. The letter carried by this envoy, dated Safar 908 (August 1502), is noted in Feridun Ahmed Beg, Munse'atü 's-selatin, 1:347–49. No gifts are mentioned in the letter.
90. Ibn Iyas, Badā'yi al-zuhūr, 4:122, mentions that Qansawh bestowed a robe of honor on the envoy and outfitted his companions with short-sleeved coats of lynx and sable (wa-albasā jamā'atuhu sallāriyyāt washaq wa-sammār).
93. Ibid., 1:355–56.
94. Ibn Iyas, Badā'yi al-zuhūr, 4:269.
95. Ibid., 4:289. This decision to send an envoy to Selim was made a few days after the arrival in Cairo of Sulayman, the son of Prince Ahmed (Selim’s older brother, who had been Bayezid II’s favorite to replace him on the throne).
96. Ibid., 4:383–84. It is not clear from the description whether this gift included live animals or pelts, although the fact that they are followed by other kinds of fabric would suggest the latter.
98. Ibid., 4:402–4. Ibn Iyas notes that Sultan Qansawh did not order the drums to be beaten or the city to be decorated following the news of this victory, nor was the reason for this lack of celebration known at that time.
99. Ibid., 4:435–36. Ibn Iyas points out that the title used to refer to Qansawh (maqāmum al-ālī), was distinctly less lofty than the one Selim used to refer to himself (maqāmum al-sharif). This, says Ibn Iyas, represented a form of disdain on Selim’s part (wa-hādhā min nar' al-istikkhāf bi 'l-sulţān). The following day brought news of the battle between the forces of ‘Ali b. Shahsawar and ‘Ala’ al-Dawla, and the latter’s defeat and flight.
100. Ibid., 4:445–46.
101. Feridun Ahmed Beg, Munse'atü 's-selatin, 1:411–13. This letter is also mentioned by Ibn Iyas, Badā'yi al-zuhūr, 4:462–63, who describes the scene of disturbance caused by the “gift” of ‘Ala’ al-Dawla’s head. The Ottoman envoy arrived in Cairo on 25 Jumada II 921 (6 August 1515).
102. Feridun Ahmed Beg, Munse'atü 's-selatin, 1:419–21. Note that this letter is dated incorrectly, as the defeat of Qara Khan and the conquest of Diyar Bakr was not complete until 922 (1516): see A. H. de Groot, EI2, s.v. “Koč Hüşär.” This is further corroborated by the statement in the letter that Selim spent the winter at his capital before launching his campaign again in the spring.
104. Ibid., 1:422–23. The date of this letter is almost certainly incorrect, as the undated response from al-Ghaweri suggests that he received the letter in Cairo before departing for Aleppo in May 1516.
105. Ibid., 1:423–24. In this letter, Qansawh strikes a balance between praising Selim for fighting the accursed Safavids and attempting to convince him that they no longer represent a threat. He urges Selim to turn his attention to the west.
106. Ibn Iyas, Badā'yi al-zuhūr, 5:60–61. Selim also sent gifts to the caliph and to some of the umarā'ı.
107. Ibid., 5:60–63. A qintār was equivalent to 100 rāts, a unit of weight that, in northern Syria during the period in question, was roughly equivalent to 2.22 kilograms. See E. Ashtor, EI2, s.v. “Makāyil.” I have not designated the sugar and confectionery as gifts because Selim specifically asked for them.
108. Ibn Iyas, Badā'yi al-zuhūr, 5:63–64. As Ibn Iyas reports, this gift never reached Selim. When Kurdbay arrived in ‘Ayntab, he learned that the sultan had cast Mughulbay in prison and that the Ottoman army had entered Syrian territories and was descending on Malatya. He immediately hurried back to Qansawh to deliver this news.
109. Ibid., 5:68.
110. For a discussion of the difficulty of defining “the boundaries between a written document meant to be read or heard and images or objects meant to be seen or used,” see Grabar, “Shared Culture of Objects,” 116–17.
111. The choice of sources has also had the effect of providing slightly more information about Ottoman gifts. Although all of the chronicles are Mamluk sources, detailed information about gift exchanges tends to make its way into the history books when the envoy is arriving from, rather than setting out for, a foreign court. Incorporating some Ottoman chronicles and the few Mamluk chancery documents that remain might change the overall picture of the corpus.
114. On Murad II’s good relations with the Mamluks, see Muslu, “Ottoman–Mamluk Relations,” 39–41, 117–26. Muslu notes a period of “harmony from 816/1413 to 855/1451…due to the ongoing menace that Shah Rokh, the successor of Timur, posed to both powers.”

115. This, says Ibn Iyas, was a trick designed to turn Qansawh’s thoughts away from war. See Ibn Iyās, Badā’i’i’ al-zuhūr, 5:60–61.

116. Caroline Finkel discusses Ottoman “chicanery” in the build-up to war against the Mamluks, noting that “[d]iplomacy between the great powers of the Middle East was a complicated business. The spies and agents of each—Ottoman, Mamluk, and Safavid—were engaged in an endless game of disseminating propaganda and disinformation in equal measure.” See Caroline Finkel, Osman’s Dream: The History of the Ottoman Empire (New York, 2006), 108.

117. For the trade in Ba’albaki silk, see Dina Rizk Khoury, State and Provincial Society in the Ottoman Empire: Mosul, 1540–1834 (Cambridge, 2002), 34.


119. An “Uthmanic Koran” can be found today in the Pavilion of the Sacred Relics at Topkapı Palace. It was sent as a gift from Egypt to Istanbul by Mehmed Ali Pasha, the governor of Egypt, in the year 1226 (1811); this is not the one from 1440 mentioned by Feridun Ahmed Beg. However, according to the late curator of the Topkapı Palace Museum, Tahsin Öz, there are two copies in the museum that are presumed to have belonged to ‘Uthman. Thus, it is possible that the second one is the copy mentioned in our sources. See Aydan, Sacred Trusts, 91. The Topkapı Palace Museum has been closed for renovations for the past several years and I have not been able to verify the existence or the provenance of this second text.


121. In order to restrict the scope of this study, I have not examined the letters between the Ottomans and the Persians found in Feridun Ahmed Beg’s collection, which might provide a useful basis for comparison. Nor have I investigated Mamluk sources of gift exchange with other powers, such as the Venetians and Florentines.
Among the most striking artifacts of the extraordinary cross-cultural encounters that took place in the fourteenth-century Mongol Empire stretching from China to eastern Europe is an illustrated manuscript from Tabriz on Chinese medicine. The manuscript is the *Tansūqnāma-i Īlkhān dar funūn-i ʿulām-i Khatāʾi* (Treasure Book of the Ilkhans on the Branches of the Chinese Sciences), known as the *Tansūqnāma*. Based on various Chinese medical texts, but produced for readers of Persian, it contains cosmological and medical images unlike any other known images from the Islamic world. Surviving as a unicum, i.e., in only one known manuscript, now in the Süleymaniye Library in Istanbul, it ends with a colophon documenting its completion by the scribe Muhammad b. Ahmad b. Mahmud in 713 (1313) (fig. 1 [figs. 1–30 are grouped together at the end of this article]). It also begins with a preface by Rashid al-Din (d. 1318), from which we know that it was produced at his behest.

Rashid al-Din is one of the most famous figures of medieval Islamic history, and well known as a patron of the arts. He trained as a medical physician, but served as vizier to two Mongol Ilkhanid rulers of the eastern Islamic lands, Ghazan (r. 1295–1304) and Uljaytu (r. 1304–17). In that capacity, he instigated major financial reforms in the Ilkhanid realm. He also wrote a horticultural treatise, and patronized numerous architectural projects, such as those of an entire suburb of Tabriz, including a research hospital and a manuscript workshop. Further, he authored a universal history, *Jāmiʾ al-tawārīkh* (Compendium of Chronicles), and directed its production and distribution in multiple illustrated manuscripts. The production of his universal history is unusually well documented; the work contains paintings striking for their stylistic eclecticism, making it a canonical monument of Islamic arts of the book. Yet Rashid al-Din’s other illustrated work, the *Tansūqnāma*, is hardly known to art historians. The exception that proves the rule is that, in 2007, it was included in the Mongol art exhibition that appeared in Istanbul and Berlin, and was mentioned briefly in the Turkish version of the catalogue for that exhibition, though not in the German one.

A brief description of the manuscript indicates both (a) just how striking it is as an example of the introduction of Chinese visual forms into the Islamic milieu, and (b) that Rashid al-Din did not have it produced as an exotic curiosity, but as a results-oriented project, with the audacious goal of radically transforming Islamic culture through translation. This description paves the way for the main arguments of this article: first, that in fourteenth-century Tabriz, the visual properties of the *Tansūqnāma* did more to position it as an authentic record of Chinese medical traditions than they did to effectively translate those traditions for a new audience in the Islamic world; and, consequently, that in our own time, the *Tansūqnāma* testifies not only to the tremendous breadth of Iran’s encounter with Chinese culture during the Mongol period, but also, and more unusually, to the limits of its depth.

The *Tansūqnāma* begins with Rashid al-Din’s preface, in which he explains and comments on the project as a whole. The main section that follows is a compilation of various texts and commentaries on specific topics in Chinese medicine, many of them illustrated. The images in the main section may be crudely divided into...
cosmological diagrams (figs. 4, 7, and 19) and representations of the body or of parts of the body. The latter include organs (figs. 9–14), the hands, wrists, and full body (figs. 20–22), and the head (fig. 24). Like the text, all are penned in bold strokes. Black ink dominates, while red ink provides contrast. Each appears against a plain ground. Though one would not mistake these for images actually produced in China, they are obviously related to Chinese traditions of cosmological and medical illustration (figs. 5, 6, 8, 15–18, 23, 25, and 26). On the other hand, one is hard pressed to find comparanda for them from the entire history of the arts of the book in the Islamic world.

The highly unusual look of the manuscript is also distinguished by the formal presentation of the text. After the preface, which is in Persian, the main body consists largely of passages translated into Persian from various Chinese medical texts. However, this section also includes several Chinese words and passages that are not translated, but rather phonetically transcribed. The Arabic alphabet (in which Persian is also written) is used for this, with additional shapes to signify Chinese sounds for which Arabic or Persian letters are lacking. Below some of the transcribed Chinese passages, Persian words glossing the Chinese terms are written on the diagonal. Together, the additional shapes for Chinese sounds and the diagonal layout of the Persian glosses give the transcribed passages an unexpected appearance (figs. 27 and 29). This renders any paleographic analysis of the writing problematic; at the same time, it invites engagement with the text at not only a verbal but also a visual level.

With a text including an otherwise unknown system for transcribing Chinese into Persian, and with images lacking obvious comparanda from the Islamic world, the Tansūqnāma is a singular object. Indeed, it has such an odd appearance that the question of its authenticity must be addressed from the outset. In light of Rashid al-Din’s famous stipulation in the endowment deed for his scriptorium, the Tansūqnāma does not appear among the list of titles to be produced there. If this manuscript was produced in Rashid al-Din’s hospital rather than in the scriptorium, it may have been that the specific stipulations regarding paper size did not apply. There are several additional reasons to accept that it is what it says it is. First, what motive would a forger have for producing an object that sticks out from the rest of the history of Persian painting like a sore thumb? Second, both the style of the illuminated roundel at the start of the manuscript (fig. 2) and the quality of the paper on which the manuscript is written are comparable to those in the Compendium of Chronicles (fig. 3). Third, if the Tansūqnāma was not made in Rashid al-Din’s Tabriz, where else could it conceivably have been made? Early fourteenth-century Tabriz was remarkable for its cosmopolitanism and energetically innovative cultural life. At the crossroads of a Mongol world empire stretching from eastern Europe to China, it was a center in which intellectuals, painters, architects, doctors, cooks, missionaries, merchants, bureaucrats, and envoys from throughout Eurasia met. It uniquely offered exactly the confluence of circumstances that could allow the production of this manuscript.

At one level, an initial glance at the visually provocative folios of the manuscript clearly shows that, even within this exceptional context, it represented a bold attempt to challenge cultural boundaries. Indeed, Rashid al-Din’s own explanation of why and how the Tansūqnāma was made invites this interpretation—at least when it comes to intentions. In his preface, Rashid al-Din noted that just as the great Abbasid caliph Harun al-Rashid (r. 786–809) had made Greek knowledge available to Islamic scholars through translation (tarjama) into Arabic, so he, Rashid al-Din, intended to make Chinese knowledge available to Islamic scholars through translation into Persian. To this end, he chose a particularly promising Persian scholar of medicine who had been sent to study Chinese, Safi al-Dawla wa-l-Din. Rashid al-Din would periodically question Safi al-Daula wa-l-Din, not just about Chinese medicine, but, more broadly, about the Chinese language. Rashid al-Din also found “the best of the Chinese doctors here,” Siyū Sha, noting that “no one knows writing better than he.” In addition, he found a good interpreter. He does
the limits of artistic exchange in fourteenth-century Tabriz

not comment on who actually produced the illustrations, but we know from the colophon that the scribe was Muhammad b. Ahmad b. Mahmud. It is not known whether the illustrations were done by any of the above-named members of the team, either separately or collaboratively, or whether additional individuals were brought in specifically to work on the illustrations. What is clear is that the finished manuscript was the result of a team effort. The varied and collectively wide-ranging cultural expertise of the identifiable members within the team demonstrates the degree to which the very decision to attempt this project did challenge cultural boundaries.

But, at another level, the manuscript starts to look much different when we try to assess how far it actually furthered Rashid al-Din’s goal of transforming Islamic culture through translation. In explicitly identifying Harun al-Rashid and the Abbasid translation movement as his models, Rashid al-Din set the bar for his project outrageously high. Just how high will become clear below, when we sketch out an initial comparison between the awkward place that the single Tansūqnāma manuscript occupies within the history of Islamic art and the established position held by the multiple manuscripts of Kitāb Ṣūwar al-kawākib al-thābita (Book of Fixed Stars) by ʿAbd al-Rahman b. ʿUmar al-Sufi (d. 986) within that same history. Considered in Rashid al-Din’s own terms, the Tansūqnāma starts to look less like an effective challenge to cultural boundaries, and more like a demonstration of just how formidable those boundaries can be.

The paradox of the Tansūqnāma, then, is the gap between its great achievement, which was truly impressive, and the extraordinarily ambitious goals that Rashid al-Din articulated for it and of which it fell short. In this article, I focus on that paradox as it played out in the context of the manuscript’s production in early fourteenth-century Tabriz. In a subsequent article, I will delve into the question of how the same paradox frames the manuscript’s anomalous position in the broader history of Islamic manuscript painting. In the current article, I explain that part of the problem, even within the context of fourteenth-century Tabriz, was that although the presentation of images and ideas in this manuscript did depart significantly from the Chinese sources, and even though the direction of that departure was towards the expectations of a new intended audience of medieval Islamic doctors and intellectuals, nonetheless, the degree of departure was not sufficient to make those images and ideas conceptually accessible in their new milieu. Yet ironically, the look of the manuscript conveyed precisely the opposite message: it communicated a promise of access to authentic Chinese knowledge, even as it failed to make that knowledge understandable, thereby marking the limits of effective cultural exchange in the Mongol Empire.

Exactly how accessible the Tansūqnāma did make knowledge of Chinese medicine must, of course, have varied by reader. Considering that the Tansūqnāma was produced by a team whose members brought very distinct knowledge bases to the project, it seems likely that different aspects of the completed manuscript were accessible to the members of that team to varying degrees. In fact, it seems highly unlikely that any single member of the team had the breadth of knowledge that the completed object seems to assume of its readers.

The same is true of scholars who attempt to study the Tansūqnāma today. Just as a full realization of the goal of radical cultural transformation through translation likely eluded Rashid al-Din’s handpicked team in the fourteenth century, so, I suspect, will a full understanding of the Tansūqnāma likely elude modern scholars. But the very characteristics that make the Tansūqnāma inherently difficult to study also make it of great art-historical interest, and they result directly from the boldness that motivated the project. The only way to improve our understanding of this manuscript is for scholars working in different fields to engage with it from different angles.

Like Rashid al-Din, I do not know Chinese. It is both striking and fortuitous that in many cases what was transcribed rather than translated in the Tansūqnāma remains what is transcribed rather than translated in English-language discussions of Chinese cosmology and medicine today, and that several of the diagrams and images also recognizably correspond to those found in that literature. Striking, because it demonstrates how difficult it has remained, over centuries, to translate these terms and diagrams without disrupting the knowledge
systems to which they belong. Fortuitous, because it suggests that my own challenges in studying this manuscript might be oddly parallel to the ones faced by its original audience.

For translations of specific terms from the Chinese imprints, navigation of unfamiliar bibliographic conventions, and references to pertinent articles from Japanese, I have been fortunate to get some targeted help from specialists. But of necessity, I have relied heavily on secondary sources for pertinent information about Chinese medical illustration and medicine. When it comes to several of the transcribed Chinese words in the *Tansūqnāma*, I have been able to access them myself, in a limited way, by sounding them out, noting their context and recognizing that they correspond to Chinese words transcribed into the Roman script in English-language discussions of Chinese cosmology, medicine, and related images. This would obviously be an imperfect method for accessing any kind of text, but particular caution is warranted here, as many translators of Chinese medical texts into English have drawn special attention to the degree to which the same Chinese term can mean very different things in different contexts. Although I have tried to guard against this, the necessarily circuitous nature of my method has no doubt led to some unfortunate oversimplifications concerning the rich and varied history of Chinese medical imagery and medicine.

In other words, though I hope this article may be of interest to sinologists, it is not written from the vantage point of Chinese medicine, cosmology, history, or art history. Rather, it comprises the comments of a historian of Islamic art who sees in the *Tansūqnāma* a rare delineation of the scope of Iranian engagement with Chinese visual culture in the fourteenth century. With singular clarity, this manuscript helps to define not only the tremendous breadth, but also the limits of that engagement. It does this precisely because, as an extraordinarily ambitious project, it confronted the boundaries of what was possible in a way that less ambitious (and therefore more easily accessible) projects did not.

### COMPARING QI TO PERSEUS?

**ARTS OF THE BOOK IN THE GREEK-INTO-ARABIC TRANSLATION MOVEMENT**

To appreciate fully the audacity of Rashid al-Din’s goal, it is helpful to consider a specific example of what he was holding up as a standard of comparison. Al-Sufi’s *Kitāb Šuwar al-kawākib al-thābita*, which was dedicated to the Buyid sultan ‘Adud al-Dawla (d. 983), offers itself as a suitable example. This illustrated book of constellations, initially composed in Arabic and based heavily on Greek astronomy in the tradition of Ptolemy, is seen as a classic of the Greek-into-Arabic translation movement. The images in al-Sufi’s book, as in the *Tansūqnāma*, are of a formal type that we now tend to label, anachronistically, as scientific: visually forthright, with a minimum of narrative elements, and tending towards a diagrammatic clarity often enhanced by something very close to a monochromatic presentation. The Book of the Fixed Stars, then, was to the Greek-into-Arabic translation movement what Rashid al-Din hoped the *Tansūqnāma* would be to the proposed Chinese-into-Persian translation movement. But whereas only one manuscript of the *Tansūqnāma* survives, there are numerous extant manuscripts of the Book of the Fixed Stars. From one manuscript to the next, the images vary perceptibly, but they nonetheless belong together within a recognizable visual tradition that flourished well into the seventeenth century. Moya Carey’s recent work on the closely related images in the astronomical text by al-Sufi’s son shows that the tradition was sufficiently deeply rooted in Islamic visual culture that it could serve as a reference point for the illustration of additional texts.

Nothing comparable happened to the images from the *Tansūqnāma*. It was produced by a small team of experts, all of whom had been handpicked by Rashid al-Din, suggesting that even in early fourteenth-century Tabriz, its audience was quite limited. If we allow the possibility that a handful of other copies may have been made, but have been lost, the fact that the *Tansūqnāma* only survives in one known manuscript shows that whatever status it did achieve within Islamic culture did not rival that of al-Sufi’s Book of the Fixed Stars. While the adage that “absence of evidence is not evidence of absence” is well taken, it does seem that, in this case, relative absence of evidence does constitute evi-
dence of relative absence. That is, although we cannot know how many manuscripts of the Tansūqnāma were ever made, we can see clearly that they were not produced nearly as frequently or as widely as manuscripts of the Book of the Fixed Stars. Further, the Tansūqnāma manuscript itself does not bear the marks of wear and tear that would normally occur over eight centuries of use. The paper and binding are in excellent condition, and the Arabic pagination suggests that only two folios are missing from the original text block.

In a subsequent article, I will delve into this comparison in more detail, exploring how the images in the al-Sufi manuscripts were visually “translated” and how this allowed the work to become established within Islamic arts of the book. But even this brief initial consideration of what Rashid al-Din was holding up as a standard of comparison shows that neither the medical nor the visual legacy of the Tansūqnāma in the Islamic world ever approached what he envisioned. In this respect, it must be admitted that this spectacularly innovative project ultimately failed to bring its instigator’s radically ambitious and clearly stated goal to fruition.

MODERN APPROACHES TO THE TANSŪQNĀMA

This interpretation is somewhat at odds with the bulk of the scholarly bibliography on the Tansūqnāma, which comes from the histories of medicine and science, and tends towards supporting an intellectual agenda laid out by Joseph Needham. In his pioneering and monumental multivolume reference work, Science and Civilisation in China, Needham drew attention to ways in which scientific knowledge can be seen as having disseminated from China to the West. He mentioned the Tansūqnāma in a subchapter that inventories known scientific contacts between the Islamic world and China and India. Needham’s main source for this discussion was a short booklet published in 1939 by Süheyl Ünver that included several of the images from the manuscript, along with Turkish translations of Rashid al-Din’s preface and the detailed table of contents. It is worth noting that although Ünver often wrote about such art-historical topics as calligraphy, miniatures, and marbled papers, he was actually based in the medical history program at Istanbul University. Historians of medicine and science who have written about the Tansūqnāma since Needham have tended to discuss it in terms of the diffusion of Chinese scientific knowledge. Needham’s intellectual legacy is palpable, for example, in the very title of Saburo Miyasita’s article, “A Link in the Westward Transmission of Chinese Anatomy in the Later Middle Ages.”

One also senses it, in a milder form, in a series of articles by Felix Klein-Franke and Zhu Ming, who note that “the dissemination of Chinese medicine to the countries west of China is closely connected with the book named Tansuqnamah.”

Compared with most of the work done within the histories of science and medicine, the few cultural historians who have worked on the Tansūqnāma have been more cautious in their assessment of its impact. Karl Jahn left the whole question of the project’s success aside when he used the preface to the Tansūqnāma as an important source for his article on Rashid al-Din’s attitudes towards Chinese culture, although he did frame his discussion in terms of the irrefutable observation that the effects of Central Asia and the Far East on Iran in the Mongol period lasted for centuries. And although Thomas Allsen’s Culture and Conquest in Mongol Eurasia sports an illustration from the Tansūqnāma on its cover, he was concerned with the manuscript not as a visual object but as a written source in a text-based history of cultural exchange. Allsen noted the Tansūqnāma as one of several examples of how medical knowledge crossed the Mongol Empire. But in a typically prescient aside, he also pointed out that despite exposure to Chinese medicine, “there is little evidence that Muslim or Eastern Christian physicians abandoned or altered the inherited, Galenic theory of medicine.” He urged that future research be undertaken to determine what impact the encounter had on subsequent medicine in Iran, concluding that, “even if these investigations demonstrate that there were no such influences, the effort will not have been in vain since such successful resistance will tell us something important as well.”

There is an art-historical parallel to Allsen’s point. The fact that Chinese medical images were introduced into Iran in the early fourteenth century does not mean that they were conceptually accessible, gained traction, or replaced other modes of medical illustration there. And it is precisely because the Tansūqnāma’s images
did not become an organic part of the history of Islamic medical illustration that one must begin by studying them in reference to the Chinese image traditions to which they are more obviously related.

THE VISUAL SOURCES OF THE TANSŪQNĀMA
AND THE PROBLEMS OF THEIR MATERIAL FORM

The Chinese tradition of medical imagery to which the Tansūqnāma is heir is vast. Just how vast is clear from Catherine Despeux’s article “Visual Representations of the Body in Chinese and Daoist Texts from the Song to the Qing Period (Tenth to Nineteenth Century),” which offers an overview of the full tradition. Two questions then arise. First, which images within that large corpus constitute the most pertinent comparanda? And second, how much can we learn from the comparison? Addressing these questions requires (a) a basic understanding of the characteristic contexts of these images within Chinese books, and (b) some background knowledge of general patterns in the material history of book production and preservation in China.

The images and diagrams from this tradition typically belong within tightly defined text-image units called *tu*. Several of the *tu* are so thoroughly recognizable from one rendering to the next that they can be referred to with the equivalent of proper names. For explanatory purposes, it may be useful to invoke a rough analogy with a well-known text-image unit example from the contemporary visual culture of the United States: “the food pyramid,” which is used to educate the public on dietary recommendations. The Chinese *tu* of relevance to the Tansūqnāma are composed of what we might think of as a highly conventional visual component along with specifically associated textual elements such as captions. In a similar vein, the food pyramid consists of a pyramidal shape with captions labeling its various sections: e.g., the small space at the top is conventionally labeled “fats and sweets,” from which the public is supposed to understand that these should be eaten only in small quantities, whereas the broad space across the bottom is labeled “grains,” implying that they should be the foundation of the daily diet. When two diagrams of similar form are accompanied by different textual labels, they are regarded as different *tu*, and have different names. Or, in terms of our analogy, a formally very similar pyramid accompanied by a different text might be an organizational chart for a specific corporation, in which case it would be simply incorrect to call it “the food pyramid.” Just as the graphic elements were constituent parts of the *tu*, the *tu* were in turn constituent parts of specific books—even as those books were produced in multiple editions, whether in manuscript or in print, from one century or dynasty to the next.

Lucille Chia, a scholar of Chinese printed books who has been particularly interested in the unstable relations between texts and images that can emerge over time, has noted that in the case of printed medical books in particular, “even when later printers of the Yuan [1279–1368] and Ming [1368–1644] claimed to have...added new annotations, they still used the same or similar *tu* as appeared in the Song [960–1279] editions.” Earlier books are often preserved only in later compilations and commentaries.

The starting point for finding appropriate visual comparanda for the Tansūqnāma images is to determine which *tu* were most likely used as sources, and this is therefore how sinologists have proceeded. However, partly because these *tu* are not traditionally classified as art in Chinese historiography, the kinds of sensitivities that art historians are most suited to bring to the discussion have not yet been considered. Specifically, the problem of how material rather than purely conceptual aspects of different renderings of the same *tu* might impact how they look has received minimal attention.

For example, Miyasita’s article includes visually compelling comparisons between the Tansūqnāma images of organs and corresponding Chinese images. Tantalizingly, but misleadingly, Miyasita identifies his Chinese visual comparanda as having come from a Yuan-period edition of a medical treatise that, according to a Chinese tradition rejected by modern scholars, was attributed to the Han dynasty-period (206 B.C.–A.D. 220) author Hua Tuo (d. 208): *Hua Tuo Neizhaotu* (Hua Tuo’s Illuminating Illustrations of Internal Medicine). From an art-historical point of view, the intriguing thing about this reference is that it would seem to suggest that prints of Chinese comparanda for the Tansūqnāma images, or at least the images of the organs, survive in Yuan-period editions—in other words, in editions that date
from roughly the same period as the *Tansūqnāma* itself.

However, my research assistant, Catherine Stuer, was able to determine that Miyasita’s reference to the Yuan edition is a seriously misleading oversimplification. Miyasita mentions that he learned about this edition from an article by the Japanese scholar Kozo Watanabe, who traces the history of the text in question and explains that, despite the Han-dynasty attribution, the work actually dates to about 1095, under the Song.26 But even more importantly for the purposes of the current discussion, he explains that the earliest surviving imprints of this text date from the Ming period—the oldest one from the second half of the fifteenth century.27

To see how such historical elisions can happen within a scholarly bibliography dominated by the histories of medicine and science, it is worth considering the implications of some aspects of Despeux’s highly insightful overview of the relevant tradition of Chinese medical imagery. In that discussion, she shows with subtlety and acuity that in the Chinese context the images are inseparable from the broader medical discourse in which they appear. As part of that larger argument, she describes them as “coded representations, composed of conventional signifying elements.” These representations, she goes on, “are meant to be read, in the same way that one reads a Chinese character” (her emphasis).28

Given that the medical images were both highly conventional and highly integrated into their textual context, I do not dispute that on some level they could be read like a text. But that does not mean that there was no significant change from one material rendering of a conventional image—or as Despeux would have it, coded representation—to the next. Consider that the script, mode, and style of calligraphed, hastily written, or printed words, rendered with different inks on different papers, can have an impact on how those words signify at the visual register of form, even as the same words simultaneously continue to signify at the linguistic register of semantics.29 Likewise, the visual particularities of different renderings of the same conventional image might signify at registers other than the textual. I hasten to point out that Despeux does not say otherwise. Nonetheless, her argument that the representations should be read like texts may be easily construed as support for a manner of thinking about these medical images that has allowed sinologists to discuss Ming-dynasty versions of older images not as later examples of lost images, but as if they were the earlier images themselves.

There are also inherent aspects of the material histories of the books that encourage the tendency of modern scholars to conflate the historical differences between an earlier *tu* and a later rendering of it. Chia notes that within the history of Chinese printed books the fact that an image and its accompanying text were often carved onto the same wood block gave them a tighter relationship than existed in the western printing tradition that utilized moveable type.30 Chia could have extended the point further: it also gave them a tighter relationship than in the medieval Islamic manuscript tradition, where images were often transferred by pounces, and text was separately penned.

Ideally, therefore, the appropriate visual comparanda for the *Tansūqnāma* images would be identifiable not only as the appropriate *tu*, but also as renderings of those *tu* that could have circulated within the Mongol Empire in the early fourteenth century, when China was under the rule of the Yuan dynasty. However, as we shall see, it turns out that unfortunately the only versions of the relevant *tu* that survive are preserved in books produced in the Ming period. On the one hand, the fact that the Chinese comparanda for the *Tansūqnāma* images date from the late fifteenth century at the earliest puts Rashid al-Din’s fourteenth-century Persian book in an oddly seminal position within visual traditions of Chinese medicine.31 On the other hand, it considerably limits the conclusions that we may draw from those comparisons.

Because the *tu* were integral parts of texts, the identification of the appropriate *tu* goes hand in hand with the identification of the textual sources of the *Tansūqnāma*. Fortunately, the problem of identifying them has received, and continues to receive, considerable scholarly attention.

In the late 1990s, Felix Klein-Franke and Zhu Ming pointed out that the transliterated proper noun “wank shū khū” in the *Tansūqnāma* refers not to a title, as Süheyl Ünver had previously concluded,32 but to a
person, Wang Shuhe, the author of the *Mai jing* (Canon of the Pulse), ca. 280. This text was later simplified in verse form into a work called *Mai jue* (Pulse Poem). The later, simplified poem was available in many editions in the Yuan period, and was used as the principal source of the main text of the *Tansūqnāma*. Although Klein-Franke and Zhu Ming were not able to identify which precise edition of the Pulse Poem was used, they focused on a particularly useful point of comparison, the commentary *Mai jue kan wu* (Correction of the Pulse Poem), by the writer Dai Qizong, who was active in the Yuan period. Comparison with this text allowed them to identify additional Chinese sources. Further research on the problem is currently being undertaken by Wang Yidan of the Institute of Iranian Culture Studies at Beijing University. Vivienne Lo of University College London has generously brought to my attention the recent studies on relevant Chinese sources that have been published in Japanese, and advised me that several of the *Tansūqnāma* images must have been based on *tu* in a book by Li Jiong (d. 1269). *Bashiyi nanjing* (Canon of Eighty-One Problems), including its images, is only accessible through the Ming edition of the Taoist Canon, which was published in facsimile in Shanghai in 1925. The Ming edition includes useful comparanda for several of the *Tansūqnāma* images that do not come from the chapter on organs.

The earliest surviving imprints of the visual Chinese comparanda for the *Tansūqnāma* images therefore postdate it by over a century. As an Islamicist who has devoted particular attention to the manner in which the texts and images of the same title change in different manuscripts over time, even as successive generations of scribes continue to defer to the authority of the original author, I cannot help being suspicious about the idea that a volume materially produced in the late fifteenth century can be taken as a reliable source for an eleventh-century image, or even for a fourteenth-century one. But as no Chinese comparanda for the *Tansūqnāma* images survive from the Yuan period, there is no choice but to resort to images that are preserved in Ming-period imprints. In pursuing such comparisons, however, we must be mindful of the fact that we are not actually looking at the same images that served as sources for the *Tansūqnāma* team, but rather at later renderings.

The most important question concerning possible differences between the later Ming renderings and their lost earlier sources pertains to the position of print within the material history of Chinese books. The Ming versions survive in wood-block printed books. Were the works available to the *Tansūqnāma* team also printed books, or were they in manuscript form? The limited available evidence does not permit firm conclusions on this question, but it seems most likely that the team was looking at a combination of printed books and manuscripts.

Although it does not survive, a printed edition of the Taoist Canon did circulate in the Yuan period; it was one of the first publication projects that the Yuan supported. Further, Rashid al-Din was evidently familiar with the Chinese book-printing process and its advantages, which he explained in the preface to the *Tansūqnāma* as well as in the introduction to his History of China. In the former, he says that Chinese books are written with the utmost care on wooden pages (saḥifahā-i chūb), corrected, and then pressed onto very thin sheets of paper. Interestingly, he specifically mentions *naqqāshān* in connection with this process. Jahn interpreted *naqqāshān* in this passage as “painters,” but “engravers” might be a more apt translation. In any case, Rashid al-Din comments that this process allowed the Chinese to produce as many books in a day as would otherwise take a year. He points out that the Chinese method of printing books is an effective form of quality control for works written in the difficult Chinese character system, which few people could master. Allsen notes that Rashid al-Din’s comments “constituted, in their own day, and for some time thereafter, the fullest and most detailed statements about the methods of Chinese printing in any language, including Chinese!”

Given Rashid al-Din’s familiarity with Chinese printed books, and the publication of a printed Yuan edition of the Taoist Canon, it seems likely that some of the older sources available to the *Tansūqnāma* team would have been in wood-block printed form. For example, as discussed earlier, even though the *Neizhaotu* (Illuminating Illustrations of Internal Medicine) falsely attributed to Hua Tuo was actually produced under the Song, it was thought of as a Han-period book. This attribution would have given it special status.
as a book that preserved the wisdom of the ancients, and may have resulted in its inclusion in the Yuan edition of the Taoist Canon. On the other hand, Li Jiong lived in the early Yuan period. In the early fourteenth century, his Bashiyi nanjing may have represented, instead, the latest thinking on medicine from the Chinese sages. There is no evidence that it was printed before the fifteenth century, and it seems more likely to have been available to Rashid al-Din’s team in manuscript form.

Given the probability that at least some of the sources the Tansūqnāma team had at its disposal were wood-block prints, and given Rashid al-Din’s evident appreciation of Chinese wood-block printing, the decision to avoid printing any part of the Tansūqnāma manuscript requires some comment. In the specific case of Rashid al-Din and Ilkhanid Iran, it may be relevant to mention the 1294 attempt to introduce printed currency there, which ended disastrously. The Ilkhan Gaykhatu (r. 1291–95) printed money with both Chinese and Arabic writing and ordered that it be accepted as currency in the Ilkhanid realm. However, the people rejected it and it had to be withdrawn. Rashid al-Din comments that the failure of this paper money in Iran was regrettable. The significant differences between printed money and printed books notwithstanding, Rashid al-Din’s direct remarks on that failed experiment with print in Iran suggest that he may have realized that an entirely penned manuscript would be much more accessible to the intended audience of the Tansūqnāma than either a printed book or a penned manuscript enhanced by wood-block printed images would have been.

As is well known, printing was not widely adopted for Islamic books until very late—starting in the nineteenth century (the products of the few eighteenth-century presses were not widely disseminated). This was not just because calligraphy was considered a great art—as, of course, it was in China. It was also because the task of maintaining the status of any given book, and ensuring its authenticity, was vested in the person and character of the calligrapher. For a medieval Islamic bookish audience, the rendering of both images and text with the pen rather than the wood block conveyed the authority of Chinese tradition, because it highlighted the personal process upon which authenticity depended.

**COSMOLOGICAL DIAGRAMS AND BODILY IMAGES IN THE TANSŪQNĀMA**

The main text of the Tansūqnāma begins on folio 40a, immediately following Rashid al-Din’s preface. It starts with the table of contents, and with mention of the name Wang Shuhe. Since commentaries of ancient canonical texts were a widespread medieval phenomenon throughout Eurasia, Rashid al-Din and his team probably understood what they were translating to be Wang Shuhe’s work, supplemented and improved by the most up-to-date commentary of Chinese doctors. After the table of contents, there follow roughly twelve chapters. Between chapters three and six, the text does not follow the table of contents with precision—that is, no sections specifically identified as chapters four or five appear between those labelled three and six.

All of the diagrams and images evidently based on Chinese tu fall in the first two chapters, the first of which lays out the fundamentals of Chinese cosmology and contains versions of two classic diagrams that conventionally present the underlying cosmological paradigms on which Chinese medicine is based. The subject of the second chapter is identified in Persian as a’zā’i andarūn (interior organs). However, in addition to seven images of organs, the chapter also contains a series of five circular diagrams, four images of the full body, six images of wrists, and one of a head. I will treat first the diagrams that fall in both chapters, and then the images of the body or parts of the body that fall in the second chapter.

**Cosmological diagrams**

In general, the Tansūqnāma team presented the diagrams in a manner that makes them readily identifiable as depictions of Chinese tu. But the degree to which the Tansūqnāma versions remain anchored in Chinese cosmology varies, as is evident in how three paradigmatic diagrams known as the Taiji diagram, the Hetu diagram, and the Wen Wang arrangement of the trigrams, do and do not appear in the Tansūqnāma. In some cases, the Tansūqnāma versions of the diagrams seem, at least initially, to preserve the underlying cosmological paradigms classically expressed by the tu on which they are based. But in other cases, unobtrusive details in the forms or explanations of the diagrams in
the \textit{Tansūqnāma} obscure, or even undermine, their Chinese cosmological roots.

Given the impressive extent to which the \textit{Tansūqnāma} team \textit{did} effectively preserve numerous aspects of Chinese cosmology, we should not necessarily jump to the conclusion that they simply did not understand what they were translating. The paradigms that these diagrams expressed confronted them with a paradoxical challenge. The diagrams were, on the one hand, essential prerequisites for understanding the practical information on Chinese medicine that would follow later in the book. But they were also an uncomfortable fit with even the most flexible Islamic models of revelation and monotheism. While it is entirely possible that the \textit{Tansiqānāma} team as whole, or some of its members, did not understand the diagrams, there is also good reason to posit that aspects of the diagrams or their explanations that most abruptly challenged these foundational cornerstones of medieval Islam may have been deliberately obscured.

The first section of the first chapter covers the five Chinese phases, also sometimes referred to in English as elements: metal, wood, water, fire, and earth. These five are classically understood in terms of how they destroy or generate each other:

Water overcomes fire; fire melts metal; metal—in the form of a knife, for instance—overcomes wood; wood—as in a space—overcomes soil; soil—as in a dike—subdues water.

Water/watering produces plants and trees, that is, wood; wood brings forth fire; fire produces ashes, that is, soil; soil brings forth metal; when heated, metals produce steam, that is, water.\footnote{44}

The \textit{Tansiqānāma} chapter on the five phases begins with a diagram identified by a transcribed label in a circle at the top as “\textit{Taygī},” with no Persian gloss (fig. 4).\footnote{45} This recognizable corresponds to the diagram known in secondary Anglophone literature as the “\textit{Taiji} Diagram,” or the “\textit{Taijītu}” of Zhou Dunyi (d. 1073), a Song-period scholar who left posterity a classic explanation of this diagram. Despeux explains that Taoist texts include a closely related \textit{tu} composed of a formally identical diagram and a different textual explanation, which represents the body.\footnote{46} However, the Persian letters and text in the \textit{Tansūqnāma} confirm that this is not the Taoist version, but the “\textit{Taijītu}” of Zhou Dunyi, whose work was foundational for Neo-Confucianism, which continued to flourish under the Yuan.\footnote{47} Five small, interconnected circles representing the five Chinese phases appear at the center of the diagram. In the \textit{Tansūqnāma}, these are labeled in Persian, with no transcribed Chinese. Water (\textit{āb} and fire (\textit{ātish}) appear at the top, metal (\textit{zar} and wood (\textit{dirakht}) at the bottom, and earth (\textit{khāk}) in the middle. In secondary Anglophone renderings of this diagram today, including one whose Chinese characters have been translated by Robin Wang (fig. 5),\footnote{48} the phases are similarly identified in English translations. Above the five phases, there appears a circle with nested black and white stripes alternating on the right and left sides of the circle. In the \textit{Tansūqnāma}, this is flanked with transcribed and glossed labels. To the right, the red transcription in Arabic letters reads “\textit{yin ming}” [sic]; to the left, “\textit{yang dung}.” \textit{Yin ming} is glossed as “\textit{barādat sukūn}” (“still coldness”); and \textit{yang dung} as “\textit{harārat harākat}” (“moving heat”). In Wang’s presentation of the diagram and accompanying discussion, the corresponding glosses are transcribed and translated as follows: \textit{yinjing} (“\textit{yin} is rest”) (right); and \textit{yagdong} (“\textit{yang} is motion”) (left).\footnote{49} As \textit{yin} is associated with coldness and \textit{yang} with heat, one can see the logic of the Persian gloss, but also the lack of a recognition of \textit{yin} and \textit{yang} as discrete concepts beyond their associations.

The \textit{Tansūqnāma} contains a brief explanation of this diagram on the next page. We read that \textit{Taygi}, \textit{i.e.}, \textit{Taijī}, “is the name of the movement,” which has “nothing greater than it, and before which there was nothing,” and that \textit{yin} and \textit{yang} are the basis of everything useful. The explanation ends with the customary concluding remark, “God knows best.”

It is interesting to compare this rather terse explanation with the classic explanation of the author of the diagram, Zhou Dunyi, which was well known in China in the Yuan period. According to him, \textit{Taijī} is the “supreme ultimate,” from which first \textit{yin} and \textit{yang}, then the five phases, and then everything else are generated in turn:

...The supreme ultimate moves [and] therefore generates \textit{yang}, when movement reaches its extreme, it generates rest. Rest generates \textit{yin}. When rest reaches its extreme, it will return to motion. Motion and rest alter-
nate and become the root of each other. Thus the distinction between yin and yang is made and two forms are established. The transformation of yang with the unity of yin generates water, fire, wood, metal, and soil....Five elements are generated with their own character...their profound unity gives rise to all emergent things....The myriad things engender and renovate, there are boundless changes and infinite transformations.

In a medieval Islamic context in which a Neoplatonic model of creation by emanation was both widely known and highly controversial, it is difficult to imagine that the idea behind the Taiji diagram would not sound very much like a description of creation by emanation. Islamic Neoplatonists held that all of creation had emanated from God, whom they identified with “The Good” in Platonic thought. Indeed, commenting on Zhou Dunyi’s explanation, Fung Yu-lan has noted that, “[s]poken of in this way, the Supreme Ultimate is very much like what Plato called the Idea of the Good, or what Aristotle called God.” Just as the medieval Islamic world had adapted Plato’s model of emanation from “the Good” to a monotheistic framework by equating it with God, the Tansūqnāma team could have explained the Taiji diagram in a manner that adapted it to a model of creation by emanation. To do so would have radically changed the philosophical basis of Zhou Dunyi’s thought, but it might have made sense in an Islamic milieu. Instead, the team seems to have opted for a less radical, but also less accessible explanation. The explication of the Taiji as “the name of the movement” does not directly contradict Zhou Dunyi’s classical explanation. At the same time, the lack of a detailed discussion of the sense in which it is a “movement,” coupled with the comment that it is “that which has nothing greater than it, and before which there was nothing,” seems like an attempt to make the idea of the Taiji palatable in a monotheistic context without equating it with God. But it is difficult to imagine how a cosmological model that evaded any mention of God could have made any sense in a milieu whose unquestioned foundational premise was a monotheistic cosmos.

The next section covers “what is handed down in their books, which they call ‘hū tū shū’; this expression is from a Book of Mathematics (hisāb).” The section begins with the comment that the meaning of hū tū shū “is not known, for the reason that the Chinese also do not know the meaning!” On the next page, the phrase hū tū shū is transcribed in red in the center of a diagram (fig. 7, right page). This diagram is recognizably a version of the tu known as Luoshu, which is also found in a Ming-period imprint of the astrological compilation Tianyuan fawei (Astronomical Phenomena) of the thirteenth-century author Bao Yunlong (fig. 6). The Luoshu diagram is often accompanied by another one, called Hetu, which does not appear in the Tansūqnāma. However, some Song-period scholars complained of historical confusion about the names of these two diagrams. We should not dismiss the possibility that the comment in the Tansūqnāma that the Chinese could not explain the meaning of hū tū shū might have something to do with that confusion or with complaints among Chinese scholars about it.

In the diagram that appears on folio 55b of the Tansūqnāma (fig. 7, right page), clusters of circles surround the phrase hū tū shū from above and below, to the right and left, and diagonally. Persian glosses written in black comment on how many circles should appear where, and associate the different areas of the page with the cardinal directions. At the top, there are nine circles, along with the label “south” (janūb); at the bottom, one circle, and the gloss “north” (shamāl). To the left, three circles are glossed “east” (mashriq). There are also seven circles on the right, but without any gloss. Circles with associated glosses are also found in the corners: four in the top right; six in the bottom right; two in the top left; and eight in the bottom left.

The quantity and placement of these circles do not quite match those of the standard Luoshu diagram, even if we allow that clusters of circles might be arranged in a single row rather than stacked. The top row of circles in the Tansūqnāma might initially suggest that the diagram has been translated into a visual mirror image, but this does not work for either the bottom row, in which the quantities of circles appear in the same rather than the opposite sides, or for the center row, in which the standard Luoshu has five circles in the middle that are entirely missing in the Tansūqnāma version. Also, none of the circles in the Tansūqnāma version of the diagram are filled in, whereas in the standard Luoshu diagram, some are and others not. Though none of these differences causes any confusion in identifying the Luoshu as
the visual source for the Tansūqnāma diagram, the differences are nonetheless significant, as they disconnect the diagram from its significance in Chinese cosmology.

Scholarly and popular discussions of the Luoshu diagram alike agree that it is traditionally associated with a legend that circulated in medieval Chinese commentaries on ancient writings. According to this story, the diagram appeared on the shell of a tortoise that emerged from the Luo River in the time of either the legendary Huangdi (the Yellow Emperor) or the mythical King Yu. The appearance of the Luoshu diagram on the tortoise’s shell is usually associated with the emergence of the Hetu on a dragon horse that came out of the Yellow River.58

Crucially for its subsequent significance in Chinese cosmology, the ancients who studied the Luoshu on the tortoise discovered it to be a mathematical magic square. That is, if one divides the diagram into a 3 x 3 grid, counts the dots in each of the nine resulting areas, and adds them up in any direction, along the horizontals, the verticals, or the diagonals, one gets 15 as follows:

```
4 9 2
3 5 7
8 1 6
```

The magic square has various implications, both mathematical and cosmological. It demonstrates the concept of the mathematical mean, since five, the mean of the numbers one through nine, must be in the middle for the square to work. This is the simplest of the ways in which the diagram may be linked to the five phases. It also depends on the balance between the odd and even numbers, indicated by consistent convention in white and black circles, which also refer to yin (even) and yang (odd). In Chinese cosmology, the magic square therefore further alludes to the balance between yin and yang. Thus, in giving the diagram, the river imparted awareness of addition and subtraction, mathematical means, and odd and even numbers; it thereby also conveyed the principles of two of the fundamental pillars of Chinese cosmology: the five phases and yin and yang.59

The version in the Tansūqnāma, though obviously based on a Luoshu graphic, either obfuscates or misses the magic square and the distinction between odd and even; it also fails to include the crucial (and literally central) number five. In other words, it misses the essential mathematical and cosmological properties of the diagram.

On the next page of the Tansūqnāma, we find an arrangement of circles that shares the peculiarities of the previous diagram but has different words and glosses (fig. 7, left page). The appearance of the two versions on facing pages invites comparison.60 The most striking difference between the two is that in the second version, rather than the phrase /hşdotbelowū tū shū, eight transcribed Chinese words appear in the middle of the page. They are written in red and accompanied by Persian glosses in black. These words are the proper names of the eight Chinese trigrams. In the Tansūqnāma, the standard graphic presentation of the trigrams does not appear until later in the book (fig. 19, right page).61 but before discussing the second of the two peculiar versions of the Luoshu in the Tansūqnāma, it is useful to explain what trigrams are and why they are significant in this context.

Trigrams are so-called because each is a unit consisting of three parallel lines, either solid, representing yang, or broken, representing yin. Eight combinations of three solid or broken lines are possible. The eight trigrams are conventionally arranged in a circle according to two standard configurations, one associated with the Luoshu, the other with the Hetu.62 In either arrangement, the circular motif of the trigrams puts the systems of correspondences central to Chinese cosmological thought into visual form. When the circle of trigrams does appear in the Tansūqnāma (fig. 19), the relative positions of the trigrams follow the organization associated with the Hetu, which is known as the Wen Wang. The presentation of the eight trigrams in the Tansūqnāma may be compared to the Wen Wang arrangement as it appears in a Ming imprint (fig. 8).63 The main difference is that in the traditional Wen Wang presentation, as seen in the Ming imprint, the circle is aligned so that the vertical and horizontal axes of the page are marked by particular trigrams. By contrast, in the Tansūqnāma presentation, the circle is
rotated counterclockwise about 22 degrees, so that it is the spaces between the trigrams, rather than the trigrams themselves, that fall on the vertical and horizontal axes. The dark and light sections in the center of the Tansūqnāma rendering formally follow a convention for representing yin and yang within the trigrams; this is also found in Li Jiong’s Bashiyi nanjing.

Each of the eight possible combinations of solid or broken lines has a proper name, as well as an associated nature, sometimes called an image, which is occasionally used in translations instead of the proper name. Thus, the trigram consisting of a broken line between two solid lines (top in fig. 8) is named “Li”; the nature of the trigram Li is fire, and in some English translations of Chinese texts, this trigram is simply called “Fire.” Further, each trigram signals a set of correspondences between variables including the five phases, the seasons, and parts of the body, as well as colors, family members, yin and yang, and numbers. For example, Kun, whose nature is earth, is represented by three broken lines (upper right in fig. 8). It refers to an association between earth, autumn, and spleen. It is also sometimes associated with beige, mother, mountain, yin, and/or the number two. Each trigram should be understood not as the equivalent of any single term but as a reference to the entire group of corresponding terms.

Although the right to left nature of the script invites readers to start with the right column, I will begin with the left one because it represents the simpler case. The five trigrams listed on the left have natures that are one and the same with the phases with which they are associated; they are glossed by a single word that indicates both simultaneously. Thus, starting at the top of the list, the trigram Kan, transcribed “kān” in red, is accompanied by the black gloss “āb” (water). Li, here “lī,” is glossed “ātish” (fire), while Zhen, here written “tchin,” is glossed “chūb” (wood). Dui, here “dūk,” is associated with metal, and is glossed “zar” (gold). The last of the trigrams listed on the left is Kun, here “kun,” glossed “kīhā” (earth). As there are only five phases but eight trigrams, the natures of the other three trigrams do not correspond to the phases. These three are listed in the right column, with longer Persian glosses that indicate the nature and the phase separately. The nature of the first, Qian, here “kīn,” is heaven, and its phase is metal; it is glossed “āsmān wa zar” (heaven and gold). The nature of the second, Gen, is mountain, and its phase is earth; it is transcribed “kūn”—the same as the transcription for the trigram Kun at the bottom of the left column, but the one in the middle right is identifiable as Gen because of the Persian gloss, “kīhā bar kūh,” which means “earth on mountain.” Finally, the nature of Xun, here “sūn,” is wind, and its phase is wood; it is glossed “chūb, hawā” (wind, wood).

These transcribed trigram names and accompanying glosses were clearly done with great care, but they sit in the middle of a peculiar rendering of the Luoshu diagram that does not present a mathematical magic square. Further, they are completely dissociated from the graphic of the trigrams themselves, and lack even the kind of rudimentary explanation I have given above. In other words, despite the obvious care that went into rendering them, the trigram names and glosses assume so much prior knowledge that it is difficult to imagine how they could have been accessible to a reader in fourteenth-century Tabriz. In China, it went without saying that such things as trigrams existed and had names, natures, and associations. But the fact that people in China accepted these concepts was hardly common knowledge in fourteenth-century Tabriz.
On one level, then, the *Tansūqnāma* seems to be precisely the book that introduces trigrams to medieval Iran; but on another level, it lacks the kind of explanation that could have made that introduction even minimally effective. One really wonders how puzzled the scribe Muhammad b. Ahmad b. Mahmud might have been as he penned the phonetic transcription, or whether the translator providing the gloss wished he knew more about why he was translating those particular words. The inconsistency of the syntax in what we might call the compound glosses in the right column—if “earth on mountain,” then why not also “gold on heaven” and “wood on wind”—suggests a lack of conviction about the relationship between the two terms in each case. Even if, despite the lack of a magic square, the members of the *Tansūqnāma* team engaged in enlightening and clarifying conversations about this diagram, few indeed would have been privy to what was discussed.

The *Tansūqnāma* does not explain how the names of the trigrams that appear in the middle of the *Luoshu* diagram are connected to the diagram as a whole. Such an explanation would have been illuminating for the manuscript’s audience in fourteenth-century Tabriz, because they would not have known that in classical Chinese thought the trigrams were understood to be an implicit part of the mathematical mysteries of the *Luoshu* diagram. From the point of view of Chinese scholarly culture, the derivation of the trigrams from the *Luoshu* was essential, because the trigrams, in expressing systems of correspondence, convey the complexity of fluctuating relations between microcosm and macrocosm, governor and governed, body and environment.

But in the medieval Islamic milieu, it is difficult to imagine how the close link between the trigrams and the *Luoshu* could have been palatable. The idea that systems of correspondence underlay the organization of the cosmos would have been familiar. Such systems, though different in how they mapped relations between clusters of associated materials, planets, directions, and so forth, were well established in Islamic Neoplatonism. But the idea that a dragon horse and a tortoise emerged from ancient rivers to display diagrams that allowed the discovery of great and timeless mysteries? The whole legend must have sounded squamishly close to blasphemy. It could have been heard as coming dangerously close to suggesting that, according to the Chinese, diagrams emerged from rivers as divine revelations.

The problem would not have been the idea of a revelation other than the Koran so much as the claim of a revelation that did not fit the Islamic model of what one was and how it should be revealed. Any revelation that did not conform to that model cast doubt on monotheism, and such doubt was the ultimate blasphemy. Then, as now, Muslims accepted that there were revelations before the Koran, which is positioned in Islam as the final revelation that superseded the earlier ones to the Jews and the Christians. But according to the Islamic model, divine revelations were books, not diagrams; they were delivered through the mouths of prophets, not on the backs of animals; and most importantly, they came from the one and only God worshipped by all the recognized “peoples of the book,” not from rivers.

We need to take this into account when we consider what conclusions we might draw from the mathematical mistakes in the *Tansūqnāma* version of the *Luoshu*. On the one hand, the diagram itself has been visually translated in a manner that renders it mathematically wrong. But on the other hand, there is much evidence that the members of the team paid careful attention to their sources. Much of the information that the *Luoshu* was thought to contain in Chinese cosmology, including the Chinese system of correspondences, the names of the trigrams through which those correspondences can be discussed, and even (later in the manuscript) the arrangement of the trigrams, is carefully preserved in both verbal and visual aspects of the translation. How can this apparent discrepancy be explained?

Perhaps the *Tansūqnāma* team tried to render any possibility of interpreting the *Luoshu* diagram as a revelation of mysteries impossible, while still preserving what emerged from that diagram, i.e., the system of trigrams. But since the *Luoshu* and the *Hetu* diagrams were identified as the ultimate basis of the trigrams in Chinese thought, this would have been a contradictory aim. If the *Luoshu* was not actually a magic square, the whole system of trigrams lacked a solid foundation. Sabotaging the *Luoshu* diagram, while preserving the trigrams, would not have been just a matter of resolving, as the idiom goes, not to throw the baby out with
The visual separation of the organs from the body’s exterior outline may also have been important to how the Tansāqnāma was understood in fourteenth-century Tabriz, but not unambiguously so. A visual interpretation emphasizing the separation of the organs from the body is at odds with the salient point of the chapter within the framework of Chinese medicine, which would have mattered to at least some members of the Tansāqnāma team. That point was to detail the relations between these organs and the rest of the body. With this in mind, it becomes clear that it is also possible to interpret the images of the organs in a manner that emphasizes the relations between them. The Tansāqnāma versions of these images were more open to such interpretations than an initial glance might suggest. But at the same time, they were also more open to alternate interpretations than were their probable Chinese sources.

In order to better understand the ambiguous position of the Tansāqnāma images of the organs within that larger project of relating them to the body as a whole, it is helpful to start by reviewing some basic points about these organs in Chinese medicine, which are paradigmatically termed zang fu organs. Zang and fu, literally “deposits” and “palaces,” are, first and foremost, classifications. Zang organs include the liver, heart, spleen, lungs, and kidneys, as well as, in some sources, the pericardium, which surrounds the heart. Fu organs include the stomach, gall bladder, small intestines, large intestines, and bladder, and sometimes also the “triple burner”—the only organ of Chinese medicine that cannot be identified with an anatomically recognized physical organ. The classification of the organs into these two groups is based on the roles they play with respect to qi, which is understood to move through the body through various channels, establishing important relationships between the organs. The fu organs are hollow: when qi passes into them, they decontaminate it, eliminating impurities. The zang organs, which are solid, retain qi. In addition to being a classification system, then, the concept of zang fu organs charts relationships among the various organs, both to one another and to the rest of the body.

One indicator of the primacy of the total system in defining the individual organs is that each one is said
to correspond to a political office: the roles of officials within the body politic parallel the roles of the organs within the human body. Paul Unschuld has further argued that when the zang fu organs became established in Chinese medicine under the Qin (221–206 B.C.), the political economic system became not just an explanatory rhetorical device, but established the template for conceptualizing the body. He suggests that it was precisely because smelters and saltworks played a central role in the political economy of Qin China that there had to be a corresponding organ—the triple burner—even if that organ could not be physically observed.75

Within the Tansūqnāma, the images that most clearly convey the relationships between the organs are the two at the beginning of the second chapter, which show the mass of interior organs together (fig. 9). But the subsequent images can also be viewed as expressing the same point. Interestingly, although the organs are removed from the external outlines of the body, it would be inaccurate to characterize any of them as completely isolated from the rest of it. With the exception of the diaphragm, all the other organs are shown in groups. And in the image of the diaphragm, the diaphragm muscle appears almost as a stage for the three tubes that rise prominently above it (fig. 11).

At the same time, the differences between the Tansūqnāma images and their Chinese counterparts (exemplified by figs. 15–18) show that connections between the organs and the rest of the body receive comparatively less emphasis in the Tansūqnāma. Two aspects of the images of organs in the book set them apart from the corresponding images found in Chinese imprints in general. First, the Tansūqnāma images of organs have no captions. By contrast, the captions are integral parts of the tu preserved in the Ming imprints of the texts that include them.76 This calls to mind Chia’s observation that Yuan and Ming editions of earlier Song medical texts, even when updated, tended to preserve the pairing of images and captions as part of the same tu.77 Second, the complete cycle of images that belong together in the book is conceived differently in the Tansūqnāma than in the available comparanda from Ming China.

To take up the second point first, the Tansūqnāma team excluded images of organs framed within an exterior outline of the human form. In the Ming editions, however, the images of organs like those in the Tansūqnāma were generally introduced by a representation of a torso and head that contained the zang fu organs (fig. 18).78 Such images are sometimes called “the interior landscape.” They made it quite clear that the zang fu organs were to be seen as parts within the whole. By contrast, the images that are included in the Tansūqnāma version of the cycle are specifically those in which the organs seem to have been excised from the body. Located apart from any external outlines of the corporeal form, these are the images that are more easily viewed outside of the paradigmatic structure of the zang fu system.

The lack of captions in the Tansūqnāma images of the zang fu organs has the same effect. Based on readings of these captions by my research assistant Catherine Stuer, the ones in the Ming imprints are of two types: some are labels, and others explain directional movement. For example, figure 16 includes a central label identifying the heart, as well as captions for the various channels emerging from it, indicating the direction of the flow of qi. The two captions to the upper right of the heart indicate movement upward towards the lungs and the throat, while the pair to the upper left indicate movement downward towards such organs as the stomach and the liver. It is important to note that although the qi channels in this image are related to the circulatory system, the two are not synonymous. Qi channels are defined not so much by the physical structures themselves, as by the connections between different parts of the body subjectively experienced by many patients over time.79

The captions in the Chinese tu, then, function to reinforce the connection between the images of organs and the zang fu system. With these captions lacking in the Tansūqnāma, the connection between the images and the zang fu system is much less clear. It is as if the Tansūqnāma team were trying to pick and choose, perhaps making careful copies of what could easily be seen as anatomical records of how organs look, but leaving out the captions that place them securely within the conceptual framework of the zang fu system. The
viewer is left with much more freedom to interpret the Tansūqnāma organ images as depictions of anatomical structures, rather than as representations of nodes in an interconnected system.

The selective diagonal gloss translations in the Tansūqnāma of words from some Chinese poetic passages but not from others also reveal an attempt to extract information on specific organs that might fit it into a Galenic model of medicine, rather than an effort to engage with the Chinese medical conception of how the organs work together in a system. This point will be further explained below, in the section entitled “The Look of the Text.”

A similar ambiguity appears in the manner in which the zang fu system is treated in the Tansūqnāma text, which does indeed try to explain zang and fu, rendered as shāng or jāng, and fū or shū. It even attempts to describe the organs within the zang fu framework, though with palpable hesitancy. For example, it is noted that “the Chinese sages have given the liver a zang fu name, that is, the Minister of Finance, according to a figure of speech, since the nourishment for all of the organs comes from the liver.”80 Compare this with the following statement from the Huangdi neijing (Inner Canon of Huangdi): “The liver is the general; planning and deliberation have their origin there.”81 The significance of the comparison lies as much in the tone as in the content: the Tansūqnāma text offers an elaborate circumlocution, whereas the Inner Canon of Huangdi offers an uncluttered assertion.

The seventh, eighth, and ninth subchapters build on this somewhat tentative foundation to explain how the human body relates to the larger cosmic system. The circulatory system is compared to the orbits of heavenly bodies and to the movements of earthly bodies of water; the timing of breath is related to the timing of day and night. A series of circular diagrams, possibly unfinished, accompanies these comparisons.

The tenth subchapter is unusual within the context of the manuscript in that it is almost entirely visual. Its six images (figs. 19–21) link the earlier subchapters with subsequent ones. The first two echo the circular diagrams of the preceding subchapter, and the rest introduce the image types of wrists and full bodies that also appear in the eleventh, twelfth, and thirteenth subchapters. Just as the images of organs are not framed by the outline of the body, the pictures of full bodies do not include indications of specific organs.

The first image in the tenth subchapter is the diagram of the trigrams explained in the discussion of cosmological diagrams above (fig. 19, right). This is followed on the facing page by a closely related diagram of twelve of the sixty-four possible hexagrams, which are composed of pairs of trigrams (fig. 19, left). The trigrams diagram is introduced by a transcribed Chinese phrase that is not glossed, and by Persian text which reads, “The appearance of the first and the last; increase and decrease; heat and cold.” The only other text in the chapter is the phrase “the explanation of yin and yang,” which introduces the fifth image (fig. 21, right). The detailed table of contents for the main text also suggests that yin and yang are important themes of the subchapter as a whole, describing it as “the explanation of yin and yang (yim yānk), remedies for them, and their manifestations in the body and the hands, in the places of good pulse (nabz).”82

The third image in the tenth subchapter (fig. 20, right) is one of three in the manuscript related by type and proximity, the other two being the fifth image of the tenth subchapter (fig. 21, right) and the first image of the eleventh subchapter (fig. 22, right). All three depict a human figure wearing a short skirt, standing straight with arms extended to the sides, and marked by a clearly demarcated narrow band running vertically down the center. There is no text above the first picture, but the image at the start of the eleventh subchapter is introduced by a transcribed Chinese passage, which begins with yin and yang (yim yānk). Occurring on folios 77b, 78b, and 79b, the three standing figures appear in direct succession as one turns the manuscript pages. All three are positioned across from the images of hands and wrists found on folios 78a, 79a, and 80a. (In the 1972 facsimile, the printed pages are bound in a manner that reverses the a and b sides of the folios in this section,83 but in the manuscript the three successive pairs of images on facing pages actually have standing figures on the right [i.e., the “b” sides of the folios], and hands on the left [i.e., the “a” sides].) The same pairing is also found in the Ming imprint of Li Jiong’s text (fig. 23). Additional images of wrists appear without stand-
ing figures in the twelfth and thirteenth subchapters of the Tansūqnāma, and in subsequent pages of Li Jiong’s text (fig. 26).

All three sets of standing figures paired with hands and wrists in the Tansūqnāma (figs. 20–22) clearly follow several Chinese conventions evident in figures 23 and 26. The posture of each standing figure is defined by a vertical bar that, with its clearly indicated demarcations, resembles a bar graph. Anchored vertically along the axis of the bar, each figure faces straight ahead, the inner legs apparently held tight together under the bar graph and terminating in feet turned out about 45 degrees. Arms extending straight down the sides of the body, ending with wrists turned distinctively outwards to open the palms away from the hips, delimit the outer bounds of these images. The outlines of the Tansūqnāma bodies are notably more plump and less contoured than in the example in the Ming imprint, but without being certain of the stylistic relationship of the Ming image to its early Yuan-period source, it is difficult to conclude much from this difference. In the case of the hands, the similarities can be found not only in the position of the hand and wrist, but also in the manner in which they are rendered. The lower arm and hand rise vertically from the bottom of the page, the inner wrist faces the viewer, and the thumb is slightly opened and the fingers loosely extended to reveal the inside of the palm. Nested, curved lines indicate the nails, the inner joints of the digits, and the folds of the palm. Bars like those found on the bodies here extend along the vertical axis of each wrist. In all, the conventions that these images follow clearly signal their close relationship to Chinese traditions of medical imagery, and separate them from other known depictions of Islamic art.

Yet, as in the case of both the cosmological diagrams and the images of organs considered earlier, the Tansūqnāma renderings of the full bodies and wrists differ from their Chinese counterparts in ways that obscure the cosmographic paradigms upon which their medical relevance depends. To see this, it is useful to begin by considering figure 23, which is the first pairing of body and wrist in the Ming imprint of Li Jiong’s text. There, both the standing body and the wrist are clearly situated within the system of trigrams.

In the Tansūqnāma, the first of the standing bodies paired with wrists, shown in figure 20, may appear in a photograph to be superimposed onto a fading arrangement of hexagrams; and it appears even more that way in the 1972 facsimile edition. However, this is not the case. In fact, the red ink has bled through the paper from the previous page on the other side of the folio (fig. 19). In fact, none of the figures in the sequence are visually located within the trigrams arrangement (figs. 20–22). Likewise, none of the hands and wrists are clearly oriented within the arrangement of trigrams. The wrist implicitly below the hand in figure 20, like that in figure 23, is covered with a circle containing a vertical bar graph and thin, red, horizontal lines bent at the ends. However, in figure 23, this circle is surrounded by text and by the full Wen Wang arrangement of the trigrams. In figure 20, only three of the eight trigrams appear, and though the two on the top are situated according to the Wen Wang arrangement, the one on the bottom is not.

In the Chinese medical tradition, however, the situation of the body and wrists within the framework of the trigrams is critical. This is evident in Paul Unschuld’s discussion of the diagnosis of the condition of the inner organs from the appearance and feel of the wrists, as presented in the Chinese classic Bashiyi nanjing. Unschuld begins his discussion by explaining the system of Five Phases, which details the organs that are most susceptible to harm from external forces. For example, “cold and lung are associated with the phase of metal; hence cold will always harm the lung first.” He then continues the explanation with a pair of diagrams: as here, the first of these shows the full body, facing forward, and the second represents the wrists. He then lays out the implications of how the interior zang fu organs are simultaneously mapped onto the body and onto the system of correspondences theorized in yin, yang, and the five phases. “The fact that the body has an upper half (yang) and a lower half (yin), a left side (yang) and a right side (yin), as well as the location of the lung (top), heart (next to top), spleen (center), liver (next to bottom), and kidneys (bottom), should be reflected in the movement of the influences [qi] through the conduit circuit at any given location.” For example, according to one system, the health of the lung and heart manifests in the yang near the surface of the wrist, the health of
the spleen a bit deeper, and the health of the liver and kidneys in the yin even deeper down, near the bone. Thus, by checking the movement of qi at the wrists, the practitioner should be able to diagnose which organs are the source of illness, and which others may be adversely affected by them. But in order to correctly interpret what he feels at the wrist, the practitioner must be able to understand where it fits within the system of correspondences. It therefore makes perfect sense that the trigrams surround both the full body and the wrist in figure 23. The trigrams, after all, encapsulate the Five Phases systems of correspondence, according to which the health of the zang fu organs can be ascertained by external indications. The Ming imprint of Li Jiong’s text includes one additional paired set of a full standing figure of this type, immediately followed by a wrist: the figure is surrounded by all eight trigrams and the wrist by the four trigrams that mark the top, bottom, left, and right coordinates of the Wen Wang arrangement.

Interestingly, the second of the human figures in the sequence of forward facing figures paired with wrists in the Tansūqnāma (fig. 21) is the closest to the Chinese figure shown in figure 23. The similarities are evident in the delineation of the chest, the thickness of the sash of the cloth around the waist, and the demarcation of dark and light areas of the bar defining the vertical axis of the body. But if these details of form clearly suggest that the Tansūqnāma team paid close attention to their Chinese sources, and thus make the manuscript look convincingly authentic, they do nothing to explain Chinese medicine to the viewer. In figure 21, the only text on the page is, ironically, the word “explanation” (şarḥ) at the upper right-hand corner of the image. While this may mean that this picture is supposed to explain the previous one, or the chapter as a whole, or what trigrams and hexagrams have to do with medicine, the image itself is hardly self-explanatory to an audience lacking the prerequisite knowledge.

Because the trigrams and the hexagrams appear immediately before the sequence of paired sets of standing figures and wrists, they might be said to introduce these paired sets codicologically. But given a complete lack of either verbal or visual explanation as to how the former are supposed to relate to the latter, they cannot be said to introduce them conceptually. The peculiar alignment of the full arrangement of the trigrams in the Tansūqnāma (fig. 19), in which the vertical and horizontal axes intersect with spaces between the trigrams, rather than with the trigrams specifically associated with those directions, makes it even harder to conceptually superimpose the system onto the vertically mapped body.

The first image of the fourteenth subchapter is a head (fig. 24). Whereas there is a marked consistency in the captions that accompany the Ming imprints of the organs, heads similar to the Tansūqnāma head appear within a variety of Chinese medical texts. Wide foreheads below hairlines indicated by short vertical black lines are surmounted by lotus-like crowns. The eyes, nose, cheeks, and pronounced lips on the faces are framed by strong eyebrows, square jaws, and long narrow ears. Images of this type can be found in conjunction with discussions of topics in Chinese medicine ranging from the relationship between the microcosm of the body and the macrocosm of the universe, to an art of diagnosing the complexion by examining its colors and expressions called se diagnosis. Shigehisa Kuriyama has explained that “colors” in this case were understood as much in terms of vibrancy and glow as in terms of hues. Several examples of these faces, whose different diagnostically pertinent zones are identified with captions, appear in the early Ming-period treatise Shenxiang quanbian (Complete Compilation on the Wondrous Art of Physiognomy) (e.g., fig. 25).

The Tansūqnāma image appears in the fourteenth subchapter, which concerns the twelve veins or arteries (‘irq), their names, and their classification as warm, cold, or moderate. The depiction of the head falls at the point in the text that discusses how the six warm veins flow from the head and neck to the extremities. Because the face is presented without captions delineating specific zones, its appearance in this chapter calls attention to the general connection between the head and the circulation system.

This review of the cosmological and bodily images in the Tansūqnāma has shown that to describe these pictures as having an ambiguous relationship with the text would be too simple. At a more fundamental level, these images appear in the context of indefinite relationships between text, image, medical tradition, and underly-
ing paradigms for conceptualizing the body, the cosmos, and the connection between the two. Although we do not have direct access to the Tansūqnāma team’s Chinese sources, later Ming imprints of the likely Yuan materials do provide a good sense of the tradition to which their source images belonged. They also point to how images from an earlier period of the same tradition likely functioned within Chinese medicine and cosmology. The comparison with the Ming imprints reveals both that the Tansūqnāma team clearly put considerable effort into making sure that the images in the manuscript were faithful to their Chinese sources and that at the same time the relevance of Chinese cosmology to the Tansūqnāma images was visually obscured. The nature of the obfuscation eludes description in constructive terms. In and of themselves, these images do not explain Chinese medical traditions, confront them directly, or transform them into an alternative model that made more sense in the Islamic cultural sphere.

It seems therefore most likely that for the majority of viewers—whether in subsequent generations or in early fourteenth-century Tabriz—the primary effect of the images in this section was that they marked the book as an authentic record of Chinese medical knowledge. What the images would have effectively conveyed to that audience, then, was not an understanding of Chinese medicine, but proof of privileged access to authentic Chinese sources.

**THE LOOK OF THE TEXT**

The transcribed Chinese text considered thus far has consisted of terms or proper names. However, the later chapters of the book also include several transcribed poetic passages. These first appear in the untitled text between the third and the sixth chapters, and continue through the twelfth and last chapter. Their basic layout suggests that the Tansūqnāma team heard the poetic rhythm of these passages in terms of the bayt (verse) system of Arabic and Persian poetry, wherein each bayt has a first and a second part. The shortest of the poetic passages, therefore, are written along a single line, with a space between the two parts. If a given verse was too long to be written in this way, it was arranged along two lines of text, with the part analogous to the first half of the bayt starting at the right-justified edge of the page and the part analogous to the second half written on the subsequent line, with a slight indent. In longer poetic sections, the pattern is repeated as necessary (fig. 27).

The transcribed Chinese poetic passages are interesting in two respects. First, they offer us a glimpse of the process of verbal translation and in so doing they help us to better envision the range of levels of access to knowledge of Chinese medicine among the members of the Tansūqnāma team. The lines of poetry thereby lend support to the assumption of the previous section that the images may have been seen differently by different individuals of the team, thus revealing which topics within the Tansūqnāma were considered worth pursuing in more detail in fourteenth-century Tabriz. Second, the distinctive layout of the most fully translated of these passages resonates with that of cross-lingual Korans from the same period. They therefore raise interesting questions about the status of the Chinese text.

The appearance of these passages suggests that the Persian text was written in black first, with space left for the transcribed Chinese lines. The evidence for this comes from the few folios in chapters nine and ten in which transcribed Chinese passages seem to be missing altogether (fig. 28). Next, the transcribed Chinese lines were added in red. Many of them do not seem to have received further attention after the transcribed Chinese was added (fig. 29). Last, in some cases, Persian explanatory glosses were inserted in a small black hand, written on the diagonal under the corresponding transcriptions (fig. 27).

From this we can see which chapters and passages attracted the most interest. These tended to be the passages on topics that resonated with the framework of medical knowledge as it was already established in Islamic medicine. Specifically, most such passages were either on the external manifestation of the pulse or on the organs. Even the specific understandings of what parts of the text pertained to those topics seem to have been viewed through the prism of Islamic rather than Chinese medicine. For example, the eye is not classified as a zang fu organ in the Chinese system and therefore not discussed along with the zang fu organs in the Tansūqnāma. However, the eye was an organ that had long attracted attention in the study of Islamic medicine, and so some Chinese poetic passages concerning
the eye are glossed even though they occur in chapters that were largely left otherwise unglossed. The sections of text between the third and the sixth chapters, as well as chapter six, deal with blood and organs, and with the external places where the pulse manifests. Almost all the poetic passages in these chapters are glossed. Chapters seven through nine treat different qualitative categories of the pulse. Apart from a few poetic sections at the start of the ninth chapter, the other poetic passages in these chapters are not glossed. Chapter ten and the first part of chapter eleven generally treat the diagnosis of fatal disease, and are not glossed, except for specific sections dealing with the locations for feeling different pulses or with the eye. The twelfth chapter addresses pregnancy, the fetus, and nursing, and is glossed sporadically. Looking through which Chinese poetic passages are glossed and which are not, this reader imagines Rashid al-Din quickly flipping through the manuscript after the poetic passages had been added and identifying the places where he wanted more detailed information. Of course, this scenario can neither be proven nor disproven.

The layouts of the transcribed Chinese poetic passages that are glossed with Persian translations are also interesting because they specifically evoke the cross-lingual interpretations of the Koran that were produced in this period (fig. 30). I refer to them as cross-lingual Korans rather than as translations because the revealed Arabic Koran is considered an untranslatable text. The lines in the original language appear in large letters on the horizontal, while the gloss in the target language is written on the diagonal in smaller letters of a contrasting color.

While one would not want to push the comparison too far, the use of this layout in the Tansūqnāma does visually emphasize that something about the Chinese poetic passages retained in transcription was considered untranslatable. To figure out what that something was, it is important to note that the Chinese text of the Tansūqnāma has been altered in a manner that the Arabic text of the Koran has not. In a cross-lingual Koran, the Arabic remains written in Arabic. In the Tansūqnāma, the Chinese characters have been removed, and replaced with a phonetic transcription. The transcription of the Chinese into the Arabic alphabet preserves (albeit imperfectly) the specific sounds of the Chinese language. In the case of the poetic passages, it retains the sound of poetry, which, for Chinese students, served a mnemonic purpose, making it easier for them to remember the Chinese medical texts. But what purpose did it serve for a medieval Islamic audience?

The spoken word, orally conveyed, was generally held in great esteem in medieval Islamic culture. The legal primacy of oral testimony over written evidence is one clear index of this as a general social principle. In the specific world of book learning, the official process by which texts were supposed to be taught also testifies to the importance of the spoken word. Theoretically, a text was not supposed to be copied but rather taken down as a dictation; it was subsequently supposed to be read back to check for accuracy. All of this suggests that, as with the images, the look and format of the transcribed Chinese text became a way to convey the authenticity of the knowledge in the Tansūqnāma.

CONCLUSION

The Tansūqnāma may have been a failure on some level, but if so, what a gloriously bold failure! This is its paradox. Its survival testifies not only to Rashid al-Din’s audacious sense of possibility, and the capacity and gusto for learning of the handpicked experts whom he assigned to it, but also to the inherent difficulty of their project. In one sense, that difficulty arose from the degree to which medieval Islamic medical theory was rooted in Galenic traditions and Chinese medicine was not. But in another, more general sense, it arose from the fact that the visual nature of medical imagery did not by any means imply that it was a universal language; on the contrary, it was only understandable through deeply rooted paradigms of ultimately cosmological thought. The great achievement, and the great failing, of the Tansūqnāma seem to have been one and the same. When Rashid al-Din’s team encountered something that was anathema in a medieval Islamic milieu, or even simply inaccessible, it refrained from radically reinventing it. Instead, the team obscured the difficulty, whether deliberately or by mistake. If the goal was to avoid mis-representing the original sources, the fact that more familiar alternatives were generally not interpolated
into the translation was an achievement. But if the aim was to make Chinese medical knowledge and imagery accessible in a new milieu, the same choice was a failure. For the sake of the latter goal, the problem with the visual translation (and with what little I have been able to learn about the verbal translation) was not that it departed from the Chinese originals too much. Rather, it seems to have been that it departed from them too little. In other words, if we can say with confidence that the Tansūqnāma team visually translated the images from the cosmological paradigms that provided the theoretical underpinnings of Chinese medicine, it is not at all clear that it translated them into any alternative cosmological or medical models that would have been more familiar to its new target audience in a medieval Islamic milieu.

As a gloriously bold failure, the Tansūqnāma complicates the model of an open fourteenth-century Pax Mongolica, in which images across the Mongol Empire easily combined. On the one hand, there is no other context in which we can imagine this manuscript having been made in the first place. Any one of the images in this manuscript, unequivocally evoking Chinese visual traditions, rendered with a pen, and paired with text in the Persian script, visually expresses with instant clarity exactly what was so remarkable about this period. But, on the other hand, the same images show just as clearly that the fact of encounter is not the same as the fact of exchange. The manuscript was produced not because Chinese culture was exotic but because Rashid al-Din wanted to enrich Islamic culture with centuries of Chinese learning. Even so, and even in its highly specialized original milieu among a handpicked team in early fourteenth-century Tabriz, the images probably functioned more as markers of authenticity than as vehicles of cosmological and medical knowledge. So did the look of the text.

Ultimately, the manuscript leaves us with a vivid sense of ambitious aims and formidable odds. Centuries later, the Tansūqnāma compels an exercise of historical imagination: a polymath vizier, a Chinese doctor, a Persian doctor, a translator, a scribe, and possibly an artist, gather in fourteenth-century Tabriz. They do not fully understand the words of one another’s languages, the visual conventions of one another’s images, or the foundational paradigms of one another’s medical traditions—and yet they strive over long years to combine their ultimately incompatible knowledge. Together, they work at the precise limits of artistic exchange in fourteenth-century Tabriz.

Department of Art History,
The University of Chicago
Fig. 1. Colophon. Rashid al-Din, *Tansūqnāma-i Īlkhān dar funūn-i 'ulūm-i Khatā’ī* (Treasure Book of the Ilkhans on the Branches of the Chinese Sciences), Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fol. 261b (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)
Fig. 2. Illuminated roundel. Rashid al-Din, *Tansūqmā-i Īlkhān dar funūn-i 'ulām-i Khatā'i*, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fol. 1a (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)

Fig. 3. Illuminated roundel. Rashid al-Din, *Jāmi’ al-tawārīkh* (Compendium of Chronicles), Tabriz, 1314–15. London, The Nasser D. Khalili Collection of Islamic Art, Ms. 727, fol. 259a (43.5 x 30 cm). (Photo: courtesy of the Khalili Family Trust)
Fig. 4. The “Taygī” Diagram. Rashid al-Din, Tansūqnāma-i Ilkhan dar funūn-i ‘ulūm-i Khatā’, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fol. 53a (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)

Fig. 6. The Luoshu diagram. Tianyuan fawei (Astronomical Phenomena), compiled by Bao Yunlong in the thirteenth century, Ming-dynasty edition, 1457–63. Washington, D.C. The Library of Congress, Chinese Rare Book Collection, Asian Division 79.1. (Photo: courtesy of The Library of Congress)

Fig. 7. Two facing renderings of “hū tū shū,” the right one identified as such. Rashid al-Din, Tansūqnāma-i Īlkhān dar funūn-i ‘ulām-i Khatā’i, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fols. 54b–55a (each full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)
Fig. 8. The eight trigrams according to the Wen Wang arrangement. Zhang Huang, *Tushu bain* (Compendium of Diagrams) (China, 1613), vol. 11, p. 39 (26.3 x 15.5 cm). The University of Chicago Library, East Asian Collection. (Photo: courtesy of the East Asian Collection, the University of Chicago Library)
Fig. 9. The inner organs. Rashid al-Din, *Tansūqānama-i Īlkhān dar funūn-i 'ulūm-i Khatā'i*, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fols. 63b–64a (each full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)

Fig. 10. The heart. Rashid al-Din, *Tansūqānama-i Īlkhān dar funūn-i 'ulūm-i Khatā'i*, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fol. 65b (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)

Fig. 11. The diaphragm. Rashid al-Din, *Tansūqānama-i Īlkhān dar funūn-i 'ulūm-i Khatā'i*, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fol. 66b (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)
Fig. 12. The stomach and the spleen. Rashid al-Din, *Tansūqnāma-i Īlkhān dar funūn-i ‘ulūm-i Khatā‘ī*, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fol. 67b (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)

Fig. 13. The large intestine. Rashid al-Din, *Tansūqnāma-i Īlkhān dar funūn-i ‘ulūm-i Khatā‘ī*, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fol. 68b (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)

Fig. 14. The intestines, the right kidney, and the bladder. Rashid al-Din, *Tansūqnāma-i Īlkhān dar funūn-i ‘ulūm-i Khatā‘ī*, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fol. 71a (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)
Fig. 15. The inner organs. Li Jiong, *Bashi yi nan jing* (Canon of Eighty-One Problems), preserved in the Ming edition of the Taoist Canon, which was published in facsimile as *Dao zang: Wu si ba wu juan* (The Taoist Canon: 5485 Volumes) (Shanghai: Shangwu yinshuguan, 1924–26), vols. 668–70.
Fig. 16. The heart. From the text known as *Hua Tuo Neizhao jing* (Canon of the Inner Reflection by Hua Tuo), as preserved in the *Yangsheng jilan* (Collected Readings of Cultivating Life), China, Ming dynasty, 1513–1620 (14.1 x 23.5 cm). (Photo: courtesy of the Harvard-Yenching Library, Harvard University)

Fig. 17. The diaphragm. From the text known as *Hua Tuo Neizhao jing*, as preserved in the *Yangsheng jilan*, China, Ming dynasty, 1513–1620 (14.1 x 23.5 cm). (Photo: courtesy of the Harvard-Yenching Library, Harvard University)

Fig. 18. The interior organs in the body. From the text known as *Hua Tuo Neizhao jing*, as preserved in the *Yangsheng jilan*, China, Ming dynasty, 1513–1620 (14.1 x 23.5 cm). (Photo: courtesy of the Harvard-Yenching Library, Harvard University)
Fig. 19. The eight trigrams (right), and twelve hexagrams (left). Rashid al-Din, *Tansūqnamā-i Ḩāfīzīn dar funūn-i ʿulūm-i Khatāʾi*, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fols. 76b–77a (each full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)
Fig. 20. Human figure (right) and wrist (left). Rashid al-Din, *Tansūqāma-i Īlkhān dar funūn-i 'ulūm-i Khatā‘i*, Tabriz, 1313. Istanbul, Suleymaniye Library, Ms. Aya Sofya 3596, fols. 77b–78a (each full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Suleymaniye Library)

Fig. 21. Human figure (right) and wrist (left). Rashid al-Din, *Tansūqāma-i Īlkhān dar funūn-i 'ulūm-i Khatā‘i*, Tabriz, 1313. Istanbul, Suleymaniye Library, Ms. Aya Sofya 3596, fols. 78b–79a (each full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Suleymaniye Library)
Fig. 22. Human figure (right) and wrists (left). Rashid al-Din, Hamsānāma-i Ilkhan dar funūn-i ‘ulūm-i Khatā‘, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fols. 79b–80a (each full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)

Fig. 23. Human figure (right) and wrist (left). Li Jiong, Bashiyi nanjing, preserved in the Ming edition of the Taoist Canon, which was published in facsimile as Dao zang: Wu si ba wu juan (Shanghai: Shangwu yinshuguan, 1924–26), vols. 668–70.
Fig. 24. The head. Rashid al-Din, *Tansūqnāma-i Īlkhān dar funūn-i 'ulūm-i Khatāʿī*, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fol. 83a (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)

Fig. 25. Identification of specific areas of the face for physiognomy. From *Shenxiang quanbian* (Complete Compilation on the Wondrous Art of Physiognomy), first compiled by Yuan Zhongche (d. 1458), which is now preserved in a Ming edition in the National Central Library in Taipei, Taiwan. Parts of the Ming edition, including this image, are reproduced in the physiognomy section of the encyclopedia *Gujin tushu jicheng* (Complete Collection of Illustrations and Writings Old and New). This image is reproduced from the edition of that encyclopedia printed in Shanghai by the Gujin tushu jicheng Press in 1884. The image is found in volume 632, or in the fourth facsimile in case 171 of the 1884 encyclopedia.
Fig. 26. Wrist with trigrams, shown next to hexagrams. Li Jiong, Bashiyi nanjing, preserved in the Ming edition of the Taoist Canon, which was published in print as Dao zang: Wu si ba wu juan (Shanghai: Shangwu yinshuguan, 1924–26), vols. 668–70.
Fig. 27. Chinese poetry transcribed in paired lines, with specific terms translated into Persian, and written diagonally below. Rashid al-Din, Tansūqnāma-i Īlkhān dar funūn-i ‘ulām-i Khatā’, Tabriz, 1313. Istanbul, Suleymaniye Library, Ms. Aya Sofya 3596, fol. 146b (full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Suleymaniye Library)
Fig. 28. Unfinished blank passages for transcription of Chinese poetry. Rashid al-Din, Tansūqnāma-i Īlkhān dar funūn-i 'ulūm-i Khatāʾī, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fols. 204b–205a (each full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)

Fig. 29. Chinese poetic passages left unglossed. Rashid al-Din, Tansūqnāma-i Īlkhān dar funūn-i 'ulūm-i Khatāʾī, Tabriz, 1313. Istanbul, Süleymaniye Library, Ms. Aya Sofya 3596, fols. 182b–183a (each full folio 34.2 x 26.4 cm; written area 22.3 x 16.4 cm). (Photo: courtesy of the Süleymaniye Library)
Fig. 30. The cross-lingual Koran of Fars Malik Khatun, Shiraz, 1336–57. London, The Nasser D. Khalili Collection of Islamic Art, Ms. QUR 182, fol. 19b (42.6 x 31 cm). (Photo: courtesy of the Khalili Family Trust)
NOTES

Author’s note. For graciously facilitating research in the collections under their care, I would particularly like to thank Emir Es, Director of the Suleymaniye Library; Nahla Nassar, Curator and Registrar of the Nasser D. Khalili Collection of Islamic Art; Mi Chu, Head of Scholarly Services, Asian Division, Library of Congress; and Raymond Lumi, Librarian for Western Languages, Harvard-Yenching Library, Harvard University. Robin Wang generously provided me with her original rendering of fig. 5. Thanks are also due to Megan Macken, Amanda Rybin, and Sinem Eryilmaz.

This article would not have been possible without the help of several individuals who shared their expertise. I am grateful for the help of Catherine Stuer and Katherine Alexander, my research assistants for this project, and for useful comments from Yuming He and Quincy Ngan. Yuan Zhou, Curator of the East Asian Collections at the Harvard-Yenching Library, helped me to navigate the collections in their care, and, along with Eizaburo Okuizimi, Subject Specialist in Japanese at the Regenstein Library, kindly shared their knowledge with me. I am particularly grateful to Vivienne Lo, a historian of Chinese medicine, now at the Wellcome Trust Centre of University College London, who has also been working on this manuscript. She did a close reading of an earlier draft of this article, and generously shared her knowledge in her very helpful comments.

Unless noted, all transliterations from Persian are my own.

1. Istanbul, Suleymaniye Library, Ms. Aya Sofya 3596. A

2. Unless noted, all transliterations from Persian are my own.


4. Ms. Aya Sofya 3596, fol. 261b; Rashid al-Din Tabib, Tanksuqnamah, 519. All folio numbers given in this article reflect the current order of folios in the manuscript. In some previous studies, scholars identified the folios according to reconstructed sequences, which attempted to account for the two or three folios that seem to be missing. See Tanksuqname-i Ilhan der Fünunu Ulûmu Hatai Mukaddimesi, ed. A. Süheyl Ünver, trans. Baki Gölpınarlı (Istanbul: Milli Mecmua Basımevi, 1939).


8. Ibid., n.p.


11. Ms. Aya Sofya 3596, fol. 4a; Rashid al-Din Tabib, Tanksuqnamah, 7; Jahn, “Rashid al-Din,” 139.


13. Please see the author’s note above.


18. A. Süheyl Ünver, “Esere bir Bakiş” in Ünver, Tanksuqname-i Ilhan der Fünunu Ulu Mu Hatai Mukaddimesi, 10–18. Although they are not referenced in this publication, the manuscript was already known to some other scholars such as Aleksandr A. Dragunov, “A Persian Transcription of Ancient Mandarin,” Bulletin de l’Académie des sciences de l’URSS: Classe des sciences sociales (1931): 359–75.


22. Allsen, Culture and Conquest, 158.


27. Hu Wenhuan, ed., Gezhi congshu (China: Qiantang Hu Shì, Ming Wanli period [between 1573 and 1620]).
20. Hu Wenhuan, ed., Gezhi congshu (China: Qiantang Hu Shì, Ming Wanli period [between 1573 and 1620]).
17. Hu Wenhuan, ed., Gezhi congshu (China: Qiantang Hu Shì, Ming Wanli period [between 1573 and 1620]).
This is based on my research assistant Catherine Stuer’s comparison of captions in imprints in the following Ming collations that include the Huá Tuo Neizhào jìng (Canon of the Inner Reflection by Hua Tuo): (a) the imprints published by Miyasita without publication information, and (b) Yangsheng jílan, China, Ming dynasty, datable to 1513–1620.

88. For another example, see Li Jiong, Bashiyi Nanjing, as published in Dao zàng: Wu si ba wu juan (Shanghai: Shangwu yinshuguan, 1924–26), vols. 668–70.

89. The subchapter also includes an image of a person walking: Ms. Aya Sofya 3596, fol. 83b; Rashid al-Din Ṭabīb, Tanksūqnāmah, 163.

90. This is reproduced from the edition of that encyclopedia printed in Shanghai by the Gujin tushu jichèng. This image is reproduced from the edition of the text referred to in the previous note. In the fourth facsimile in case 171 of the 1884 encyclopedia,-volume 632, or the fifth facsimile in case 171 of the 1884 encyclopedia, the image is found in volume 632, or the sixth facsimile in case 171 of the 1884 encyclopedia, the image is found in volume 632.

91. Parts of this edition of the physiognomy section of the encyclopedia Gujin tushu jichèng. This image is reproduced from the edition of that encyclopedia printed in Shanghai by the Gujin tushu jichèng Press in 1884. The image is found in volume 632, or in the fourth facsimile in case 171 of the 1884 encyclopedia. The relationship of the pagination in the 1972 facsimile to the current order of folios in the manuscript is further complicated by the fact that manuscript folios 57b–58a are not included in the 1972 facsimile, which skips them between pages 113 and 114. The manuscript folios are almost blank, containing only a later inscription.

92. As quoted and translated in Unschuld, Medicine in China, 100.

93. Ms. Aya Sofya 3596, fol. 43b; Rashid al-Din Ṭabīb, Tanksūqnāmah, 86. Kuriyama has convincingly explained that what Chinese physicians felt at the wrist was not only the movement of blood but also the movement of the nervous system, temperature, and degree of moisture. Kuriyama, Expressiveness of the Body, 37–38. Nonetheless, the Persian text refers specifically to pulse.

In the sixteenth-century Ottoman world, state ideology was to a great extent reflected in historians’ perceptions and writings. What affected the historian’s pen was manifested in the brush of the painter/designer (nakkâş) as well. These miniatures sometimes depicted events as they happened but at other times they only echoed how the parties involved wanted those events to be portrayed.

The sultans in particular were concerned about how they and the state would be perceived by others in written and visual form. Since sultans wished to be seen as moral role models for their subjects, they did not want their flaws ever to be revealed. This motivation affected the official historiography considerably. In addition to the sovereign image promoted by statesmen and scholars, the hierarchical nature of the components of the Ottoman state was always deemed of paramount importance and, as a result, the rules needed to maintain this structure were written in the form of legal codes (sing. kânûnnâme) and protocol registers.

Within such a context, the state was party to the formation and maintenance of its political ideology, as were the writer and the painter, with their distinct personal backgrounds and political orientations. The perspectives of these parties have always affected how historical events were recorded. This particular study postulates that miniatures featuring ceremonies were sometimes used as if they were historical records, documenting how these occasions actually unfolded, while at other times they were intended to be visual protocol registers, showing how these events were supposed to have taken place.

Miniatures in Ottoman historical manuscripts are mostly in harmony with the texts they accompany. Upon close examination, we see that the authors of these manuscripts exerted a great effort to narrate events as they occurred and that same effort is also highly apparent in the miniatures. However, it is impossible for a historian or a painter to be totally unbiased. In recording events, official historians made sure that they conformed to the state ideology. Consequently, while examining historical texts, the reader should always consider the possibility that the events in question were chronicled not as they actually happened but as the author believed they were supposed to have occurred in order to reflect and validate state ideology. This point is also valid with respect to the painters of miniatures.

Historical manuscripts from the sixteenth century were mostly written by state officials for the sultans and statesmen. Among such works, Selaniki’s history (Târîh-i Selânikî), written intermittently between 1563 and 1595, is noteworthy, since it was not composed at the behest of those in power but on the inclination of the historian himself, who could then write it as he wished. In a manuscript such as this, we see how a historian’s background might be reflected in the way he narrated events. In such instances, historians were comparatively freer than they were with works for which they had received a royal commission (or ones that they gave to a sultan or statesmen even when they had no official support), since there was no predetermined individual to whom the work at hand was to be presented.
In a careful reading, the influence that a historian’s personal background and political orientation had on the text he was composing can be identified. To illustrate, let us consider the example of Hoca Sa’deddin (d. 1599), who narrated the events that took place during the reign of Sultan Selim I (r. 1512–20). Writing his book based on what he had learned from his father, Hasan Can (d. 1567), who was Selim I’s confidant, Hoca Sa’deddin naturally described what had happened, especially the parts about Selim I, in a way that portrayed the sultan in a positive light. For instance, in order to present Selim as an innocent figure in his accession to the throne, Hoca Sa’deddin says that the sultan’s father, Bayezid II (r. 1481–1512), abdicated on his own accord and was not forced to do so by his son.4 When considering this assertion, a researcher must take Hasan Can’s close relationship with Selim I into consideration. Subsequent historians depicted Selim I’s accession in different ways. Not surprisingly, those who specify Hoca Sa’deddin’s book as their main source present a point of view that favors Selim. In contrast, in his manuscript on the same subject entitled Tabakatu’l-memâlik ve derceatu’l mesâlik (Levels of the Dominions and Grades of the Professions), the lord chancellor (nişâncı) Celalzade (d. 1567) recounts how the janissaries put pressure on Bayezid II to abdicate and how Selim I acceded to the throne only after a struggle.5

Another example of how a historian’s personal background could influence his historical perspective would be the way Şükrî-i Bidlisi (d. after 1530) was affected by his sources when shaping the content of his Selîmnâme (History of Selim), which was completed before 1530 (fig. 1). The events that Şükrî discussed in his book were based on what he had heard from Şehsuvaroğlu ‘Ali Beg (d. 1522), who admired Selim I and was appointed by him to be governor of the province of Dulkadiroğlu. After Şehsuvaroğlu ‘Ali Beg’s death, Şükrî completed his manuscript with the help of Koçi Beg’s account of the reign of Selim I. As one who was raised in the palace and fought beside the sultan in battles, Koçi Beg presented Şükrî with his particular interpretation of Selim’s life story. Thus, like Hoca Sa’deddin, Şükrî portrayed the sultan as having done the best he could, given the circumstances of his reign.6

These manuscripts, which were often written in a literary style laden with emotion, became a way to laud the person to whom they were to be submitted and, within such a context, the identity of the recipient gained significance.7 The parts of these works depicting ceremonies also had an effect on the future structure of the state. For example, in the Kanûnname-i âl-i ‘Osmân (Law Code of the Ottomans), written during the reign of Mehmed II (r. 1453–83), it was stated that dignitaries such as the grand vizier, the chief justice, fiscal officials, the sultan’s instructor, the lord chancellor, guardians, a group of officers (alay begleri), head tasters, salaried müteferrikas (court officials used for public or official missions), and some holders of land grants (zaim), as well as scholars, should kiss the sultan’s hand when coming into his presence. However, according to some other texts composed in a more florid literary style, whoever came before the sultan “became the dust on his feet” or “kissed the ground.”8 Such inconsistencies in describing the rules of protocol were of little consequence when the state was constantly victorious, but...
as it started to lose its power and thus its self-esteem, these matters became increasingly important: the rules governing ceremonies multiplied along with the number of details involved. The situation was the same for the hierarchical rules that gave the state its structure. This growing complexity can be regarded in one of two ways: it either enriched the culture or caused the affairs of state to be slowed down by a growing bureaucracy.

The artists who painted miniatures for historical manuscripts worked in the imperial palace and were as much responsible to the state as the historians were. In comparison with the texts, which take more time to read and evaluate, miniatures can be considered forms of expression that convey their meaning in a much more immediate way.

Historians and artists generally recounted events as they actually happened in addition to indicating how they were supposed to have occurred. That is, they made an effort to narrate and portray scenes exactly as they had transpired, but they also incorporated the precepts of the protocol registers, as if all the rules had actually been followed in the ceremonies depicted. Most importantly, historians never failed to add details portraying those in power in a favorable light before they submitted the texts to them. For similar reasons, there were discrepancies in visual representations of such events. For instance, when depicting accession ceremonies, painters preferred to draw a soldier bowing before the sultan’s throne rather than a statesman kissing the sultan’s hand, one rare example of which we find in the depiction of the enthronement of Ahmed I (r. 1603–17). Had they been more commonplace, in such miniatures the sultan should have been depicted standing up to welcome high-ranking officials such as the grand vizier, the finance officers, the chief justices, and the sheyhulislam. Nevertheless, such miniatures were never painted because the sultans did not wanted to be portrayed in a way that might seem to compromise the image of their sovereignty, that is, standing up to greet their own officials.

Like historians/writers, artists always highlighted their subjects in a way that was consistent with the rules of ceremony and that clearly displayed the hierarchical structure and supremacy of the Ottoman state. For example, the pro-Selim perspective in Şükri’s Selimname is observable in its miniatures as well. In Ottoman sources, Shah Isma’il (d. 1524), the founder of the Safavid state, and his army are criticized for being overconfident and arrogant; according to the Selimname, Shah Isma’il and his soldiers were, in fact, drunken cowards. Şükri takes the artistic license to have even the enemy proclaim Selim’s greatness, when he has Shah Isma’il state that the true sultan was indeed Selim and that he himself was an insignificant figure. Having observed the Ottoman army, Isma’il says: “Osman is the shah of the world. We do not deserve to be called shah.” Ottoman historians delighted in describing events in this way and Şükri was no exception. Neither were the painters: a miniature depicting the intoxicated state of the Persian soldiers just before the Battle of Çaldıran, which took place on August 23, 1514, shows cupbearers handing Shah Isma’il and his combatants cups of wine.

The same biased attitude on the part of the painters can be seen in the miniature in which Shah Isma’il is depicted observing the Ottoman army (fig. 2). In addition to Sultan Selim and those beside him on horseback, there are four janissaries standing neatly in formation with their guns, thereby underlining the army’s discipline. In this miniature, the viewer immediately perceives the orderliness of the Ottoman army, whereas the stunned and cowardly shah is enveloped by his soldiers, who, except for the attendants, are shown wearing their armor.

HISTORICAL EVENTS AS PORTRAYED IN OTTOMAN MINIATURES

Miniatures depicting historical events generally portray those events as they are described in historical records. For this reason, they have been used as primary sources in various studies.

Şükri’s Selimname, one of the earliest manuscripts to have miniatures depicting historical events, hews very closely to the truth as we know it from other sources in its depiction of episodes from that era. Take, for instance, the miniature depicting the actions of the Ottoman and Persian armies before the Battle of Çaldıran (fig. 2). To the left, we see a Safavid soldier in half-armor and wearing a white turban with a tall, thin, red, pipe-shaped inner cap and a plume in the back; he
is curiously watching the Ottoman army, encamped on the outskirts of a hill. Meanwhile, an Anatolian soldier provides the Safavids with intelligence about the Ottomans. The story relating what is depicted in the miniature is rendered in such a detailed way that even if there were no miniature at all, we would still be able to visualize the scene. The picture portrays exactly what the text describes. Şükri says that the Ottoman troops descended the hill carrying different flagpoles and dressed in various garments: the Mihailoğulları carry a red flag with a golden flagpole, while İsfendiyaroğlu and his attendants wear white garments and carry a green flag; Sinan Pasha and his troops carry flagpoles described as “the best.” When the Rumeli Beylerbeyi, Hasan Pasha, arrives, the Anatolian soldier tells Shah Isma’îl such impressive things about this high-ranking official that Shah Isma’îl puts his finger in his mouth to show his admiration, as well as his so-called regret at having engaged such a formidable and well-organized enemy. In the miniature, too, Shah Isma’îl is depicted putting his finger in his mouth, a typical convention referring to awestruck wonder and bewilderment. Lastly, the text says that Sultan Selim I arrived with red and yellow flags, and the red, green, and white flags on the right side of the miniature are also described as belonging to the sultan.
Another miniature of the same manuscript portrays the Celali revolt (fig. 3). The painting, featuring state forces and rebels, depicts the Anatolian public in 1518. According to the text, after the conquest of Egypt in 1517, a person called Celal from the Bozok tribe gathered a large number of people around him by claiming that he was the Mahdi. Before Ferhad Pasha, who was assigned the mission of suppressing the revolt, managed to reach them, Şehsuvaroğlu ‘Ali Beg caught them in the vicinity of Erzincan. In the miniature, Şehsuvaroğlu and his soldiers are shown fighting the rebels on horseback. The janissary in the forefront represents the state’s official armed forces. In contrast to these soldiers, the rebels are on foot. According to the accompanying text, women also took part in this combat and they, too, are present in the miniature: we see two unarmed women and two children watching the battle with worried eyes. Their presence in the scene effectively conveys the public nature of this movement. The women’s blue and green caftans and headscarves, the upper parts of which resembled a kaşbastı (a tightly tied headband), as well as the children’s short caftans and simple coifs, are representative of the clothing and hairstyle characteristic of Anatolia at the beginning of the sixteenth century.

These two miniatures display the great efforts taken by the painter to portray the reality of the sixteenth-century Ottoman world. Indeed, both miniatures closely reflect the content of the texts with which they were associated.

MINIATURES DEPICTING CEREMONIES

Since sultans and their statesmen attended and actively participated in state ceremonies, there were certain rules that had to be followed in accordance with the hierarchical structure of the Ottoman state.

Official state ceremonies included enthronements, the observance of semiannual bayram (Eid) festivities, and the rituals performed during Imperial Council meetings, which were held four times a week. There were also receptions for statesmen and ambassadors, the sultan’s weekly Friday processions from the palace to the mosque (Cuma selâmlığı), and events marking the departure of the sultan or a commander on a military campaign. Many of these occasions were described in sixteenth-century Ottoman miniatures. Indeed, ceremonies were one of the most important subjects treated in such works.

Of great significance were enthronement ceremonies, which, according to protocol registers, occurred after the throne was placed in front of the Gate of Felicity, namely, the third gate of the Topkapı palace in Istanbul. Invited guests formed a semicircle in front of the sultan, while statesmen waited in the Council Hall until
to and including that of Sultan Selim I,24 which was held in Istanbul in Yenibahçe—since his father, Bayezid II, was still at the Topkapı Palace—in front of the imperial tent. It is evident that the miniature and the accompanying text, which were created at the same time, perfectly conform to one another. In the text, the sultan is said to be in Istanbul, though, as mentioned above, not in the palace but in the imperial tent; the person swearing allegiance to him is an infantry officer (yayabası or solak). There is thus no inconsistency between the text and what we see in the miniature (fig. 4).

In the second volume of the same manuscript, completed in 1587–88, the description of the enthronement ceremony of Sultan Süleyman I (r. 1520–66) is much more realistic, since the sultan was almost the contemporary of the writer and the painter (fig. 5).25 It is, in fact, consistent with the depiction of the enthronement found in ‘Arifi’s Süleymānnāme (History of Süleyman), written in 1558, relatively close to Süleyman’s enthronement in 1520 (fig. 6).26 In both miniatures, the young sultan is seen seated on his throne in front of the Gate of Felicity. Piri Pasha (d. 1532), the grand vizier, appears on the left side of the sultan, at a distance from the viziers standing to the sultan’s right. In a number of miniatures, this highest-ranking official, the most powerful man after the sultan, is clearly featured more prominently than the other figures in the scene. Of all the miniatures from the sixteenth century featuring enthronements, the ones depicting that of Sultan Süleyman I conform most closely to the rules of protocol.

After the death of Selim I, on September 22, 1520, in the vicinity of Çorlu (in northwestern Turkey), his son Süleyman set off from the province of Manisa (in western Turkey) for the palace, arriving there at midnight. Without waiting for the funeral to take place, Grand Vizier Piri Pasha left the coffin in the care of the other officials and quickly headed for Istanbul to attend the enthronement ceremony, as representative of all the statesmen.27 This gesture by Piri Pasha indicates the importance attached to the statesmen’s approval of the new sultan’s rule. In both of the miniatures depicting Sultan Süleyman’s enthronement ceremony (i.e., the ones from the Süleymānnāme and the Hünernāme), we see that the artists painted the scene in accordance with how it was described in the text.
The presence of a soldier bowing before the sultan in each of the enthronement miniatures in the Hünernâme was a deliberate choice that reflected the way both the writer/historian and the painter highlighted state ideology. In fact, we can reach two conclusions from this most vivid representation of Ottoman ceremonial and political structure. Firstly, it indicates that as a symbol of power, the military recognized the sultan’s rule. Secondly, the soldier and the sultan are shown facing each other, a sign of their direct interaction with one another. In each case, in the text describing the event portrayed in the miniature, the accession ceremony is depicted just as the protocol registers say it should have been. The event is recounted by the state, and thus from the state’s perspective.28

The enthronement of Selim II (r. 1566–74) was first narrated in the Nüzhetü esrâ’î’l-âhâr der Sefer-i Szigetvâr (Joyful Chronicle of the Szigetvár Campaign), written by Feridun Ahmed Beg (d. 1581) in 1568 (figs. 7 and 8),29 and then in Seyyid Lokman’s Şehnâme-i Selim Hân (Book of Kings of Sultan Selim),30 written in 1581 (fig. 9), which will be discussed in detail below. In both manuscripts, the individual taking the oath of allegiance is a soldier. The miniature depicting the enthronement of Murad III (r. 1574–95) (fig. 10),31 is, to a great extent, a repetition of the one showing the ceremony for his father in the Şehnâme-i Selim Hân (fig. 9):32 we see the grand vizier standing apart from the other viziers, prominently highlighted, as well as a soldier taking his oath of allegiance to the sultan. This time, how-
ever, the ceremony takes place in the second courtyard of the Topkapı palace. The enthronement miniature in the Süleymānnāme, on the other hand, shows a state official or courtier-like müteferrika in front of the sultan (fig. 6). The depiction of the enthronement ceremony of Ahmed I (fig. 11) was conceived differently from the others. In that work, the painter shows the sultan from a broader perspective, in a more spacious area. We see high-ranking officials waiting in a line in front of the Council Hall in the second court. For the first time, the person taking his oath of allegiance before the sultan is a statesman, who kisses his hand (as opposed to a soldier kneeling before him). This innovation indicates that the şehnâme writer (şehnâmeci) Lokman and the artist Nakkaş Osman were no longer working together and demonstrates a new style in depicting the enthronement ceremony. The change also has to do with the fact that the manuscript in which this miniature is painted is not a şehnâme written specifically to praise the sultan.

Another ceremonial activity treated in miniatures was the sultan’s reception of statesmen and envoys in the Chamber of Petitions (‘arz odası). Some of these miniatures show the Imperial Council convening in the palace, and many more depict the councils of the grand vizier and other viziers. Other miniatures show meetings of the Imperial Council being held in the Council Hall, located in the second courtyard of the Topkapı palace, in accordance with what was dictated by the kânûnînâmes. The grand vizier was the head of the Imperial Council and to his right sat the second, third, and fourth viziers, in that order. After the fourth vizier came the lord chancellor (nişâncı), to the left of whom sat the two chief justices and the fiscal officials (defterdâr). The chief of clerks (reisülküttab) and the commander of the Imperial Guard (kapucular kethüdâsı) are depicted standing up and serving them, although they also attended the meetings of the Council.

In portraying these gatherings of the Imperial Council, the painter clearly took protocol into account. Miniatures in Şükri’s Selīmnâme are the earliest known examples that we have showing statesmen sitting in two rows facing each other. Such scenes indicate that the sultan was still in charge of the Imperial Council. It is generally inferred from what is written in the Kânûnînâme-i Âl-i ‘Osmân that sultans ceased heading the Imperial Council’s meetings during the reign of Mehmed II. However, according to the risâle (treatise) of Koçi Beg, written in 1631, sultans stopped leading the Imperial Council after the reign of Sultan Süleyman I.

In many other sultan-centered reception miniatures found in manuscripts written after Şükri’s Selimnâme, Council members are depicted standing (e.g., when visiting the sultan in his throne room or in the Petitions Chamber), again in conformity with the rules of protocol.

A miniature found in the second volume of the Hünernâme depicts a Council meeting and shows us how a painting could portray matters of ceremony not
Fig. 7. The enthronement ceremony of Sultan Selim II. Feridun Ahmed Beg, Nüzhetı esrârı’l-aḫbâr, Çorlu, ca. 1568, Topkapı Palace Museum Library, Ms. H. 1339, fols. 110b–111a. (Photo: Zeynep Tarım Ertuğ, courtesy of the Topkapı Palace Museum Library)

Fig. 8. Detail of fig. 7, “The enthronement ceremony of Sultan Selim II.” Feridun Ahmed Beg, Nüzhetı esrârı’l-aḫbâr, Çorlu, ca. 1568, Topkapı Palace Museum Library, Ms. H. 1339, fol. 110b. (Photo: Zeynep Tarım Ertuğ, courtesy of the Topkapı Palace Museum Library)
conveyed in the accompanying text (fig. 12). Here we see the interrogation of a kadi from Kayseri, about whom people had complained to the Council. The text itself does not tell us about the rules regarding seating arrangements but rather the reason for the complaint against the judge. Instead, the miniature itself functions as a visual protocol register, showing the viewer how a session of the Imperial Council was conducted. At the meeting, held in the Council Hall in the second courtyard of the Topkapı palace, we see the grand vizier sitting just below the Tower of Justice, with three viziers to his right and the lord chancellor a bit more in front. To the grand vizier’s left sit two chief justices and three fiscal officials. The painting thus provides us with information not given in the text. Miniatures depicting the receptions of ambassadors and imperial processions (alay-i hümâyûn) also complement the information given in the accompanying written sources.

We have significantly fewer instances of miniatures illustrating bayram ceremonies in Ottoman times. A miniature showing Osman Pasha’s visit to Murad III is the best example we have of how greetings were exchanged during this type of event (fig. 13). The hierarchical nature of these occasions recalls the rules followed in enthronement ceremonies. Indeed, the Kanûnî-nâme-i Âl-i ‘Osmân says that the bayram ceremony should be regarded as a model for how enthronements are to take place. In fact, the scenes portrayed in both bayram and enthronement miniatures show that both celebrations shared the same features, thus demonstrating that the artist clearly took the rules of protocol into account when painting these ceremonies in miniatures. During both enthronements and bayrams, a group of officials stood in a semicircle facing the sultan, who sat on his throne in front of the Gate of Felicity. In bayram ceremonies, the military band would in front of the colonnade close to the palace kitchen (fig. 13). Another noteworthy detail is that if a prince from abroad, from Iran or the Crimea, for example, happened to be in the palace, he stood just behind and to the right of the sultan. Although enthronement ceremonies are today regarded as more important by most historians who focus on political history, the premium placed on the bayram ceremonies demonstrates that customs deriving from longstanding traditions had more weight than political ceremony.

The sultans’ visits to holy places were also depicted as ceremonial activities. We have very few examples of miniatures showing the rituals performed for princes when they were appointed governor of a province (sançağa çıkmak). This must have been a ceremony to which little or no importance was attached, since each prince was a rival to the sultan. Accordingly, painters probably preferred to downplay rather than celebrate these events.

Funeral ceremonies, on the other hand, did not have a standardized form, though they were held after the enthronement of the new sultan. While there is only one miniature showing Sultan Bayezid’s funeral, Sultan Süleyman’s funeral was depicted in very similar fashion in three different manuscripts (figs. 14 and 15). Another miniature shows the funeral at the Topkapı palace of either Murad III or Selim II.
MINIATURES AS VISUAL PROTOCOL REGISTERS? DEPICTIONS OF THE ENTHRONEMENT OF SELIM II IN BELGRADE

Sixteenth-century Ottoman miniatures featuring ceremonies functioned as protocol registers in the sense that they depicted what was supposed to happen in addition to what actually happened. We find the most striking examples of this in miniatures showing the enthronement ceremony of Selim II.

In 1566, Sultan Süleyman went on a campaign to Hungary with his army and his viziers, and besieged the castle of Szigetvár. During this siege, however, he developed an illness and died, upon which Grand Vizier Sokollu Mehmed Pasha (d. 1579) and other members of the Imperial Council notified Prince Selim, who was then governor of Kütahya, that he should come at once to where the army was encamped. Instead, Selim immediately headed for Istanbul, accompanied by his instructor, Hoca Ataullah Efendi, his private tutor, Lala Hüseyin Pasha, and his confidant, Celal Beg, as well as Mirahur Hüsrev Pasha, the master of the sultan’s horse; Ferhad Agha, the agha of the elite imperial cavalry corps (sipahi oğlan); Ömer Agha, the chief of the salaried cavalry corps (ulüfeci-bâşî); and his soldiers and attendants.

According to various historical texts, Selim II was enthroned in the Topkapi palace on 14 Rebiülevvel 974 (September 29, 1566), the very day he came from Kütahya to Istanbul. Among those in attendance were...
the sheyhulislam, Ebussuud Efendi (d. 1574); the guardsman of Istanbul, İskender Pasha; the finance officer of Anatolia, Küçük Hasan Çelebi; and Balkzade ʿAli Çelebi, as well as Ataullah Efendi, Lala Hüseyin Pasha, Celal Beg, and scholars from the Sahn-ı Seman madrasas (the eight elite schools of the Fatih mosque in Istanbul), some of them retired. Sixteenth-century sources do not mention any other details concerning this ceremony.

Three days after ascending the throne, the sultan left Istanbul. Ebussuud Efendi, together with Ahmed Efendi, the kadi of Istanbul, İskender Pasha, and the scholars and notables of the city, saw him off with a ceremony. Two miniatures from the Nüzhetü esrāriʾl-aḥbār depicting Selim’s journey to Belgrade with his men (figs. 16 and 17) are consistent with what is stated in the corresponding text. One painting shows his serious demeanor during this campaign, and also his men’s fatigue. Selim II appears on horseback wearing a red çakşır (a kind of trousers) and a short navy blue campaign caftan. Marching with him are guards (solak) and footmen (peyk) depicted as ceremonial troops. The attendants whom we see behind him are pulling their exhausted horses (fig. 16). In the corresponding text, it is stated that although they intended to march the distance that could be covered within a week, four thousand soldiers could not keep up with this fast pace and failed to continue.

The next miniature in the same manuscript depicts Selim II sitting on a carpet spread on the grass, writing a response to a letter sent by the Grand Vizier and the other viziers (fig. 17). He holds a sheet of paper in one hand and a pencil in the other. To his right stand two aghas from the Privy Chamber (ḥāṣoda), one of whom is a personal servant in the sultan’s retinue (çūkâdâr) and the other a sword bearer (ṣilaḥdâr). To his left, two statesmen wait for him to finish and in the background two grooms hold the reins of the horses.
Selim II sent his reply, which was addressed to Sokollu Mehmed Pasha, with the same courier who had delivered the viziers’ letter. In his response, Selim II hints to the grand vizier that it was not certain whether the latter would be reappointed after the enthronement ceremony. Indeed, the tense relationship between the prince and the grand vizier may have influenced the events that followed. The way in which the subject matter of these two miniatures is portrayed exemplifies how author and painter approached the issues at hand.

Sultan Süleyman’s death and Selim II’s enthronement were described by both Feridun Ahmed Beg and Selaniki Mustafa Efendi, who each witnessed both events. Although the two authors’ versions are more or less consistent with one another, their descriptions of Selim II’s enthronement ceremony in Belgrade are different. Feridun Ahmed Beg, who was Sokollu Mehmed Pasha’s confidant and personal secretary, gives a detailed account of the events leading up to the ceremony but fails to give sufficient information on the enthronement itself. On the other hand, Selaniki Mustafa Efendi, who worked for Feridun Ahmed Beg at the time, provides us with a clear account of everything that occurred. The same occasion is also described in Gelibolulu Mustafa ‘Ali’s Heft meclis (Seven Assemblies), Lokman’s Şehnâme-i Selim Hân and the second volume of his Hünernâme, and Agehi’s Szigetvárnâme (History of the Szigetvár Campaign), but they do not give the same level of detailed information.

After Selim II reached Belgrade, the army, on its way there from Szigetvár, was informed of Sultan Süleyman’s death. Selim II waited in Belgrade for the arrival...
Fig. 13. A bayram ceremony at the Topkapı palace. Seyyid Lokman, Şehînşâhnâme, vol. 2, Istanbul, ca. 1592, Topkapı Palace Museum Library, Ms. B. 200, fols. 159b–160a. (Photo: courtesy of the Topkapı Palace Museum Library)

Fig. 14. The funeral of Sultan Süleyman I. Feridun Ahmed Beg, Nûzhetü esrâ’îl-ahbâr der Sefer-i Sîgetvâr, Çorlu, ca. 1568, Topkapı Palace Museum Library, Ms. H. 1339, fols. 107b–108a. (Photo: Zeynep Tarım Ertuğ, courtesy of the Topkapı Palace Museum Library)
of the deceased sultan’s coffin and the statesmen: a miniature depicts the funeral cortège approaching the city (fig. 15). According to tradition, the enthronement ceremony had to be carried out before the funeral prayers were offered. Sultan Süleyman I’s imperial tent had been sent beforehand and was set up on a spot called the Sultan’s Hill (Hünkâr tepesi) when the funeral procession arrived.

As the army and statesmen approached Belgrade, the grand vizier wrote a letter to Selim II detailing how the enthronement ceremony was supposed to be performed. After explaining that he had ordered canopies, which were to be placed in front of the imperial tent, Sokollu Mehmed Pasha goes on to say that the throne sent from Istanbul had to be set up in front of the tent, between two horsetail banners (sing. tüg). He then continues:

After your accession, the statesmen will bow before the throne. The soldiers will expect you to decree that they will be given accession bonuses and promotions. When you say “Your bonuses and promotions are granted,” then, following tradition, the janissary guardians will lift up their hands and pray for the deceased companions from their ocaş (corps) and all the Ottoman sultans. Then the funeral prayer will be performed and condolences will be accepted. The next day, the Council will be gathered inside and the state dignitaries who come to greet you will be presented with caftans.62

The new throne mentioned in the letter had actually been sent for Sultan Süleyman, but, in light of the circumstances, it was deemed appropriate to use it for the new sultan’s accession ceremony. The guidelines provided by Sokollu Mehmed Pasha were followed in all the enthronements that took place in the sixteenth century. In the ceremony of Selim I, the throne was placed in front of the entrance to the imperial tent known as the Bâbû’s-Sa’âde (Gate of Felicity).

Selim II showed the letter sent by the grand vizier to Ataullah Efendi, Lala Hüseyin Pasha, and Celal Beg, to ask their opinion. These men, all of whom seemed to be uninformed about the protocol, said that the enthronement ceremony was supposed to be performed in Istanbul and that it was not necessary to hold one in Belgrade. They even said, “What would have happened if you hadn’t stayed in Istanbul but had come directly here?” Speaking of the grand vizier in an accusatory tone, Celal Beg reminded the sultan of the saying that “An Ottoman sultan will never accede to the throne without walking under his servants’ swords.” In this section, Selaniki must have mined the rumors coming out of the grand vizier’s immediate circle about the sultan’s “uninformed” advisers. According to Selaniki, the sultan did not take the letter sent by the grand vizier seriously. He left his headquarters and, after looking at the imperial tent opposite him for a while, mounted his horse and sat on the throne that was located in the tent,63 which had just been set up on the Sultan’s Hill under the supervision of the chief gatekeeper (kapıcıbaşı). The head tent setter (otakçıbaşı) was apparently so surprised to see the sultan sitting in the imperial tent complex that he immediately ran to the grand vizier to tell him about the incident. The head tent setter’s astonishment shows us that the sultan’s actions were out of the norm.64 The fact that
Feridun Ahmed Beg asked Sokollu Mehmed Pasha to rectify the situation also proves that the rules of ceremony had been violated. Feridun Ahmed Beg told the grand vizier that even if no enthronement ceremony was to be held, at least that part of the ceremony involving the oath of allegiance should be performed. However, Sokollu Mehmed Pasha, who did not wish to confront the sultan about this, told him that there was no need for the oath of allegiance at that point, since it was not yet known whether he would be reappointed.

That the sultan would ignore state protocol shocked both statesmen and soldiers alike. It can easily be inferred that the sultan should not have entered the imperial tent before the enthronement ceremony was held. Feridun Ahmed Beg’s worries, together with his assertion that “[h]e has already entered the imperial tent but at least the oath ceremony for the military should be carried out after setting the throne in the field,” point directly to the significance of enthronement ceremonies in cementing the relationship between the new sultan and his army.

In his manuscript, Feridun Ahmed Beg does not assert that a throne had been set up in front of the imperial tent. He only writes that after the funeral ceremony, the sultan entered the tent and greeted the statesmen from the throne that had been set up within the tent. If it had not been for Selaniki, who explained how Selim entered the tent even though no ceremony had occurred, Feridun Ahmed Beg’s words could have implied that the enthronement had, in fact, taken place in Belgrade. However, according to the rules of protocol, the sultan’s reception of visitors in the tent did not necessarily mean...
that the enthronement ceremony had occurred. The second stage of the enthronement ceremony involved the sultan greeting the statesmen after they and the soldiers had taken the oath of allegiance. Previously, at the coronation of Selim I, for example, the enthronement ceremony had been held outside the palace, though he welcomed guests inside. Considering that Feridun Ahmed Beg’s text was finished during the reign of Selim II and was submitted to the grand vizier or perhaps the sultan himself, it is quite understandable why he chose to discuss the matter in such ambiguous terms.69 When describing the ceremony held in Istanbul, the same writer noted only that Selim had acceded to the throne and become caliph at an auspicious time.70

Feridun Ahmed Beg’s manuscript must have affected his successors. Basing his argument on an unknown source, Peçevi states in his chronicle that Selim II arrived in Belgrade at midnight and that the accession ceremony was held early the next morning, before the funeral prayer was said. However, in the same book Peçevi also writes that Selim II acceded to the throne in Istanbul on 9 Rebiülevvel (September 24).71 These conflicting bits of information indicate that the writer based his narrative on the assumption that if an event could not be documented, it would be permissible to fill in the blanks in the most appropriate way. ‘Ali, on the other hand, states in his Heft meclis, written around 1569–70, that Selim entered the imperial tent the day he arrived in Belgrade and welcomed the state dignitaries one day after the funeral, in an Imperial Council meeting. This must have referred to the meeting where greetings for the enthronement were extended.72 However, in a book covering only Sultan Süleyman’s campaign in Hungary and his death, the enthronement of Selim II should have been described more extensively.

In the second volume of the Hünernâme, Süleyman I’s death, the arrival of the funeral cortège in Belgrade, and even the pattern on the cloth covering the coffin are all recounted. The statesmen and the army, which had left Szigetvár to go to Belgrade, were notified of Selim’s arrival in Belgrade when they were about to reach the city, whereupon the sultan’s death was announced and the army and the statesmen entered the city as a funeral cortège. The book tells us that after the funeral procession had arrived in Belgrade, Selim II emerged from his imperial tent and, wearing a şemle (a kind of dark blue or dark purple turban) on his head, he shed tears in front of the hearse as a sign of his grief. On the page opposite this text, there is a miniature depicting Selim II in a dark garment standing in front of the hearse, which is covered with a black cloth with gold threads, normally used to cover the Ka‘ba (fig. 15).73 It is noteworthy that while the writer elaborates on other issues, he refers to the accession ceremony by saying only that “he entered the imperial tent.”

An enthronement ceremony in Belgrade that had been planned but not carried out was nevertheless considered done and depicted as such among the other miniatures in Feridun Ahmed Beg’s Nüzhetü esrâ’i‘l-ahbâr (fig. 7).74 This miniature, which is illustrated on two pages, can be regarded as a realistic expression of an event that never took place (since, in an infringement of protocol, the enthronement ceremony had previously been held at the Topkapı palace). In fact, this miniature answers the question “What would the ceremony have been like if it had actually been held?” The reddish imperial tent and the canopies under which the state dignitaries stand show the splendor and richness of the ritual.
Selim II sits on the gem-inlaid throne that was brought from Istanbul and placed just in front of the tent. However, his garb—a red inner robe layered under a white inner caftan and a dark blue outer caftan—does not conform with what other sources say he was wearing when he met the funeral cortège: according to the Tārīḫ-i Sultan Süleyman (Chronicle of Sultan Süleyman), the Hūnernāme, and the Nüzhetī ʿesrāʾīl-ʿabābār, which all cover what happened on that day, Selim was dressed in dark-colored garments when he met the hearse. In view of the fact that these three sources all state that after the funeral prayer he greeted statesmen in this tent while wearing his mourning clothes, it is clear that the miniature depicts how he was supposed to have been dressed for his coronation rather than the actual clothes he wore. The sultan’s personal servant (çuhadar) and swordbearer stand to his left, and in front of and beside them are men from the Privy Chamber. As they watch the ceremony, an infantry officer (solak) bows before the sultan, taking his oath of allegiance, while another one waits his turn. The painter seems to have imagined the ceremony as it would have been carried out had it actually been performed. To the sultan’s right stand four viziers, including the grand vizier, rather than five: it is known that Pertev Pasha, the second vizier, was not in Belgrade, as he had been sent to conquer the castle of Göle (Gyula). To the right of the viziers are the chief justice of Anatolia, the chief justice of Rumelia, a scholar, and other state dignitaries, who stand with their hands folded. In the foreground, we see high-ranking foot guards, who comprise the sultan’s ceremonial troops, and his guards as well. Standing behind the aforementioned figures are two aged soldiers and a soldier holding a pouch, who immediately capture the viewer’s attention. The miniature presents a typical enthronement scene, the clear drawings and vivid colors of the imperial tent and canopies imbuing the image with a sense of liveliness. Selim II’s posture and clothes, together with the viziers’ gestures, turbans, and caftans, further enhance the spectacle (figs. 7 and 8).

We have the names of those statesmen who were with Sultan Süleyman during the Szigetvár campaign and those who accompanied Selim II from Istanbul. We thus know with certainty which dignitaries were present in Belgrade that day and were supposed to attend the ceremony, namely, Sokollu Mehmed Pasha; Third Vizier Ferhad Pasha, who was also the sultan’s son-in-law; Fourth Vizier Ahmed Pasha (also the sultan’s son-in-law); Fifth Vizier Kızılahmedli Mustafa Pasha; Ataullah Efendi; Lala Hüseyin Pasha; Celal Beg; Hamid Efendi, the chief justice of Rumeli; Perviz Efendi, the chief justice of Anatolia; Kızılahmedli Şemsi Ahmed Pasha, the governor-general of Rumeli; Zal Mahmud Pasha, the governor-general of Anatolia; ‘Ali Agha, the agha of the janissaries; and Murad Çelebi, the head finance officer.

The second miniature describing the same scene is located in the Şehnâme-i Selim Hân, which, as mentioned above, was written by Lokman, who was a protégé of Sokollu Mehmed Pasha and Ferhad Ahmed Beg (fig. 9). It is quite obvious that the artist who painted this miniature was inspired by the previous painting from the Nüzhetī ʿesrāʾīl-ʿabābār. Although they completely differ in style, the elements of the scene that the two painters intended to depict are the same. The throne located to the right in the Şehnâme-i Selim Hân miniature is distinct from the one in the former, with its higher, embroidered backrest. Nevertheless, the sultan sitting on it is wearing the same dark blue caftan, as a foot guard bowing before him takes his oath of allegiance. The statesmen attending the ceremony are shown from a wider perspective in this miniature, making the scene seem more crowded. Whereas only four viziers appeared in the former miniature, here five viziers are depicted. Pertev Pasha, who, as mentioned earlier, was most probably not in Belgrade at the time, is included in the picture as if he had actually been there. Sokollu Mehmed Pasha, who was also called Tavil Mehmed Pasha (tavil meaning “tall”) because of his height, can easily be identified as the individual in the forefront in the white caftan. The clothes of the other four viziers are plain in comparison with those of the viziers depicted in the Nüzhetī ʿesrār (figs. 7 and 8). As in that miniature, to the viziers’ right (on the left side of the page) are three men, apparently scholars, wearing outer ceremonial caftans (sing. hilʿat) over their long-sleeved caftans. The first two must have been the chief justice of Anatolia and the chief justice of Rumelia, in which case, the third might have been the sultan’s instructor. With its successful scene composition covering two pages, the miniature features all the characteristics of an enthronement ceremony.
THE DEPICTION OF CEREMONIES IN OTTOMAN MINIATURES

The influence of the *Nüzhetü esrârîl-aḥbâr* on the preparation of the *Şehnâme-i Selim Hân* is observable in the latter’s portrayal of events in the miniatures (fig. 9). However, with its more elaborate, classical, static figures, the painters of the *Şehnâme-i Selim Hân* miniatures seem also to have been concerned with the aesthetic aspect of the scenes being described; the painters who created the miniatures in the *Nüzhetü esrârîl-aḥbâr*, on the other hand, appear to have been more preoccupied with realistically portraying what was described in the text.\(^77\)

THE JANISSARY UPRISING IN ISTANBUL

The disturbances caused by the janissaries when Selim II arrived in Istanbul prove that an accession ceremony such as the one depicted in figures 7 and 9 did not take place. They did not think the enthronement ceremony had been held and were still expecting it to be performed. As a result, when they entered Istanbul with the new sultan, they gathered in the front part of the palace in order to prevent him from entering, thus causing trouble. The first revolts actually broke out even before this, as they were about to enter Istanbul: in expectation of an official declaration from the sultan about their bonuses and promotions, the soldiers shouted, “The enthronement ceremony must be held now!” as they made their way into the city. They wanted the tradition to continue so that they could get their accession bonuses.\(^78\)

In fact, what really caused the problem was that the oath of allegiance ceremony had not been held in Belgrade. In this traditional ceremony, the sultans would tell the janissaries, “Your bonuses and promotions are granted,” thus honoring their soldiers. The soldier’s oath and the sultan’s promise of bonuses comprise an agreement and are a sign of mutual respect. Selim II gave the soldiers their bonuses but did not utter this sentence. When the sultan did not address them in Belgrade in an oath of allegiance ceremony and failed to honor their code, the soldiers became furious, perceiving it as an insult.

The army was now in Istanbul but the soldiers had not been provided with a satisfactory explanation about the sultan’s contrary behavior in Belgrade. The soldiers walking in front of the sultan’s carriage proceeded very slowly as they passed along narrow roads and slopes, thus hindering the sultan’s progress to his destination. When they arrived at Bayezid II’s bathhouse on the Divanyolu, they halted altogether, and injured their leader, ‘Alî Agha, as well as the viziers, who were advising them to stay calm, by throwing them off their horses. Grand Vizier Sokollu Mehmed Pasha and Fourth Vizier Ahmed Pasha were able to talk to them only after placating them with large sums of money. When the janissaries reached the Topkapı palace, a group of them passed through the Imperial Gate and shut it behind them so that the sultan could not enter. Those who stayed outside made all the viziers dismount from their horses. At the insistence of his viziers, Selim II finally agreed to say to them, “Your bonuses and promotions will be accepted,” and the janissary revolt was suppressed.\(^79\) This enhanced Sokollu Mehmed Pasha’s authority, which had been challenged by Selim’s household officers, who had advised the sultan not to heed the grand vizier’s letter.

If an enthronement ceremony had been held in Belgrade as it was supposed to have been, the sultan would have told the janissaries at that time that their bonuses had been granted. However, the janissaries revolted while entering Istanbul because their expectation of hearing the sultan’s promise of bonuses had not been met. Although such events have been interpreted as evidence of the janissaries’ dissatisfaction with their accession bonuses, they were actually disgruntled because the sultan had not uttered the words they expected to hear and so they shouted, “The enthronement is not valid.” Moreover, it is known that the soldiers were, in fact, given accession bonuses in Belgrade, although they were smaller than usual.

According to some historians, this revolt broke out only because of money. However, as stated above, the janissaries did receive their bonuses in Belgrade, though a bit less than was customary. They were told that they would be given the rest in Istanbul. Perhaps the revolt was planned as a lesson for the sultan, who had ignored the grand vizier’s suggestions in Belgrade in the first place. Indeed, the revolt might even have been fomented by Sokollu Mehmed Pasha himself, to intimidate the sultan. Whatever the real reason for the unrest, the pretext was the invalidity of the enthronement and such a
pretext confirms the idea that an established rule, which was supposed to have been followed, had been violated. Because Selim did not hold an enthronement ceremony (which would have included the oath of allegiance ceremony) in an open space in Belgrade, the janissaries felt that they had been ignored by the sultan and thus refused to accept his authority.

CONCLUSION

This incident well exemplifies the significance that close adherence to the rules of the enthronement ceremony had for solidifying the relationship between rulers and their subjects. As is known, Selim II had ascended to the throne in Istanbul. However, it appears that because none of the viziers and janissaries were present at this enthronement, it was not universally accepted as valid. It was thought that the throne would be set up in an open space in Belgrade and another ceremony held there. Another striking point is that all these miniatures depict the ceremony as having been held in front of the imperial tent in Belgrade. The fact that Feridun Ahmed Beg, the writer of the Nüzhetül esrâr’l-aḥbār was in the army in addition to being the private secretary of Sokollu Mehmed Pasha must have colored his narration of these events; he must have described what should have happened based on his loyalties to the grand vizier (fig. 18). In the Şehnâme-i Selim Han, too, which Lokman prepared and finished thirteen years later, the scene of the enthronement (fig. 9) was depicted as if the event had occurred in Belgrade. This second manuscript, written in accordance with the sultan’s wishes, could have recounted the ceremony held in Istanbul. Yet, out of all the known miniatures, there is not one showing that Selim II had an enthronement ceremony in the Topkapı palace. Selim II, who had at first objected to Sokollu Mehmed Pasha’s ideas, must have subsequently followed his advice, seeing that the grand vizier had been right in this situation.

In conclusion, the miniature in Lokman’s Şehnâme-i Selim Han depicts the enthronement ceremony in Belgrade as it was supposed to have occurred, whether or not it actually took place. As mentioned above, the main reason for this is that miniatures were designed to be protocol registers as well as to document historical events. It must also have been a way to convey the beneficence of Sokollu Mehmed Pasha, who was known to have supported his contemporary writers and painters. In both cases, we can interpret this as an example of miniatures in historical manuscripts being used to relate what was supposed to have happened, rather than what actually transpired.

These miniatures are all officially constructed images of Ottoman sovereignty. Ottoman historians/writers, however, regarded them not just as images, but also as a medium that showed the proper way to conduct one’s life and administer the empire, thereby strengthening and reinforcing the state ideology.

Faculty of Letters, Department of History, Istanbul University
NOTES


2. The writers of the main sources were the sheyhulislam Kemalpaşaşahde (Tevârîh-i ʿAl-i ʿOğmān [Annals of the Ottoman Dynasty]), the lord chancellor (nişâncı) Celâlzâde (Taḥâkülü’memâlîk ve derecâti’m mesâlik [Levels of the Dominions and Grades of the Professions]), the grand vizier Lütfi Pasha (Tevârîh-i ʿAl-i ʿOğmān [History of the Ottoman Dynasty]), the lord chancellor Feridun Ahmed Beg (Münşeattis-selâtîn [Writings of the Sultans], Nüzheti esrârîl-âğbâr der Sefer-i Sıgétêvâr [Joyful Chronicle of the Szigetvár Campaign]), Hoca Sa’deddin, the son of Hasan Can, Selim I’s confidant, and the sultan’s instructor (Tâcû’t-tevârîh [Crown of Histories]), and the clerk and finance officer Gelibolu Mustafa Ali, who was known to have always intended to present his work to statesmen or the sultan (Kûnihi’l-âbâr [Essence of Events] and Heft meclîs [Seven Assemblies]). There are also books by ’Arîh (Süleymannâme [History of Süleyman]), Seyyid Lokman (Hünername [Book of Skills], Şehnâmê-i Selîm Hân [Book of Kings of Selim], Şehnîşânâmê [Book of King of Kings]), and Taʿlîkizade (Şehnâmê-i hûmâyûn [Royal Book of Kings]), who were all officially appointed writers of şehnâmêş [sing. şehnâmecît], charged with keeping records of events.


6. According to Şükri, “[h]e vacated the throne and restored it to his son,” which suggests that he did it on his own accord. Şükri-i Bîdîsî, Selîmnamê, Istanbul, Topkapı Palace Museum Library (henceforth TSK), Ms. H. 1597–98, fol. 59b. See also Şükri-i Bîdîsî, Selîm-nâmê, ed. Mustafa Arşunâş (Kayseri, 1997).

7. This subject has attracted the attention of other researchers, such as Emine Fetvaci, who finished a well-prepared doctoral thesis on the topic. See Emine Fetvaci, “Viziers to Eunuchs: Transitions in Ottoman Manuscript Patronage, 1566–1617” (PhD diss., Harvard University, 2005).


9. As a result of the growing bureaucracy, ceremonies became more elaborate in the eighteenth and nineteenth centuries. The manner of extending greetings to guests must have been influenced by the records in these manuscripts, many of which are full of exaggerated compliments.


11. Accession ceremonies were performed in accordance with the codes regulating bayram ceremonies. In the Kânûnînâmê-i ʿAl-i ʿOğmân, the sultan dictated these codes of conduct as follows: “I pronounce it my duty to stand up and welcome my instructor, my sheyhulislam, my viziers, my head finance officer (başdefterdar), and my lord chancellor (nişâncı), who come to exchange greetings” (Ve hocama ve müfti’i’l-enânma ve vüzerâma ve kazî askerîlerime ve başdefterdarvama ve nişâncıya kendim kâlnmak kânûnâmûrû). Leysizade Mehmed Efendi, Kânûnînâmê-i ʿAl-i ʿOğmân, 44. According to the risâle (treatise) of Koçî Beg, thought to have been written in 1631, the sultan welcomed statesmen such as the nakibülesâr (the head of those descended from the Prophet Muhammad) by standing up, which indicates that this had become a long-lasting tradition. See Koçî Bey, Koçî Bey Risâlesi, ed. Zuhuri Danışman (İstanbul, 1972), 132, 134.

12. For further notes on how the oath of allegiance ceremonies were conducted, see Mübahat S. Kütükoğlu, “Lütfi Paşa Asafnâmesi (Yeni Bir Metin Tesisi Denemesi),” in Prof. Dr. Bekir Kütükoğlu’na Armağan (İstanbul, 1991), 49–99.


15. Ibid., fol. 113a.

16. For some of the research that has been conducted on realism in the depiction of historical events in miniatures, see Nurhan Atasoy, “Türk Minyatüründe Tarihi Gerçekçilik,” Sanat Tarihi Yıllığı 1 (1965): 103–9; Nurhan Atasoy, “The Documentary Value of Ottoman Miniatures,” in Mansel’e


19. Ibid., fols. 11a–12b.

20. Ibid., fols. 264a.

21. In the text, the name of the person who described himself as holy (mehdi) was recorded as Celal. With his supporters, he first fought against the Bozok tribe, which was his own tribe. Şükrî-i Bidlîsî, Selîmnâme, TSK, Ms. H. 1597–98, fols. 259a; Şükrî-i Bidlîsî, Selîm-nâme, ed. Arguştah, 97–98.


23. Tarım Ertuğ, Cüls và Cenaze Törenleri, 148, 149.

24. Seyyid Lokman, Hünernâme, vol. 1 (henceforth Hünernâme 1), TSK, Ms. H. 1523. For the accession of Osman I (r. 1299–1324), see fol. 49a; Orhan (r. 1324–62), fol. 62a; Murad I (r. 1362–89), fol. 75b; Yıldırım Bayezid (r. 1389–1402), fol. 96b; Çelebi Mehmed I (r. 1413–21), fol. 112b; Murad II (r. 1421–44, 1446–51), fol. 132b; Mehmed II (r. 1451–81), fol. 153b; Selim II (r. 1481–1512), fol. 178a; Selim I (r. 1512–20), fol. 201a. Although the painter tried to convey the atmosphere of the era in these miniatures, he was obviously not a contemporary of the people depicted and thus did not witness these occasions himself, something that researchers need to take into account when using these works as historical sources. Zeyneb Tarım Ertuğ, Türk Diyanet Vakfı İslam Ansiklopedisi (henceforth DİA) (Istanbul, 1988–), s.v. “Hünernâme (Minyatürlü Yazma Eser/A Manuscript with Miniatures).”

37. See ‘Arifi, Suleymânnâme, TSK, Ms. H. 1517, fols. 37b–38a; Feridün Ahmed Beg, Nüzhetî esrâ’îl-âlbâr, TSK, Ms. H. 1339, fol. 41b; Seyyid Lokman, Hûnernâme 2, TSK, Ms. H. 1524, fol. 237b; Seyyid Lokman, Şehnâme-i Selim Hân, TSK, Ms. A. 3595, fols. 27a, 28a, 29b, 30a; Seyyid Lokman, Şehnâme-i Nâdîrî, TSK, Ms. H. 889, fol. 4a, the Friday (Çuma) procession.

38. The miniature shows Bayezid II with his statesmen: Şükrî-i Bıyûlî, TSK, Ms. H. 1597–98, fol. 52b.

39. This information is derived from the following statements of Mehmed II: “First a chamber of petitions must be built so that my dignified self may be seated behind the veil (pes-i perde) when my viziers, chiefs justice, and finance officers come to consult me four times a week.” Özcan, “Fâtih’in Teşkilat Kanûnînâmesi,” 42. Uzunçarşılı bases his argument that the sultan quit attending the Imperial Council meetings on the statement in the Kanûnînâme-i Âlî-i Osmân that the sultan sat “behind the veil” (pes-i perde): İ. H. Uzunçarşılı, Osmanlı Devleti’nin Merkez ve Bahriye Teşkilâtı (Ankara, 1948), 3.

40. Koçî Bey, Koçî Bey Risalesi, 68.

41. In ‘Arifi’s Suleymânnâme, TSK, Ms. H. 1517, fol. 189b, we see the reception of a commander by the sultan in the environs of Sofia; fol. 260a, the reception of Ibrahim Pasha by the sultan; fol. 309a, King János Zápolyai of Hungary (r. 1526–40) submitting his crown to Sultan Suleyman; fol. 360a, Sultan Suleyman welcoming Barbaros Hayrettin Pasha; fol. 441a, the sultan receiving the nanny and advisers of the Hungarian king János Zsigmond (r. 1540–70) in his imperial tent complex; fol. 600a, the visit by Shah Tahmasp’s ambassador to Sultan Suleyman to plead for mercy.

42. Seyyid, Lokman, Hûnernâme 2, TSK, Ms. H. 1524, fol. 237b.

43. Ibid., fols. 235b–236b.

44. ‘Arifi, Suleymânnâme, TSK, Ms. H. 1517, fol. 328a, European envoys delivering Ferdinand’s letter during an Imperial Council meeting; fol. 332a, the reception of the Ottomans by the sultan; fol. 337a, the reception of the Austrian (Nemçe) envoy; fol. 346a, the reception of the French envoy; fol. 471b, the sultan’s reception of Alkwas Mirza; fol. 519a, Devlet Giray Khan’s visit to the sultan; fol. 603a, the visit of the envoy of Shah Tahmasp with Sultan Suleyman. See also Seyyid Lokman, Târîh-i Sultan Süleymân, Dublin Chester Beatty Library (henceforth CBL), Ms. 413, fol. 14b, the Iranian envoy’s visit with the sultan with presents; Seyyid Lokman, Şehnâme-i Selim Hân, TSK, Ms. A. 3595, fols. 53b–54a, the visit of Şahkulu Han (an Iranian envoy) to the palace in Edirne; Seyyid Lokman, Şehnâme-i Selim Hân, İUK, Ms. FY. 1404, fols. 41b–42a, the visit of Tokmak Han (an Iranian envoy) to the Ottoman sultan; and fol. 143b, the French envoy’s visit. The miniatures illustrating the Ottoman envoy’s visits with other sovereigns are: ‘Arifi, Suleymânnâme, TSK, Ms. H. 1517, fol. 374a, Ibrahim Pasha’s visit with the Iranian shah; fol. 506a, the Ottoman envoy’s visit with Alkwas Mirza; and fol. 550a, the Ottoman envoy Iskender Pasha’s submission of a letter to Shah Tahmasp. See also Zeren Tanıdû, “Osmanlı Sarayında Safevî Şehzadeler ve Elçiler” = “Safavid Princes and Envoys in the Ottoman Court,” in Proceedings of the International “Interaction in Art” Symposium, Hacettepe University, Faculty of Letters, Department of Art History, Ankara, Turkey November 25–27 (1998), ed. Zeynep Yasa Yaman (Ankara, 2000), 236–41.

45. Nurhan Atasoy, “Processions and Protocol in Ottoman Istanbul,” in The Sultan’s Procession, ed. Karin Ådahl (Istanbul, 2006), 169–95. For the miniature depicting the imperial procession passing before the Iranian envoys, which shows the order in which the sultan and his attendants marched outside the palace, see also Seyyid Lokman, Şehnâme-i Nâdîrî, TSK, Ms. H. 1524, fol. 40a, the Friday (Çuma) procession.


47. See Seyyid Lokman, Şehnâme-i Nâdîrî 2, TSK, Ms. B. 200, fol. 159b. For further details on the ceremony, see Hezârîn Hüseyin Efendi, Telhisü’l-beyân, 78–81; Tarım Ertuğ, “Bayram Törenleri,” 573–94.


51. For the scene in which Selim welcomes the funeral cortège in Belgrade, see Seyyid Lokman, Târîh-i Sultan Süleymân, CBL, Ms. 413, fols. 116b–117a; Seyyid Lokman, Hûnernâme 2, TSK, Ms. H. 1524, fol. 294a (fig. 15); and Feridün Ahmed Beg, Nüzhetî esrâ’îl-âlbâr, TSK, Ms. H. 1339, fols. 107b–108a (fig. 14). For Sultan Suleyman’s funeral before his burial in Istanbul, see Seyyid Lokman, Târîh-i Sultan Süleymân, CBL, Ms. 413, fol. 115b.


53. The grand vizier and the state officials sent him a letter urging him to catch up with the army immediately. Meanwhile, in order to hide the truth from the soldiers, the Imperial Council continued to meet, administer the affairs of state, and appoint individuals to new posts: Seyyid Lokman, Hûnernâme 2, TSK, Ms. H. 1524, fol. 293a. A courier named Hasan Çavuş arrived at Scânli plain on the outskirts of Kütahya to deliver the news to Prince Selim.
state needs your support. Until I come, you are the grand vizier of the state. Meanwhile, you must identify those who are involved in any opposition movement and inform me about them.) Upon receiving this letter, the grand vizier expressed his doubts as to whether or not he would remain in this post. Selanki Mustafa Efendi, Tarih-i Selanki, 1:49, 50.


57. There was a throne set up in the imperial tent in addition to the one set up in front of it.

58. The prince was in Kadiköy at dawn and reached Üsküdar (fol. 85a.), and the text here noted above, this was clearly stated in the letter sent by Selim II. See Feridun Ahmed Beg, Nuzhetu esrarl’-alhbar, TSK, Ms. H. 1339, fol. 85b.

59. In the part where he says “I am about to arrive, God willing” (Ben dahti insallah heman’ iriirgen izareyin), the miniature and the text were designed to complement each other. Ibid., fol. 85a.

60. Selanki Mustafa Efendi, Tarih-i Selanki, 1:49. Otak’humayına girdikleri mubarek ola, tezkire yazalım ki, serir-i salmanat meydanda kurulup, kul tâfesiniñ kadimi terk olunmaz kânûnlardan, dîleyeciklerin dîleyûp, çevâbî virîl-sin, ’akibet nedametî çekilmesiniñ diyelium. (Feridun Ahmed Beg said, “May his entrance to the imperial tent complex be propitious. Let us write a letter so that they can set the throne in the court, the soldiers can state their wishes, and the sultan can respond to them. Otherwise, it would lead to regret.”)”

61. Selanki Mustafa Efendi, Tarih-i Selanki, 1:49. After each accession to the throne, all high-ranking officials were considered to have resigned; they were then reappointed by the new sultan after the enthronement ceremony. As mentioned above, this was clearly stated in the letter sent by Selim II. See Feridun Ahmed Beg, Nuzhetu esrarl’-alhbar, TSK, Ms. H. 1339, fol. 85b.

62. Undoubtedly, Selim knew what he did and why but we have to consider the possibility that the sultan may not have known, or may have forgotten some of the rules of protocol. While this might be tolerated, the grand vizier was expected to be aware of all such regulations. For example, if at the bayram or cailüs ceremony the sultan happened to stand up, the ceremonial troops were supposed to clasp and say, “Procede, my padishah!” (hareket-i himayiñ pädisahum, and when the sultan sat down, the ceremonial troops would say, “Rest, my padishah!” (istiraht-i himayiñ pädisahum). Ismail Hakki Uzunçarşılı, Osmanlı Devlet’tinin Saray Teşkilati (Ankara, 1984), 213.

63. There was a throne set up in front of the prince’s tent, see Seyyid Lokman, Şehname-i Selim Han, TSK, Ms. A. 3595, fol. 24b. The courier, who was apparently known for his speed, was expected to reach Kutahya from Istanbul within two days: see Topkapı Palace Archive, E. 11680-3.

64. Among his attendants, there were even mercenary soldiers hired for the Battle of Konya. In the budget kânûnmâne dated 974–75 (1567–68), it is stated that 4,956 attendants accompanied Selim II from Kutahya: Ahmet Akgündüz, Osmanlı Kanûnmâneri ve Hukuki Tahilleri (Istanbul, 1990–), 7:390. In Belgrade, the janissaries became furious with Selim II and shouted “Hit the mercenary soldiers!” as they battered them. Selanki Mustafa Efendi, Tarih-i Selanki, 1:51.
might have mentioned the occasion only briefly to avoid discussing the tumultuous situation. The latter seems to be a more plausible explanation. The other sultans’ accession ceremonies are recounted in detail; that of Selim II is the only exception. Writers of that era liked telling the story of the Szigetvár campaign and this avoidance of Selim’s accession leads to a gap in the narration of events. It should also be noted that the *Hünernâme* was written after the death of Selim II.


75. The same figure is seen in the depictions of the accession ceremonies in the *Hünernâme*, the *Şehnāme-i Selīm*, and the *Şehinşāhnāme*, which rules out the possibility of a coincidence. In the *Şehnāme-i Ta/lefthalfringlī/kşdotbelowīzāde*, too, there is a figure among İbrahim Pasha’s attendants holding a similar pouch, which could have been used for carrying the ceremonial caftans (sing. *il/lefthalfringat*): *Ta/lefthalfringlī/kşdotbelowīzāde*, *Şehnāme-i Ta/lefthalfringlī/kşdotbelowīzāde*, TSK, Ms. A. 3592, fol. 41b.


78. It also must have been difficult for Selim to follow a sultan like Süleyman to the throne. Süleyman’s soldiers had been campaigning with him for more than forty years and they acted almost as if they were one with him. Feridūn Ahmed Beg, *Nüzhetü esrāri’l-ahbār*, TSK, Ms. H. 1339, fol. 116b.

By the early seventeenth century, symbolic representation and allegory had emerged as a new genre in imperial Mughal painting. The themes were guided by imperial interest and the main agenda was to give abstract concepts or performed gestures of ideal kingship a pictorial expression. Mughal symbolic representation was inspired by Europe, as we learn from Abu 'l Fazl (d. 1602), the chief historian of Emperor Akbar (r. 1556–1605) and, as Richard Eaton has famously termed him, his chief ideologue. In his Āʾīn-i Akbarī (Institutes of Akbar), written in the 1590s, Abu 'l Fazl presents us with an intriguing argument, in which he weighs the value of writing against that of painting. He begins in almost postmodern philosophical terms, anticipating Saussure’s notions of “sign,” “signifier,” and “signified,” and continues on a neo-Platonic, post-Tridentine note when he states that painting may become a means to recognize a higher truth, especially when abstract concepts are given a realistic, immediate expression, in the manner of the European masters:

A picture (ṣūrat) leads to the form it represents [khu-dāvand-i khvud, lit. its own master] and this [leads] to the meaning (ma’nī), just as the shape of a line (paykar-i khaṭṭī) leads one to letters (harf) and words (lafz), and from there the sense (mafhūm) can be found out. Although in general they make pictures (taṣvīr) of material resemblances (ashbāh-i kawnī), the European masters (kārpardāzān-i Firang) express with rare forms (ba-shigirf ṣūrat-hā) many meanings of the created world (basā ma’ānī-i khalqī) and [thus] they lead those who see only the outside of things (zāhīrīnigāhān) to the place of real truth (haqiqat-zār). However, lines [khaṭṭ, writing, calligraphy] provide us with the experiences of the ancients and thus become a means to intellectual progress.1

While the concept of Mughal symbolic representation and, to a certain extent, its composition and style are indebted to European works, its iconography and iconology were fed by sources of an astonishing heterogeneity. The Mughal emperors and their theorists (mardum-i šāhīb-i vuqūf, men of superior knowledge, as Jahangir [r. 1605–27] calls them in one of the rare instances where their input is acknowledged2) had not the slightest problem with selectively taking from Central Asian, Indian, Persian, ancient Near Eastern, and European ideas whatever served their purpose. On the contrary, the Mughals drew inspiration from the diversity of their sources in order to develop a symbolic and allegorical “multilingualism” as a means to address the widest possible audience in a cosmopolitan discourse in its own terms and, as a consequence, to legitimate themselves in the widest possible context as ideal and universal kings. An important point of reference was Iran—especially since the time of the exile of Humayun, the second Mughal emperor (d. 1556), between 1543 and 1545, at the court of Shah Tahmasp (r. 1525–76).3

Given that Iran was an essential element in the Mughal syncretistic venture, it will be of interest to investigate how themes of classical Persian literature were adopted and adapted for Mughal imperial symbolism and self-representation. I will give particular attention to the theme of Layla and Majnun, the Romeo and Juliet of Arabic and Persian literature, immortalized by Nizami of Ganja (d. 1203 or 1209) in his romance (mathnavī), which forms part of his main work, the Khamsa.4
THE STORY OF LAYLA AND MAJNUN

The story is set in Bedouin Arabia and goes as follows: Majnun, whose real name was Qays, falls in love with Layla when they are still children at school. When Layla’s father discovers their mutual attraction, he removes Layla from school and forbids the lovers to see each other. The separation only increases Qays’s passion to the point of madness, and he is nicknamed Majnun (“mad,” literally “possessed by jinn or demons”) by those who see him meandering about and singing of his love for Layla. Majnun becomes so estranged from human society that he wanders out in the wilderness, living half-naked and half-starved in the company of the wild beasts who gather peacefully around him (fig. 1). In the desert, he thinks only of Layla and composes love songs for her. His father eventually discovers him and tries in vain to console him, but his efforts to bring the lovers together fail. When Layla’s father refuses to give her hand in marriage to Majnun, the tribe of Majnun’s friend Nafis attacks Layla’s tribe in an unsuccessful attempt to persuade them to surrender her to Majnun. Layla’s father marries her to Ibn Salam against her will but she remains a virgin and faithful to Majnun, even secretly arranging meetings with him, although they only sing poetry to each other and their love remains unconsummated. Several years later, Layla’s husband dies but by now Majnun is unable to deal with the real and available Layla and withdraws again into the desert. Layla dies of a broken heart. Majnun collapses over her grave and dies, and the lovers are buried side by side. Later, Zayd, another lover who had sought the company of Majnun, dreams that Majnun and Layla were united in the gardens of Paradise, living as a king and queen.5

Nizami’s works were popular throughout the Persian-speaking world, and in India the poet Amir Khusraw Dihlawi (d. 1325) emulated Nizami with his own version of the romance. It formed part of his Khamsa, and in the title Amir Khusraw reversed the names to “Majnun and Layla.”6

The Mughals had a distinct interest in both versions. At the turn of the seventeenth century, the Mughal court atelier prepared several illustrated manuscripts of Nizami’s romance and at least one of Amir Khusraw’s version. The story of Layla and Majnun features in the splendid Khamsa of Nizami, done in 1595 for Akbar at Lahore, today in the British Library, and there are two separate illustrated manuscripts of Layla and Majnun in the Bodleian Library at Oxford, dating from circa 1590 (fig. 1) and the early seventeenth century, respectively.8 An illustrated Khamsa of Amir Khusraw was prepared at the end of Akbar’s reign, in 1597–98. Today, it is at the Walters Art Museum in Baltimore, and several of its illustrations are at the Metropolitan Museum of Art in New York.9 Besides that, there are numerous individual Mughal paintings dedicated to Layla and Majnun.10

There is quite a body of scholarship on Majnun and his love for Layla, and on the phenomenon of extraordinary love—l’amour fou, as the French call it—and its relation to poetic ability, because Majnun was a poet, his
name being given variously as Qays al-ʿAmiri or Qays b. al-Mulawwah. Various interpretations have been offered. Kračkovskij tried to find the historical poet behind the legend and the large body of poetry attributed to “Majnun.”11 His translator, Hellmut Ritter, has suggested a mystical interpretation,12 and this was further pursued by Asʿad Khairallah.13 Miquel and Kemp have used the story of Layla and Majnun as an occasion for a wide-ranging reflection on l’amour fou in Arabic and Persian poetry, following its ramifications into European medieval literature.14 Julie Meisami has analyzed the destructive aspects of Majnun,15 and Michael Dols has used his behavior as an occasion to study how medieval Islamic society reacted to madness.16 In the fullest analysis to date, Ali Asghar Seyed-Gohrab looks at the appearance and character of Majnun as lover and king of love and as ascetic and poet, as well as his relationships with Layla and his family, his descent into madness and black fate, and the factor of time in the story.17

MAJNUN AS A SYMBOL OF THE RULER?

I would like to offer yet another interpretation, one that relates to the allegorical potential of Majnun as a figure of self-identification for the ruler. Having touched on this point before, I would like to make it here the subject of a fuller investigation.18 Nizami saw in Majnun presiding over the animals of the wilderness a kingly figure and, consequently, the image of Majnun was used in this sense as a symbol of the Mughal emperor Jahangir, and later of Shah Jahan (r. 1628–58). The connection was established in an allegorical construction, a theatrum allegoricae mongolicae, in which the Koranic Solomon played a major role and the figure of the classical European Orpheus was introduced as a supporting character. Such transferrals were typical of the Mughal emperors’ uninhibited approach to the sources of their self-representation, as mentioned above. We shall also see that Jahangir identified with Majnun as a love-stricken man, as did, to an even greater extent, his son and successor, Shah Jahan.

So far, I have not discovered whether Majnun was used in this sense elsewhere in the Islamic world. Doris Abouseif’s skeptical reaction when I offered my inter-pretation at the Ernst Herzfeld conference held in Vienna in July 200719 led me to assume that this might not be the case, and that the idea to present the ruler as Majnun might be a specifically Mughal Indian contribution to the theme.

JAHANGIR’S MURAQQA’

There is evidence that the connection between Majnun, Solomon, and Orpheus was worked out in the Mughal album or muraqqa’, a book according to its form, but a picture gallery, even a museum, in function. Work was begun on the first great Mughal album of this type in the early years of the seventeenth century, revealing Jahangir to be an avid collector and patron of painting and calligraphy. The pages of Jahangir’s muraqqa’ are today dispersed—a large part is in Tehran and another substantial section is in Berlin. In the muraqqa’, works of Jahangir’s court atelier are put together with paintings of the earlier Mughal school, Timurid and Safavid images, and European engravings. According to the system of Islamic albums, which we understand better thanks to David Roxburgh’s pioneering study (though one wishes he would have said a bit more about Mughal albums),20 the images alternated with calligraphic pages, mostly of Mir Ali Herawi, the famous calligrapher of Herat, who was active around 150021 and a contemporary of Babur, the founder of the Mughal dynasty (r. 1526–30).

In 2004 and 2005, I had the opportunity to study the album pages in Tehran, where they are kept as loose folios under the name Muraqqa’-i Gulshan (Gulshan Album) at the library of the Gulistan Palace,22 and in Berlin at the Deutsche Staatsbibliothek.23 It was a surprise to find among the Tehran pages two so far unknown representations of Orpheus, one on an engraving pasted onto a page (p. 154) (fig. 2), the other obviously copied from a graphic model (p. 248) (fig. 3).

THE RECEPTION OF ORPHEUS AT THE MUGHAL COURT RECONSIDERED

The two muraqqa’ Orphei were of special interest to me because I had previously dealt with the reception of
Fig. 2. Album page. Top: “Allegory of Spring: Triumphant procession with classical gods, heroes, and personification of Spring,” from the circle of Virgil Solis (d. 1562). Orpheus is the third from the left. Bottom: “Elephant in a landscape,” Mughal, 1590s. From the Muraqqa-i Gulshan (Gulshan Album), Mughal, early seventeenth century. Tehran, Gulistan Palace Library, no. 1663, p. 154. (Photo: Ebba Koch, 2005)
Orpheus at the Mughal court. The image of Orpheus in the form of a Florentine *pietra dura* tablet (fig. 4) set into the back wall of Shah Jahan’s throne, called *jharōka-i khāṣṣ u ‘āmm* (viewing window for high and low), at Delhi (before 1648) (fig. 5), had been the subject of my doctoral dissertation for the University of Vienna, which was published in English in 1988 with the title *Shah Jahan and Orpheus: The Pietre Dure Decoration and the Programme of the Throne in the Hall of Public Audiences at the Red Fort of Delhi.* There I concluded that the *jharōka* was a Shahjahani realization of the Solomonic throne, as it had been described in Jewish and early Arabic sources and set up by the Byzantine emperors in the Magnaura at Constantinople. At over six meters high, Shah Jahan’s Solomonic throne was the most spectacular and eccentric in the entire Islamic world. It translated the palm trees of the prototype into cypress-shaped baluster columns (*sarv-andām sutūn*) of marble inlaid with semiprecious stones (*pietra dura*, termed *parchin kāri* by the Mughals), while the birds and lions appeared in the form of *pietra dura* panels from Florence embedded in the rear wall below Orpheus. The Florentine Orpheus was meant to symbolize the ideal rule of Shah Jahan. The iconological bridge for the transferral was Solomon, the archetypical ruler of the Koran,

Fig. 4. “Orpheus playing to the beasts.” Florentine *pietra dura* panel set in the back wall of Shah Jahan’s throne in the Hall of Public Audience, Red Fort, Delhi, completed 1648. (Photo: Ebba Koch, 1979)

Fig. 5. Shah Jahan’s throne (called *jharōka-i khāṣṣ u ‘āmm*) in the Hall of Public Audience, Red Fort, Delhi, completed 1648. (Photo: Ebba Koch, 1979)
The court historian Khvandamir (ca. 1475–1535) says of Humayun:

Under the protection and shelter of his justice, deer sleep carelessly in the lap of panthers, and fish fearlessly take rest near crocodiles; pigeons become friends of falcons and sparrows chirp fearlessly in front of eagles.

Under his just administration deer in the forest
Go abreast with the male lion;
The waterfowl tells its secrets to the hawk;
The pigeon relates its story to the falcon;
If injustice is indicated in the actions of any government officers,
They receive from the hands of the subjects a slap (on the face).25

In the margin (hāšiyya) of page 192 of the Gulshan Album (fig. 7), peacefully paired animals—beasts of prey and their potential victims (in Persian dad u dām)—appear like an illustration of Khvandamir’s verses, here related to Jahangir. He sits in the upper right corner on a carpet and partakes of something looking like cherries, spread out in large dishes, with an attendant standing next to him. Jahangir presides over pairs of pacified animals, arranged below him in the golden vegetation of the margin: a black buck and a panther, a lamb and a wolf (fig. 8), a duck biting the tail of a falcon (to show the empowerment of the weak over the strong) (fig. 9), and, in the middle of the bottom margin, a lion freeing a stag whose antlers are entangled in a bush (fig. 10). This seems to be the first time that the metaphor of animals pacified by the Mughal ruler’s justice was expressed in visual terms, and characteristically it happened in the margin of the album page, which is potentially a domain of experimentation, paraphrasing, and associating. The calligraphy in the center contains verses of various...
Fig. 7. Album page, with calligraphy and figural margin showing Jahangir, pairs of beasts/birds of prey and their potential victims (*dad u dām*), attendants, and secondary figures. From the *Murqqaʿ-i Gulshan* (Gulshan Album), Mughal, early seventeenth century. Tehran, Gulistan Palace Library, no. 1663, p. 192. (Photo: Ebba Koch, 2005)
Fig. 8. Detail of fig. 7 (Murqqa'-i Gulshan, Gulistan Palace Library, no. 1663, p. 192), showing a wolf lying down with a lamb.

Fig. 9. Detail of fig. 7 (Murqqa'-i Gulshan, Gulistan Palace Library, no. 1663, p. 192), showing a duck biting the tail of a falcon.

Fig. 10. Detail of fig. 7 (Murqqa'-i Gulshan, Gulistan Palace Library, no. 1663, p. 192), showing a lion freeing a stag whose antlers are caught in a bush.
content, and it is not clear whether they have a bearing on the scenes in the margin.26

Solomon was a role model for many a Muslim ruler, but the Mughals had arguably been keener and more successful than others in visualizing Solomonic imagery and relating it to their own persons. The interest of the Mughals in the Solomonic assembly of animals was intensified by its Messianic connotations. The animals demonstrated the Messianic peace in the end of times, as prophesied by Isaiah:

The wolf lies with the lamb,  
the panther lies down with the kid,  
calf and lion cub feed together  
with a little boy to lead them,  
The cow and the bear make friends,  
their young lie together.  
The lion eats straw like the ox,  
The infant plays over the cobra’s hole;  
into the vipers’ lair  
the young child puts his hand.  
They do no hurt, no harm,  
on all my holy mountain,  
for the country is filled with the knowledge of Yahweh  
as the waters swell the sea (Isaiah 11:6–9)

This animal theme appears on the first title page of the Royal Polyglot Bible (Biblia Sacra Hebraice, Chaldaice, Graece et Latine Philippi II Reg. Cathol. pietate, et studio ad Sacrosanctae Ecclesiae usum, ed. B. A. Montanus [Antwerp: C. Plantin, 1568–72]), which the Jesuits had brought to the Mughal court in 1580.27 The Mughals became deeply interested in Christianity but in the last analysis they turned to it less out of religious motivation, as the Jesuits were disappointed to note, than in search of suitable ideas and symbols to broaden their image as universal rulers with yet another deifying dimension. The Mughal pādshāh’s used Christian images to show themselves not only as second Solomons but also as new Messiahs: they appeared on allegorical portraits standing on globes populated with pacified animals, surrounded by Christian paraphernalia such as haloes and putti holding imperial attributes (fig. 12).

Orpheus pacifying the beasts through his music fitted very well into this iconography, all the more so given his relation to the Koranic David, who, in antiquity, had been invested with Orphic features and in the Arabic Qiṣaṣ al-anbiyāʾ (Stories of the Prophets) shares many elements with Solomon (fig. 13). The reception of Orpheus was also facilitated by the Islamic Plato/Aflatun who, according to Nizami, charmed the animals with the sounds of his wondrous instrument to outdo his rival Aristotle/Aristu (fig. 14). In this chain of related figures, the Florentine pietra dura Orpheus
was an attractive, new, and trendy symbol for the Solomonic power and justice of the Mughal pādshāh and the Golden Age of his reign.

This, in brief, was my reading of the Orpheus image and it was largely accepted. However, several scholars were skeptical. Vidya Dehejia, for example, felt that “its [the Orpheus image] use may signify little more than the magnitude of Shah Jahan’s reach.”

ORPHEUS IN JAHANGIR’S MURAQQA’

The newly discovered Orpheus in the Muraqqa’-i Gulshan provide highly welcome support for my interpretation of the Delhi image. They precede the use of the pietra dura Orpheus in Shah Jahan’s throne setting by over twenty years and make clear that the reinterpretation of the classical hero as a Solomonic figure had been worked out in the muraqqa’ of Jahangir.

The first Orpheus can be made out in a strip-shaped engraving, surrounded by a band of ornamental Mughal...
Playing a *lyra di braccio*, Orpheus walks in a triumphant procession of classical gods, heroes, and personifications of the seasons, designated by inscriptions (two of them written in reverse) (fig. 15). He appears third from the left, after Martius and Mercurius. In front of him is Pan, who follows Ver and Flora sitting in a triumphal car drawn by a pair of bullocks. Leading the way on foot is Pater Liber (Dionysos), and above the bullocks is a scroll proclaiming “April.” The engraving is part of a longer procession, which represents Spring in a series of the Four Seasons coming from the circle of the German print maker and book illustrator Virgil Solis (d. 1562). This image shows the integration of Orpheus among other classical figures into a Mughal aesthetic context, but does not tell us anything beyond that, and the connection with the elephant on the same page can as yet not be explained.

The second page is much more revealing. It contains the key to my reading and now we come also to the figure of Majnun (fig. 3). A brush drawing of Orpheus playing to the beasts is pasted together with three images of Layla and Majnun, done in the same style, on one album page. Orpheus is clearly based on a European model, though he is invested with feminine features (fig. 16). The earrings are also a Mughal addition. The style of brush drawing with light color washes, the Mughal nim qalam technique, points to the artists Basawan (fl. ca. 1580–1600) and his son Manohar, and the latter signed two of the three surrounding Layla and Majnun images. Orpheus appears in his classical pose, similar to the Delhi image, sitting on a rock under a tree and playing a *lyra di braccio*. On the left side is a hunting dog, who has given up the pursuit of the hare on the right side and has fallen asleep, which demonstrates the power of the mythical musician: Orphic peace. Below, in the foreground, a man is rescued by a good Samaritan, whose horse awaits him on the right. The group shows the redress of an act of violence, necessary for the establishment of Golden Age conditions.

**MAJNUN AND LAYLA IN THE MURAQQA’**

The key to the allegorical meaning of the album page comes from the three images of Layla and Majnun pasted around Orpheus (fig. 3). All three are done in
the same *nim qalam* technique and show, with slight variations, the same composition of Majnun being visited in the wilderness by Layla. The version on the lower left has been cut at one point and then extended at the top and bottom to fit the size of the Orpheus image (fig. 17). With its soft contours and modelling typical of Basawan, this image must be the earliest in the series. The other two are signed by his son, Manohar (figs. 3 and 18). The standing Layla dominates the scene. She wears a long, classicizing gown that exposes her breasts, divided by a part of her sash floating over her shoulder. Majnun, skeletal and half-naked, clad only in a bluish loincloth, sits on his heels next to her on the ground. With one hand, he pats a doe lying between his knees, and with the other he grasps a fold of Layla’s robe and gazes intently at the triangle formed by the folds of the cloth between her thighs. Basawan shows Layla as an overpowering female heroine. The emphasis on her is new in the iconography of Layla and Majnun and seems to represent a Mughal reaction to Indian thoughts about female power, here expressed through the medium of a European allegorical figure. Layla is clearly patterned on a European source, the personification of *Pietas regia*, the Piety of King Philip II, on the dedication page to Philip II of the Royal Polyglot Bible (fig. 19). *Pietas regia* inspired the artist in a series of Europeanizing drawings in *nim qalam* technique that depict enigmatic allegories with female figures, several of which are objects of devotion. Layla belongs to this group, appearing like a goddess of love.

The other two pictures of Layla and Majnun pasted above onto the page are signed by Manohar on a sheet of paper that Layla holds in her left hand (fig. 18). Both images follow the composition by Basawan, but with a few more iconographic details, and they are done in harder brushwork. Next to Layla appears a vase-like vessel and there are more animals: one sees more of the jackal on the right and there is a feline on the left side, which licks the foot of Majnun. The left image has another cat in the foreground. Manohar copied his father’s composition of Layla and Majnun in these two drawings and in several other variants, which would indicate that he was fascinated by the subject and wanted to enrich his father’s interpretation of the theme and emphasize his own versions. Another possible explanation for the repetitions would be that the artist wanted to emulate the process of making prints, since the manner of the almost colorless brush drawings seems to have been inspired by this technique in any case. This reflects an interest of his patron Jahangir, who, when still a prince, and later as emperor, tried to obtain a printing press from Rome through the Jesuits.

All three Laylas hold sheets of paper with tiny inscriptions. The one on Basawan’s Layla (lower left) contains good wishes:
Fig. 16. Detail of fig. 3 (*Muraqqa’-i Gulshan*, Gulistan Palace Library, no. 1663, p. 248), showing “Orpheus playing to the beasts,” Mughal, ca. 1600.
Manohar’s two Laylas hold identical inscriptions, in which Majnun addresses Layla:

\[
\begin{align*}
Shabī Majnūn ba Laylā guft ki āyā ma'šāq-i bi parvā \quad Turā 'āshiq shavad paydā, vali Majnūn na khvāhad bād \quad 'Amal-i Manōhar
\end{align*}
\]

One night, Majnun said to Layla: O you, the careless beloved,
Certainly you will have a lover, but he will not be Majnun.
The work of Manohar.36

MAJNUN AS A SOLOMONIC FIGURE

None of the inscriptions indicates why the images of Majnun were made to enclose Orpheus on the page of the muraqqa, but a clue comes from Nizami, who tells us about Majnun in the wilderness:

Every wild animal that was in the desert rushed to his service,
Lion, deer, wolf, and fox
all formed a camp on his way.
All of them became obedient slaves;
his kingship was so powerful that
the beasts of prey lost their beastly nature.
The sheep was freed from the violence of the wolf,
the lion withdrew his claws from the wild ass.
The dog made peace with the hare,
the fawn sucked milk from the lion.
He [Majnun] had taken his life in his hands,
and the beasts lined up around him.
If he ever slept,
the fox swept his sleeping place with his tail.
The gazelle ran to be in his care
and it drew its feet to its side [to rest].
He [Majnun] leant on the neck of the onager
and put his head on the thigh of the stag.
The lion knelt near his hip,

drawing its claws like a man his sword [to protect him].
In order to guard him, the wolf
became the commander of the night watch, ready to
give his life.
The wild leopard, born to be a wild beast,
gave up the habits innate to him.
These animals, which live by roaming the desert,
lined up in two or three rings around him.
Like kings (malikān), he was together with his guard.
He sat there like a place for the beasts to pray to [qibla-gāh].37

Nizami thus established Majnun as a Solomon-like king, who rules over the animal kingdom, cancelling out the laws of nature.38 The Mughals adopted Nizami’s identification of Majnun with Solomon: this is borne out by two Mughal paintings, one of Solomon and the other of Majnun and Layla, placed opposite each other on a double page in an album of Shah Jahan’s period, in the Bodleian Library at Oxford (figs. 20 and 21).39

On the right, a representation of Solomon in nim qalam technique, datable to around 1600, was pasted onto the page and enlarged in about 1650 in order to fit the size of the album (fig. 21). The enthroned prophet king presides over his animal subjects, which are arranged mostly in pairs, in the manner of the animal assemblies of Akbar’s artist Miskin (fl. ca. 1600).40 The demons (divs) have to watch from behind the scene and winged spirits (parīs), patterned on Christian angels, serve Solomon. On the counter image to the left, Majnun holds court among his animal followers in a rocky wilderness (fig. 20). The rugged rocks form a throne on which he sits like a king (similar to Orpheus in the Gulshan album [fig. 16]). He is visited by Layla, who has arrived on a camel, a feature not found in Nizami but in Amir Khusraw.41 The animals again follow the Miskin scheme. The painting was done by a Shahjahani artist in the 1640s, who based it perhaps on an earlier painting of Layla and Majnun by Miskin,42 in style and composition, it matches the Solomon painting. Both protagonists hold court over their respective animal subjects and the juxtaposition demonstrates that Majnun is equated with Solomon.
Fig. 17. Detail of fig. 3 (Muragga‘-i Gulshan, Gulistan Palace Library, no. 1663, p. 248), showing “Layla and Majnun,” attributed to Basawan, ca. 1595.
Fig. 18. Detail of fig. 3 (Muraqqa’-i Gulshan, Gulistan Palace Library, no. 1663, p. 248), showing Manohar, “Layla and Majnun,” ca. 1595–1600.
Fig. 19. *Pietas Regia* or "The Piety of Philip II as protector of the Catholic faith," designed by Benito Arias Montano, drawn by Pieter van der Borcht, and engraved by Pieter van der Heyden, 1569. Dedication page of volume 1 of the Royal Polyglot Bible. © British Library Board, 6.h. 4. (Photo: courtesy of the British Library)
In other words, Majnun, like Solomon, may function as an identification-figure for the ruler, and the tertium comparationis is the pacified animals. In another image in the same album, we find Prince Salim, the later Emperor Jahangir, as Majnun in the wilderness among the animals (fig. 22). He kneels and raises his hands as if in appeal to the turbaned figure of an old man sitting next to him. According to Nizami, this would be either Majnun’s father or his uncle Salim, who both came to visit him in the wilderness. But since Majnun is Jahangir, this could also be his father, Akbar (here invested with a beard, which Akbar did not have). That Jahangir and Akbar assume here the identity of protagonists of a literary work ties up with earlier practices of Safavid and Mughal painting, where rulers would appear as characters of the Shāhnāma. However, the iconography has also to do with the theme of the ruler visiting an ascetic in search of spiritual guidance, the latter assuming the role of Majnun’s father or uncle. How much more multi-layered could an image be? The Mughals were most ingenious in representing their emperors as rulers of many qualities in order to show them as universal kings.

According to the logic of the Mughal muraqqa, variations on a particular theme would be pasted together on one page. That the image of Orpheus was joined with or, more precisely, enclosed by, three Majnuns tells us that he was literally integrated into the Mughal context. The link was the dad u dām, the pacified animals. Solomon tamed them through regal power and justice, Majnun through the power of his love, and Orpheus brought them harmony and peace through music. All could stand for the Mughal pādshāh—first Jahangir, then Shah Jahan—and symbolize the Golden Age of his rule.

Orphic iconographies appear in the Hindu context, too, where Krishna pacifies the wild animals with his flute. Visual expressions of the theme of wild beasts and their potential prey assembling peacefully around Krishna, a spiritual person, or personifications of musical modes, ragas and rāginis, appear in the later regional painting schools of India and might have been inspired by Mughal imperial iconography (fig. 23).

Nizami points out the virtues of Majnun as a ruler, and even calls him shāh-i jahān, “king of the world,” or “universal king.” Majnun establishes an alternative kingdom to that of settled human society. He brings about order and harmony among the beasts, which lose their urge to prey upon one another and protect him, like a king’s guard. Moreover, his taming of the animals can be seen as a metaphor for Majnun overcoming his baser passions. This brings Majnun particularly close to Orpheus as he was portrayed in the early decades of the seventeenth century in Europe, namely, as a civilizing hero and metaphor for the ideal prince and good government.

Orpheus was a symbol of Paradise in the Aetas aurea propaganda of European rulers. He was particularly popular in Italy. In 1508, Castiglione compared Guidobaldo da Montefeltre to Orpheus. Karla Langedijk has shown that Baccio Bandinelli’s statue of Orpheus in the Palazzo Medici Riccardi at Florence, commissioned by the Medici Pope Leo X in about 1516–17, was erected to convey the message of the return of harmonious Medici rule, of the Golden Age that had prevailed in the fifteenth-century Florence of Lorenzo the Magnificent (d. 1492).

To demonstrate that he was the perfect prince, young Cosimo I, in about 1540, had himself portrayed by Agnolo Bronzino as Orpheus playing to the beasts (fig. 24). Orpheus also traversed the Alps, and appears in Schloss Ambras, a castle that was rebuilt and extended from 1563 onwards by the enlightened Habsburg Archduke Ferdinand II of Tyrol for his morganatic wife, Philippine Welser. Ambras was the center of the court life of Ferdinand and also housed his collections. The interior court of the upper castle (Hochschloss) was decorated with frescoes arranged in registers showing personifications of the sciences, virtues, heroes, biblical, classical, and historical episodes, battle scenes, and triumphal processions. For a number of these, we have graphical
Fig. 20. “Majnun in the wilderness among the animals is visited by Layla,” Mughal, ca. 1640–50. The Bodleian Library, University of Oxford, Ms. Douce Or. A. 1, fol. 52a. (Photo: Robert Skelton, courtesy of the Bodleian Library)
Fig. 21. “Solomon enthroned holding court among his animal subjects, the angels (paris), and demons (divs),” Mughal, ca. 1600. The Bodleian Library, University of Oxford, Ms. Douce Or. A. 1, fol. 51b. (Photo: Robert Skelton, courtesy of the Bodleian Library)
Fig. 22. “Prince Salim, the later Jahangir, as Majnun in the wilderness,” ascribed to Muhammad Sharif, known as Amir al-Umara’, early seventeenth century. The Bodleian Library, University of Oxford, Ms. Douce Or. A. 1, fol. 36b. (Photo: courtesy of the Bodleian Library)
models in prints by Virgil Solis, whom we already met in the discussion of the print of Orpheus in the muraqqa of Jahangir (figs. 2 and 15). A major part of the west wall is taken up by a mural of Orpheus playing for the beasts (fig. 25).\textsuperscript{53} Orpheus thus already featured in Habsburg programs in the sixteenth century and this makes it likely that the Orphic landscapes of Roelandt Savery (d. 1639) were also intended as an allegory of harmonious rule, or perhaps even of the emperor Rudolf II (r. 1576–1612) himself and his good governance.\textsuperscript{54}

Orpheus was also a popular adornment of grottoes in princely gardens in Italy, France, and Austria (fig. 26).\textsuperscript{55} In the Orpheus grotto at Hellbrunn Palace in Salzburg (ca. 1615), Orpheus appears with Eurydice, who wears on her necklace a portrait of the patron Archbishop Markus Sittikus, leaving no doubt that he saw himself as Orpheus, especially remarkable in a prince of the Catholic Church.

Sir Francis Bacon (d. 1626), politician (he was Lord Chancellor of England under James I [r. 1603–25]),
natural philosopher, and author of a utopian treatise known as *The New Atlantis* (1627), used in his *Advancement of Learning* (1605) the metaphor of the “Orpheus theatre,” as he puts it, to show how a society can be pacified by civilizing achievements, a process that would meet with more success under the good government of an enlightened and learned king. Bacon speaks of the

VII.2...Orpheus’ theatre, where all beasts and birds assembled; and forgetting their several appetites, some of prey, some of game, some of quarrel, stood all sociably together listening unto the airs and accords of the harp; the sound whereof no sooner ceased, or was drawn by some louder noise, but every beast returned to his own nature: wherein is aptly described the nature and condition of men, who are full of savage and unclaimed desires, of profit, of lust, of revenge; which as long as they give ear to precepts, to laws, to religion, sweetly touched with eloquence and persuasion of books, of sermons, of harangues, so long is society and peace maintained; but if these instruments be silent, or that sedition and tumult make them not audible, all things dissolve in anarchy and confusion.

3. But this appeareth more manifestly, when kings themselves or persons of authority under them...are endued with learning...yet so much is verified by experience, that under learned princes and governors there have ever been the best times...56

Bacon’s “Orpheus’ theatre” corresponds to the Solomonic and, consequently, Majnunian animal allegory with which the Mughals illustrated the good government of the just and wise ruler. The biblical Solomon was also for Bacon a model of the exemplary king.57 It
Fig. 27. “The Dauphin François de Valois, son of Francis I of France (1518–36).” French engraving, tinted and framed with a Mughal surround of cherubs holding a crown and a lion lying down with a calf, ca. 1610–20. Below the portrait is a French inscription: “L’ennemy envieux du son bon heur et victoire—De ce Prince, ou la France avoit tout son espoir” (The enemy is envious of his fortune and victory, of this Prince in whom France had all her hopes). London, British Museum, acc. no. 1954,0508,0.2. (Photo: courtesy of the British Museum)
appears that the pacified animals represented for the Mughals something like an attribute of kingship per se, which they also applied to other rulers. One is led to this supposition by their handling of a French engraving of the Dauphin François de Valois (d. 1536), son of Francis I of France (r. 1515–47), in the British Museum (fig. 27). The oval portrait was pasted onto a page, obviously intended for an album, with a newly painted Mughal surround dating circa 1610 to 1620. The Mughal additions consist of angels in clouds holding a crown above the head of the French prince, and below him, significantly, a lion with a calf as an attribute of his princely virtue and status.58

Majnun’s kingship over the pacified animals also made it possible for him to become an allegory of ideal rule. The depiction of a palace gate in Abu ʿl Hasan’s painting of the “Accession of Jahangir,” a double page in the St. Petersburg Album, done in 1605 and 1615, shows an archway flanked by walls decorated on each side with four superimposed niches. The niches of the painted architecture contain panels with wall paintings of typical motifs of Mughal and Persian kingship, arranged in mirror symmetrical pairs (fig. 28). From top to bottom, they show: angels; a panel, which I could not identify, perhaps fighting simurghs or dragons; Layla and Majnun
JAHANGIR IDENTIFIES WITH THE DESTRUCTIVE LOVE OF MAJNUN

Still, one wonders how Majnun could become a symbol of the ruler, keeping in mind his asocial and destructive tendencies, on which Nizami dwells and which, for Mei-sami and others, constitutes the main message of the story. Majnun’s love becomes an obsession almost from the start, and he ignores all concerns for propriety when he rhapsodizes about and celebrates Layla in his poetry, even after she has been married to another man. He does not care for religion: when taken to Mecca by his parents to be healed, he does not look at the Ka’ba but dwells on his inner vision of Layla—for him, she is the true qibla. Majnun prefers the wilderness and the beasts to the cultivated society of men, and abandons himself completely to grief for his lost lover.

It seems, however, that for Jahangir and Shah Jahan destructive love and the emotional effort required to deal with the loss of a beloved was something to which they could well relate. The connection made on Jahangir’s muraqqa’ page between Orpheus and Majnun may well have been informed by the idea that both were archetypical lovers in their respective traditions.

Jahangir’s self-identification with the mad love of Majnun becomes apparent from an inscription on the so-called tomb of Anarkali at Lahore, completed in 1615 (fig. 29). Anarkali, according to a popular tale, was a slave girl in Akbar’s harem with whom Jahangir, when still Prince Salim, fell in love. Akbar was enraged and is said to have had her buried alive. There is no mention of this event in the historical sources for Akbar or Jahangir, but a verse on the sarcophagus-shaped tombstone or cenotaph of the mausoleum reads:

Tā qiyāmat shukr Güyam kirdagār-i khvīsh rā!
Ah gar man bāz binam rā-yi yār-i khvīsh rā.

I would give thanks to my God until the day of resurrection,
Ah! Should I ever behold the face of my beloved again.
A cartouche inserted before the second verse contains the inscription majnūn Salīm-i Akbar (“The madly-in-love Salim, [son of] Akbar”) (fig. 29). The tombstone is otherwise covered with the ninety-nine beautiful names of Allah, and also bears two dates, given both in letters and in numerals: 1008 (1599–1600) and 1024 (1615–16), obviously referring to the date of death and the date of the tombstone, respectively.\(^6^3\)

The previously discussed painting of Jahangir in the Bodleian Library (fig. 22), in which he appears as Majnun appealing to a figure possibly meant to represent his father, Akbar, would acquire in this context a specifically autobiographical meaning. It was done around 1600, the time when he refers to himself on the tombstone as lovesick—as the “Majnun of Akbar.”\(^6^4\)

Layla and Majnun were still on Jahangir’s mind a few years after the tomb was constructed. From June to September 1618, he writes in his autobiography about a pair of sarus cranes that he kept at court in his personal menagerie. He named them Layla and Majnun, and observed their breeding habits with emphatic interest.\(^6^5\)

SHAH JAHAN A SECOND MAJNUN

Far more sensational than the identification of a Mughal prince with Majnun is that of a ruling emperor, namely, Shah Jahan.\(^6^6\) His grief for Mumtaz Mahal, to which the world-famous monument of the Taj Mahal owes its existence, has been a favorite subject of romantic travel literature, but what interests us here is that it entered Mughal official history at all. There we learn that after Shah Jahan had been married in 1612 to Arjumand Banu Begum, to whom he gave the title Mumtaz Mahal, she had no rival in his affections. Shah Jahan’s first historian, Qazvini, says:

The mutual affection and harmony between the two had reached such an extent as has never been seen between a husband and wife among the classes of rulers (sultans), or among the other people. And this was not merely out of sexual passion (havā-yi nafs), but the excellent qualities, pleasing habits, outward and inward virtues, and physical and spiritual compatibility on both sides caused such great love and affection, and extreme affinity and familiarity.\(^6^7\)

Such open words about erotic attraction between royal spouses were unheard of in the seventeenth century, above all in the official record of a Muslim pādshāh, for whom privacy in marital matters would be absolute.

We see Mumtaz Mahal through the eyes of Shah Jahan because it was he who constructed the history of his reign. He did not possess the searching mind or the pronounced idiosyncrasies of his predecessors. Shah Jahan is presented as self-controlled, reserved, and not given to any forms of abandonment. He refused even to drink wine until he was twenty-four years old, when he was compelled to do so by Jahangir.\(^6^8\) Shah Jahan’s main agenda was the formulation of perfect rulership, and one of his most important tools was historiography. He had daily sessions with his official historians—first Qazvini, then Lahawri—to ensure his representation to posterity as a perfect, impersonal ruler, who dedicated every minute of his life to the just administration of his empire, in which, as we have seen, because of his justice such ideal conditions prevailed that the lamb would fearlessly lie down with the lion.

It stands in almost unconceivable contrast to this construct that Shah Jahan would allow his historians to document his passionate love for his wife and his utter devastation when Mumtaz Mahal died in June 1631 at Burhanpur. We read about his grief in words that seem to be taken from the story of Layla and Majnun. Shah Jahan broke down completely, wept uncontrollably, and put on a white garment, the Indian color of mourning. His whole court had to don mourning dresses. The emperor did not hold court for an entire week, something without precedent in the history of the Mughal emperors, and against everything Shah Jahan stood for, because he himself had turned the imperial appearances before his subjects into a strictly regulated daily ceremonial. He even considered abdicating, dividing the empire between his sons, and retiring as a religious recluse.\(^7^0\) Shah Jahan, the supreme emperor, had become Majnun, the ultimate lover, who wants to flee into the wilderness to pine for his unobtainable Layla.

What is so remarkable is that we encounter here, within the literary convention of imperial historiography (taʿrīkh), a switch of genres: the historical narrative changes to conform in subject matter—though not in poetic form—to the genre of epic romance (mathnāvi). The romantic narrative is also a breach of kingly
etiquette. Arabic and Persian books of conduct (*adab*) written for rulers and their courts advise those in power not to give in to love (’*ishq*) but to rely on reason (’*aql*) to control their passions (’*havā*). This one time, Shah Jahan’s historians, Qazvini and Lahawri, ignored the books of conduct and laid out the bereaved imperial lover’s grief in detail.

We learn that for two years the emperor gave up listening to music, wearing jewellery and rich and colorful clothes, and using perfumes, and presented an altogether heartbroken appearance. His eyes so deteriorated from constant weeping that he needed spectacles, and his beard, which until then “had not more than ten or twelve grey hairs, which he used to pluck out” turned gray, and eventually white. During the great court celebrations, like the ’*Īd*, when the ladies of the court arranged festive gatherings, he broke out in tears because he did not see Mumtaz among them. He also postponed for two years the weddings of his sons Dara Shikoh and Shah Shuja’, which he had already planned with the queen. He forbade all entertainments on Wednesdays, the day of the week on which Mumtaz died, in particular the spectacular elephant fights. For several years, he and the court wore white, and abstained from all festivities throughout the month of Dhu ’l Qa’dā, the month in which the death of Mumtaz had occurred.

Shah Jahan’s condition was regarded with the greatest concern by the imperial family. Qasim Khan Munija, who was married to the sister of Nur Jahan, and as the brother-in-law of the aunt of Mumtaz enjoyed something akin to the status of an uncle to Shah Jahan, wrote to the emperor from Bengal that if he continued to abandon himself to his mourning, Mumtaz might consider giving up the joys of Paradise to come back to earth, this place of misery, and who would want to impose this burden on her? He also counselled Shah Jahan to consider the children she had left in his care. The concern of the family is also a distinct feature of the story of Layla and Majnun.

Shah Jahan’s main consolation was the tomb that he was planning for Mumtaz and where he himself was buried when he died in 1666. The epigraph on his tombstone is conventional and befitting for a *pādshāh*:
This is the sacred grave of His Most Exalted Majesty, Firdaws Ashyani, [Dweller in Paradise], the Second Sahib Qiran, Shah Jahan, Padshah [Ghazi]; may it ever flourish. The year 1076 [1666].

The decoration, however, recalls the Majnunian aspect of Shah Jahan. The cenotaph is covered with flowers, among which naturalistic red poppies stand out. In India in Mughal times, they were known as lāla, which, in the Persian-speaking world, symbolized suffering and death, like any other red flower with a black heart. It is thus the flower of Majnun (fig. 30).

University of Vienna
Austrian Academy of Sciences

NOTES

Author’s note: This article has a long history, with its focus shifting gradually towards Majnun. It originated in a paper entitled “Orpheus at the Mughal Court: A Universal Symbol of the Golden Age,” which I presented at the symposium “Théatrum Mundi: Die Kunstkammern als Spiegel der spanischen und portugiesischen Expansion,” organized by the University of Innsbruck and the Carl Justi Vereinigung, June 10–12, 2005. I subsequently delivered it in a modified form at the “Workshop of the Network of Comparative Empires,” COST Action 36, Copenhagen, June 18–19, 2005; under the title “Orpheus at the Mughal Court: Jahangir’s Album as a Think Tank for Allegory,” as the thirty-eighth Willy Cohn Memorial Lecture, Ashmolean Museum, Oxford, October 11, 2005; under the title “Solomon, Majnun, and Orpheus Revisited: Jahangir’s Album as a Think Tank for Allegory,” at Harvard University, Department of Sanskrit and Indian Studies, April 13, 2007; in German, under the title “Solomon, Majnun und Orpheus als Symbole für den idealen islamischen Herrscher in Moghulindien,” at the Kolloquium of the Ernst Herzfeld Gesellschaft, in cooperation with the Institut für Iranistik, Österreichische Akademie der Wissenschaften, July 6–8, 2007; as “The Mughal Emperor as Majnun, Orpheus and Solomon: Jahangir’s Album as a Think Tank for Allegory,” at the conference “Persian Literature in Multilingual India: Genres, Contexts, Styles,” Cambridge University, June 16–18, 2008; and, lastly, as a lecture entitled “Solomon, Majnun, and Orpheus as Symbols of the Ideal Ruler in Mughal India or Jahangir’s and Shah Jahan’s Muraqqa’s as a Think Tank for Allegory,” at the Institute of Fine Arts, New York University, October 23, 2008.

I am grateful to the following persons and institutions for assistance with and permission to study works in their collections: Parviné S. Seghatoleslami, Director of the Museum of the Gulistan Palace, Tehran; Hasan Alaieeni, Keeper of Manuscripts, Library of the Museum of the Gulistan Palace, Tehran; Lesley Forbes, Bodleian Library, Oxford; and Hartmut-Ortwin Feistel, Orientabteilung, Staatsbibliothek zu Berlin Preussischer Kulturbesitz. I thank the following institutions for waiving the reproduction fees for their photographs: Freer Gallery of Art, Washington, D.C.; British Library, London; Bodleian Library, University of Oxford. I also thank the following colleagues for their interest in, comments on, or assistance with various aspects of this study: Garth Fowden, Negar Hakim, Edmund Herzig, Fritz Koreny, Markus Neuwirth, Sanjay Subrahmanyam, John Seyller, Andrew Topsfield, and Martin Warnke. Special thanks are due to Yunus Jaffery and Sunil Sharma for helping with translations and transcriptions. And, finally, I thank the Austrian Science Fund (FWF) for a grant in support of my project “The Palace and Gardens of Shah Jahan (rul. 1628–58)” (Project No. P 21480-G21), which I am carrying out as a senior researcher of the Institute of Iranian Studies of the Austrian Academy of Sciences (2009–12). The project includes Mughal court culture and enabled me to prepare the manuscript for publication.

1. Abu ’l Fadl, A in-i Akbari, Persian text ed. by Henry Blochmann, 2 vols. (Calcutta: Royal Asiatic Society of Bengal, 1867–77), 1:111. Since Mughal writing is not very strong on art theory, this passage has been frequently quoted, but in the translation of Blochmann (1:102–3) he does not bring out what I take to be its real meaning, that naturalistic painting in the European manner is a way to visually express abstract concepts. I have retranslated the passage with the help of Yunus Jaffery in “The Intellectual and Artistic Climate at Akbar’s Court,” in The Adventures of Hamza: Painting and Storytelling in Mughal India (exhibition catalogue), ed. John Seyller (London: Azimuth Editions, and Washington D.C.: Smithsonian Institution, 2002), 18–31; for the citation, see p. 30.


5. The anonymous reader of the present paper pointed out that the “DREAM of ZAYD,” “a theme that might well be germane to the Mughal citation of this story in a funerary context [for which see below] was considered to be a later interpolation by V. Dastgirdī in his edition, published several times in the 1950s,” but that later editors such as Gohrab, for whom see n. 17, accepted it as part of Nizāmī’s poem.

6. For the numerous versions of the Majnun legend, see As‘ad E. Khairallah, Love, Madness and Poetry: An Interpretati-


10. A particularly intriguing example is “Majnun in the wilderness,” ca. 1600, in the Museum of Fine Arts, Boston, Frederick L. Jack Fund, 1981.81, with “a Darwinian touch” (to quote Sunil Sharma, with whom I studied the painting in October 2008), because Majnun has a monkey sitting next to him, with whom he converses. The assembly of the animals is in the manner of those of Miskin: see n. 40 below and our figs. 20 and 21.


19. See n. 1 above.


23. The most comprehensive publication is still Ernst Kühnel and Hermann Goetz, *Indische Buchmalereien aus dem Jahangîr-Album der Staatsbibliothek zu Berlin* (Berlin: Scarsbaeus-Verlag, 1924). The folios of the Berlin album were split during a recent restoration but since the folio context is known, they are referred to by their folio numbers.

24. See also n. 18 above.

26. Sunil Sharma kindly had a look at the verses. The central panel has a rubā’ī that he read and translated as the following:

naqdí ki iyār-i dīda-yi rawshan bād
chashm-i bad-i ayām zi chashmam ba-rubād
faryād ki faryād ba-jāy narasād
afsās ki afsās namidārād sād

The cash that was the touchstone of a bright eye,
was robbed from my sight by the evil eye of the world.
A complaint that the complaint was not redressed;
as that the grievance is of no use.

Another verse is above and below the main frame, it could relate to a ruler beloved by the people:

dar kā-yi tu ṣad ṣadār ṣāhīb-havas ast
tā ḵvād ba-visāl-i tu kirā dāst-ras ast?

In your lane there are a hundred thousand desirous people. Beware! Who has the power to achieve union with you?


29. The album page has been published without its margin by Milo Beach, The Empress: Image Painting for the Mughal Court (Washington, D.C.: Freer Gallery of Art, Smithsonian Institution, 1981), 109–10, fig. 12. He attributes the painting of the elephant to Farrukh without taking note of the engraved strip above the elephant.

30. Carelessness on the part of the printer, as Fritz Koreny has pointed out.


32. See Amina Okada, “Basawan,” in Master Artists of the Imperial Mughal Court, ed. Pratapaditya Pal (Bombay: Marg Publications, 1991), 1–16, esp. 8–12; Amina Okada, Indian Miniatures of the Mughal Court (New York: Harry N. Abrams, 1992), 86–94, 136–45. In the early sixteenth century, Mughal painters also liked to experiment in other ways with the figure of Layla in the iconography of her meeting with Majnun among the animals of the wilderness. In a drawing with color washes and gold sold at Sotheby’s on May 2, 1777, she appears dressed like the Virgin Mary with a halo, holding a lute-like instrument in her right hand and grasping with her left a book that Majnun extends to her. See Sotheby’s New Bond Street, Catalogue of Important Oriental Manuscripts and Miniatures: The Property of the Hagop Kevorkian Fund, London: May 2, 1777, lot 102.

33. There is another version of the top images in the Chester Beatty Library. See Linda York Leach, Mughal and Other Indian Paintings from the Chester Beatty Library, 2 vols. (London: Scorpion Cavendish, 1995), 1:143–46, image on p. 154, cat. no. I. 240. A colored version with the same iconography appears on p. 74 in the Gulshan Album itself, signed Manohar Das; it perhaps was colored when put on the album page, and extended on the left with further animals. Below it is the picture of a skeletal horse, which also has a Majnunian connotation. It seems to have been copied from a drawing of Basawan in the Indian Museum, Calcutta, ca. 1585–90, which shows Majnun walking behind such a horse. See Okada, Indian Miniatures, 90–92.

34. The multiple variants bring to mind the phenomenon of repetitions and copies in European print making, as discussed by David Landau and Peter Parshall, The Renaissance Print, 1470–1550 (New Haven: Yale University Press 1993), 131–46.

35. Gauvin A. Bailey, “Counter-Reformation Symbolism and Allegory in Mughal Painting” (PhD diss., Harvard University, 1996), 126, 189 n. 41. Bailey found this information in Relations et Epistolae ex Miss. Mogor, Archivium Romanum Societas Jesu, Rome: 1598 Goa 461, fols. 36a–b; 1607 Goa 461, fols. 64b and 68a.

36. Besides Hasan Alaieeni, Keeper of Manuscripts at the Library of the Museum of the Gulistan Palace, Yunus Jaffery and Sunil Sharma have helped to read these inscriptions.

37. My translation from Nizāmī, “Laylā u Majnūn,” in Dastgirdī, Kulliyāt, Divān-i Hakīm Nizāmī Ganja’i i, 545–46. The term qibla-gāh is, strictly speaking, a place towards which one looks during prayer, but it is also used in a broader sense for a person to whom one turns for guidance or help. The panegyric use of the term qibla for the Mughal emperors is discussed in Ebba Koch, “Diwan-i ‘Amm and Chihil Sutun: The Audience Halls of Shah Jahan,” Muqarnas 11 (1994): 155, 164 n. 91; repr. in Koch, Mughal Art and Imperial Ideology, 249.

38. See Koch, Shah Jahan and Orpheus, 31; repr. in Koch, Mughal Art and Imperial Ideology, 116. Seyed-Gohrab subsequently also compared Majnun with Solomon, elaborating on the idea of Majnun as a king: see Seyed-Gohrab, Love,
Madness, and Mystic Longing in Nizāmī’s Epic Romance, 116–25, also for a fuller and somewhat freer translation of this passage. He does not seem to have been aware of my comments on the issue.

39. Oxford, Bodleian Library, Ms. Douce Or. A. 1, fol. 51b: Solomon; fol. 52a: Layla and Majnun. I presented my interpretation of Majnun as a kingly Solomonic figure in connection with the Bodleian pictures in my lecture at the Ashmolean Museum at Oxford in October 2005 (see author’s note above). Since then, Andrew Topsfield has published fol. 52a (Topsfield, Paintings from Mughal India, 68–69 = cat. no. 30), as well as several others of the Bodleian paintings that I discussed, and has also followed my interpretation in his reading of two other images of Majnun among the animals in Ms. Pers. d. 102, p. 65 (his pp. 26–27 = cat. no. 9) and Ms. Douce 348, fol. 42a (his pp. 52–53 = cat. no. 22).

40. Particularly close is the tinted drawing of the animal kingdom by Miskin, ca. 1600, in the Freer Gallery of Art, Smithsonian Institution, Washington D.C., acc. no. 45.29. For this and other animal assemblies of Miskin, see Philippa Vaughan, “Miskin,” in Pal, Master Artists of the Imperial Mughal Court, 17–38, figs. 17, 11, and 16.

41. Brend, Perspectives on Persian Painting, 243.

42. For a similar version of this image in a private collection, attributed, not quite convincingly, by Pratapaditya Pal to Miskin himself, see his Court Paintings of India: 16th–19th Centuries (New York: Navin Kuman, 1983), 52 and fig. M38. To me, it seems later, and it might have even been inspired by the Bodleian image or a similar version.

43. Oxford, Bodleian Library, Ms. Douce Or. A. 1, fol. 36b; see Topsfield, Paintings from Mughal India, cat. no. 24.

44. For Akbar as Faridun, see Ebba Koch, “The Just Hunter: Renaissance Calendar Illustrations and the Representation of the Mughal Hunt,” in Islam and the Italian Renaissance, ed. Charles Burnett and Anna Contadini (London: The Warburg Institute, 1999), 171; for Safavid kings, see Jon Thompson and Sheila Canby, eds., Hunt for Paradise: Court Arts of Safavid Iran 1501–76 (Milan: Skira, 2003), e.g., cat. no. 4.10: “Rustam and the ‘seven’ champions hunt in Turan,” showing presumably the young Shah Tahmasp as one of the characters from the story.

45. John Seyller, with whom I discussed the painting after my paper at Cambridge on June 16, 2008 (see author’s note above), argued against my allegorical reading. Taking a positivistic approach, he suggested that the four paintings were pasted together on a page because they showed similar subjects and were all done in the nim qalam technique. This reduces the Mughals to pure formalists and connisseurs.

46. Ingeborg Luschey-Schmeisser takes a similar view of the connectedness of these figures in her discussion of paradi-siacal themes as palace decoration: “The harmony between the wild animals is moreover demonstrated by the representation of Majnun in the desert grieving over Layla, who, like Orpheus, gathered the animals around him; or by the picture of the wise King Solomon, and of the first king in the mountains, Gayomart, who joined his henchmen and the wild beast in a peaceful union.” (References to footnotes omitted.) See Ingeborg Luschey-Schmeisser, The Pictorial Tile Cycle of Hašt Behēšt in Isfahān and Its Iconographic Tradition (Rome: IsMEO [Istituto Italiano per il Medio ed Estremo Oriente], 1978), 157.


50. J. D. Falvo, “Urbino and the Apotheosis of Power,” Modern Language Notes (MLN) 101, 1, Italian Issue (Jan. 1986): 132. I thank Martin Warnke for this reference and for several others that he very generously gave me following the Karl Justi Symposium in Innsbruck in 2005, but which I could not pursue in the context of this paper.


52. The painting is in the Philadelphia Museum of Art, Johnson Collection; Langedijk, “Baccio Bandinelli’s Orpheus,” 48–49. See also Koch, “Pietre Dure and Other Artistic Contacts,” 55, fig. 37.

53. The attempts to establish a coherent program for Ambras have so far not been entirely successful, one of the reasons being the heavy restorations of the nineteenth century, which altered the paintings. Obviously, as has been suggested, most recently by Sandra Marsou’n-Kaindl, “Die Ausmalungen des Innenhofes von Schloss Ambras,” Magisterarbeit (MA thesis, University of Innsbruck, January 2004), the themes had some relevance to the patron, reflecting his interests and his monus as a prince. Here, I think, we are on firm ground with the Orphic theme.

54. Thomas DaCosta Kaufmann, The School of Prague: Painting at the Court of Rudolf II (Chicago: University of Chicago Press, 1988), 230, discusses J. Spicer’s interpretation of
Orpheus as an image of Rudolf II and his good government but is critical of it.


57. Francis Bacon, Advancement of Learning and New Atlantis, 276–77. See also Koch, “Jahangir as Francis Bacon’s Ideal,” in which I also adduce Bacon’s view of Solomon as an exemplary king in comparison with the Solomonicism of the Mughals (see previous note).


59. The paintings are very small, but can be made out in published reproductions and, better, in digital enlargements. See, e.g., S. C. Welch, catalogue entry for Plate 176/Folio 21 recto Festivities on the Occasion of the Accession of Emperor Jahangir, in The St. Petersburg Muraqqa: Album of Indian and Persian Miniatures of the 16th–18th Centuries and Specimens of Persian Calligraphy of lmâd al-Hasani, ed. Oleg F. Akimushkin (Lugano: Arch Foundation; Milano: Electa, 1996), 105–6, pl. 176, fol. 21a. Welch does not comment on the paintings on the gate. For a discussion of the motifs, see Lusche-Schmeisser, Pictorial Tile Cycle of Hašt Behest in Isfahan: for angels and winged spirits, see 47–55, pls. V and VI, and for lions attacking bulls, see 55–70, pls. LIII–LVIII.

60. See Meisami, Medieval Persian Court Poetry, esp. 158–59. Seyed-Ghorab, Love, Madness, and Mystic Longing in Nižâmi’s Epic Romance, discusses the pros and cons of this aspect of Majnun in detail, especially in chapters 4, 5, and 8. See also Orsini, “Introduction,” 20.

61. Khairallah, Love, Madness, and Poetry, 3–4, 77, points out in addition that they both were sources of mysticism. Majnun was also a vegetarian, for which see Seyed-Ghorab, Love, Madness, and Mystic Longing in Nižâmi’s Epic Romance, 92–101, as were the followers of Orpheus, for which see W. K. C. Guthrie, Orpheus and Greek Religion: A Study of the Orphic Movement (1952; repr. Princeton, N.J.: Princeton University Press, 1993), 196–98, and passim.

62. Robert Skelton has identified the verses as Sa’di’s; see Topsfield, Paintings from Mughal India, 171 n. 18.


64. See also Topsfield, Paintings from Mughal India, 171 n. 18, who, in consultation with Robert Skelton, expands my suggestion that the painting is meant to represent Jahangir as Majnun.

65. Thackston, Jahangirnama, 266.


71. This point is discussed by Orsini, “Introduction,” and Mazaffar Alâm and Sanjay Subrahmanyan, “Love, Passion and Reason in Faizi’s Nal-Daman,” in Orsini, Love in South Asia, 16–17, and 109–41.

72. Qazvîni, Pâdshâhnâmâ, fol. 232b/233b; Begley and Desai, Taj Mahal, the Illumined Tomb, 13.


74. Ibid., 185.

76. Begley and Desai, *Taj Mahal, the Illumined Tomb*, 193.

77. Irène Melikoff, “La fleur de la souffrance: Recherche sur le sens symbolique de lala dans la poésie mystique turco-iranienne,” *Journal Asiatique* 255 (1967): 341–60. I thank Sunil Sharma and Paul Losensky for referring me to this work and giving me their views on the meaning of lāla, for which see also Koch, *Complete Taj Mahal*, 51, 139–40, 171, 173, 174.
It was probably during his visit to Srinagar in 1589, shortly after the conquest of Kashmir by Mughal troops, that Akbar (r. 1556–1605) became acquainted with two important Kashmiri works, the collection of stories known as the Kathāsaritsāgara (Ocean of Streams of Stories) and the chronicle Rājatarangini (The River of Kings). Perhaps owing to his wide range of interests, Akbar soon ordered the two texts to be translated into Persian. But it is also possible that he had certain political interests and that these two commissions should be regarded in connection with other translation projects from Sanskrit. It is well known that remarkable activities were initiated during Akbar’s time to render Sanskrit literature into Persian. Some of these translations were copied several times and disseminated to important high officials to ensure that they received proper consideration. The case of these Kashmiri texts shows how the military annexation of the region was immediately followed by a second incorporation, into the Persophone culture of the Mughals. This is not to be judged unfavorably, since it led to the circulation of Sanskrit literary works among Muslims, as we can conclude from the number of extant Persian copies. Akbar had some of these texts furnished with illustrations. Manuscripts like the Mahābhārata (The Great Tale of the Bharata Dynasty) and the Rāmāyana (Rama’s Journey), kept in the Maharaja Sawai Mansingh Museum in Jaipur, enjoy worldwide attention today. The aforementioned Kathāsaritsāgara, a collection of tales composed in the eleventh century by the Hindu poet Somadeva (fl. 1070), was also embellished with pictures. Unfortunately, this manuscript has been thoroughly dismembered and most of the text and its illustrations are lost. Only nineteen illustrations, cut out from the folios, were known to have been part of the collection of A. C. Ardeshir, who lived in Bombay in the 1930s. In 1964, they found their way, via the Bombay-born American art dealer Nasli Heeramaneck, into either private ownership or various museums in the United States. Eighteen of them were tracked down. Seven original illustrations are readily accessible and described as follows in the respective catalogues or articles in which they are listed or discussed:


(b) A man hides in an elephant skin and is carried off by a giant Simurgh (14.6 x 18.9 cm). San Diego Museum of Art, no. 1990: 280, formerly in the Edwin Binney 3rd Collection (fig. 2).

(c) The tale of the cunning Siddhikari (16.5 x 13.4 cm). Los Angeles County Museum of Art, M. 78.9.12 (fig. 3).

(d) The tale of Somaprabha (13 x 13.7 cm). Los Angeles County Museum of Art, M. 78.9.13 (fig. 4).

(e) Harem scene, probably from a Kathāsaritsāgara (15.2 x 19.1 cm). Los Angeles County Museum of Art, M.78.9.7 (fig. 5).

(f) Episodes from the tale of the false ascetic (16.4 x 13.5 cm). Virginia Museum of Fine Arts, The Nasli and Alice Heeramaneck Collection, 68.8.54 (fig. 6).

(g) Episodes from the tale of Devadatta (13.8 x 13.6 cm). Virginia Museum of Fine Arts, The Nasli and Alice Heeramaneck Collection, 68.8.55 (fig. 7).
Fig. 1. King Lakadatta presents a beggar with an orange filled with jewels. © San Diego Museum of Art, no. 1990: 281. (Photo: courtesy of the San Diego Museum of Art)

Fig. 2. A giant bird carries the young brahman Lohazanga to the island of Lanka. © San Diego Museum of Art, no. 1990: 280. (Photo: courtesy of the San Diego Museum of Art)

Fig. 3. The tale of the cunning Siddhikari. Opaque watercolor, gold, and ink on paper, 16.51 x 12.7 cm. Los Angeles County Museum of Art, from The Naisi and Alice Heeramanek Collection, Museum Associates Purchase M.78.9.12. Photo © 2009 Museum Associates/LACMA. (Photo: courtesy of the Los Angeles County Museum of Art)

Fig. 4. Somaprabha and a celestial nymph listening to music. Opaque watercolor, gold, and ink on paper, 13.02 x 13.65 cm. Los Angeles County Museum of Art, from The Naisi and Alice Heeramanek Collection, Museum Associates Purchase M.78.9.13. Photo © 2009 Museum Associates/LACMA. (Photo: courtesy of the Los Angeles County Museum of Art)
Fig. 5. King Putraka in the palace of the beautiful Patali. Opaque watercolor, gold, and ink on paper, 15.24 x 17.78 cm. Los Angeles County Museum of Art, from The Nasli and Alice Heeramaneck Collection, Museum Associates Purchase M.78.9.7. Photo © 2009 Museum Associates/LACMA. (Photo: courtesy of the Los Angeles County Museum of Art)

Fig. 6. Episodes from the tale of the false ascetic. © Virginia Museum of Fine Arts, The Nasli and Alice Heeramaneck Collection, no. 68.8.54. (Photo: courtesy of the Virginia Museum of Fine Arts)

Fig. 7. Episodes from the tale of Devadatta. © Virginia Museum of Fine Arts, The Nasli and Alice Heeramaneck Collection, no. 68.8.55. (Photo: courtesy of the Virginia Museum of Fine Arts)
Another eleven original illustrations are in private collections:

(h) Water sports. Probably from a Kathāsaritsāgara manuscript. From a private collection unknown to the author.12

(i) Shri Datta obtains a magical sword. The original illustration (16.3 x 13.5 cm) formerly belonged to the George P. Bickford Collection. Its present whereabouts are unknown to the author.13

(j) A king slays a mendicant as a god observes from the sky (8.9 x 17.2 cm). Formerly in the Ehrenfeld Collection.14 Its present whereabouts are unknown to the author.

(k) Indivarasena, his wives Khadgadamstra and Madanamstra, and his younger brother Anichhasena travel magically to the city of Iravati (8.9 x 13.7 cm). Formerly in the Ehrenfeld Collection.15 Its present whereabouts are unknown to the author.

(l) A man holding up a large flower before two women in a chamber (14.5 x 13.8 cm).16 Text on the back of the picture. Catherine and Ralph Benkaim Collection, Los Angeles (fig. 8).

(m) Chandamahasena cuts off pieces of his own flesh (17 x 13.8 cm).17 Formerly in the Pan Asian Collection. Private collection (fig. 9). My sincere thanks to the private collector who generously made his five pictures of the Kathāsaritsāgara (m–q) available for this publication.18

(n) Beheading of a man at court being witnessed by a man and a woman in a chamber and many other figures ringing the courtyard (11.3 x 13.5 cm).19 Formerly in the Pan Asian Collection. Private collection (fig. 10).20

(o) A fire-breathing man carrying a sword-wielding man on his shoulders toward a small temple that enshrines a blue-skinned figure like Vishnu; two slain men lie before the temple (13 x 13.6 cm).21 Formerly in the Pan Asian Collection. Private collection (fig. 11).

(p) A painting in a nim qalam (half-colored) style shows a prince emerging from a huge fish that has been slit open (12.8 x 12.8 cm).22 Formerly in the Pan Asian Collection. Private collection (fig. 12). (q) A woman holding court before female musicians and onlookers (9.7 x 13.8 cm).23 Formerly in the Pan Asian Collection. Private collection (fig. 13).

(r) Three figures and four attendants (?) with books in an interior location (8.4 x 13.2 cm).24 Formerly in the Pan Asian Collection. Private Collection.

Only very small fragments of the text are preserved on the backs of some of these pictures. Consequently, the total extent of the Persian rendering remains unknown and the contents of the surviving miniatures could only be partly identified by inferring from the generally known translations of the Sanskrit Kathāsaritsāgara.25 But what kind of text is this? The Kashmiri poet Somadeva put together an extensive collection of tales that was to include all stories the way an ocean absorbs all rivers, hence the name Ocean of Streams of Stories. The collection weaves together about 350 folk tales, fables, legends, short versions of Puranic myths, Buddhist Jatakas (folklore-like literature), themes from the extensive epic stories Mahābhārata and Rāmāyaṇa, and works of ornate poetry.26 The Kathāsaritsāgara, which was presumably composed in Kashmir between 1063 and 1081,27 was dedicated to Queen Suryavati, wife of King Anantadeva (r. 1028–63), from the Lohara dynasty of Kashmir. This book was meant to “drive away for a moment the sorrows from the thoughts and reflections of this queen,” as the author explains in his epilogue. There was indeed much need for comfort, since the reign of Anantadeva was characterized, especially during its later phase, by a deadly enmity between the monarch and his son, culminating in the suicide of Anantadeva and the sati (self-immolation) of Suryavati in the year 1081.28

According to renowned experts, Somadeva’s work is regarded as the zenith of the classical Indian art of kavya,29 a term that signifies a highly stylized court poetry, whose practitioners display their skill not so much by composing original contents but by presenting well-known subjects in a refined and sophisticated poetical form.30 In this respect, we cannot reproach Somadeva for relying on an older book and, as he himself declares at the beginning and end of his work, for “composing this collection, which contains the pith of the Br̥hatkathā (The Great Tale).” The latter, attributed
Fig. 8. Ashokadatta with a golden lotus. © Catherine and Ralph Benkaim Collection. (Photo: courtesy of Professor John Seyller)

Fig. 9. King Mahasena offers his own flesh to the goddess Chandika. Private Collection. (Photo: courtesy of Professor John Seyller)

Fig. 10. The generous minister Nagarjuna decapitated by the crown prince. Private Collection. (Photo: courtesy of Professor John Seyller)
Fig. 11. A sword-wielding mendicant forces a fire-breathing corpse to carry him to a temple. Private Collection. (Photo: courtesy of Professor John Seyller)

Fig. 12. King Shaktidewa emerges from the belly of a large fish. Private Collection. (Photo: courtesy of Professor John Seyller)

Fig. 13. The pregnant Basawadatta pleased by musicians who look like Vidyādharā. Private Collection. (Photo: courtesy of Professor John Seyller)
to the poet Gunadhya, has not survived. By means of versions that have come down to us, we can roughly estimate its date of origin to be between the second century B.C. and the third century A.D. 31

The structure of the Kathāsa rītāsāgara, subdivided by Somadeva into eighteen books (Skt. lambaka, “rivers”) with a total of 124 chapters (Skt. taraṅga, “waves”), follows the typical form of an Indian framed narrative.32 In the first book, the reader is informed of the divine origin of the Brhatkathā and of the reasons why it was written down by Gunadhya. Shiva was asked by his wife Parvati to tell her a story that nobody had ever heard before. Now it happened that the Gana Puspadanta, one of Shiva’s attendants, secretly listened and passed on what he had heard. When the goddess Parvati became aware of this, she was so moved to anger that she punished Puspadanta and his friend Malyavat, who had interceded on behalf of Puspadanta, by having them both born as mortals. Puspadanta became a human being called Vararuci; Malyavat was born as Gunadhya. They were not allowed to return to the heavenly realms until these tales of Shiva had become famous worldwide.

The main story of the Kathāsarītāsāgara, which, as legend has it, is only one-seventh of the original tale (i.e., the Brhatkathā), starts with the second book. Here, the reader learns first about the life of Udayana, king of the empire of the Vatsa, his two wives Vasavadatta and Padmavati, and the birth of his son, Naravahanadatta. Most of the rest of the book is taken up with the adventures of Prince Naravahanadatta, who, accompanied and assisted by his friend and adviser Gomukha, acquired twenty-six wives and, through their fathers, twenty-six allied kings; finally, after a decisive battle, he became the lord of the demi-gods known as the Vidyādhara.

The great number of interlocking stories in the Kathāsa rītāsāgara makes it difficult to follow the main plot. As a result, breaks in the logical course of the text are not immediately recognizable. In an outline of their contents, Penzer has pointed out the inconsistent succession of the books.33 Referring to the studies of Félix Lacôte, he takes the view that the frame story of the Brhatkathā was probably more coherent and dominant than in the later version composed by Somadeva. The poet, perhaps in accordance with an earlier Kashmiri version that is lost, subordinated the narrative of Naravahanadatta entirely to the goal of integrating as many stories as possible, accepting some inconsistencies in the frame story in return.34 Thus, Somadeva provides us with a colorful kaleidoscope of tales that reflect the customs, manners, and religious life of different sections of the population.

Somadeva’s version of the Brhatkathā (i.e., the Kathāsarītāsāgara) bears witness to his veneration of Shiva, for whom most of the benedictions and homages35 located at the beginning of each of the eighteen lambakas were intended. In the Kathāsa rītāsāgara, Shiva appears as the origin of the work, because he is the one telling the whole story to his consort. Moreover, the deity and other aspects of the Shaivic form of Hinduism are a frequent theme of the tales within.36 The religious orientation of his work may result partly from the poet’s personal inclination, partly from the dominant position of Shaivism in Kashmir, and perhaps also from the religious tendency of the royal family. Nothing detracts from the veneration of Shiva and his consort Uma, even if other deities of Hindu mythology are also present, albeit to a lesser extent. Nevertheless, the proclamation of Shaivic values was evidently not the sole aim of the poet, who gives proof in the Kathāsa rītāsāgara of his erudition and knowledge of the scriptures of all religious and philosophical schools.37

Somadeva kept strictly to the principles defined by Dandin (sixth/seventh century A.D.), one of India’s most important theorists of poetic arts, in his manual Kavyādarśa (Mirror of Poetry). An especially important part of this was the thematic consideration of the “four goals of life,” viz. (1) the fulfillment of religious and moral duties (dharma), (2) the acquisition of wealth and power (artha), (3) the satisfaction of sensual pleasures (kāma), and (4) the wish for deliverance (mokṣa). With his profound knowledge of the Dharmashastra, Arthashastra, and Kamashastra literatures, Somadeva also transmits moral values by depicting the struggle for power and worldly possessions as ultimately ephemeral and deceitful. Thus, in spite of all his intentions to entertain and amuse, Somadeva never lost sight of his goal: mokṣa, deliverance from the cycle of reincarnation.38
THE PERSIAN TRANSLATION OF THE
KATHĀSARITSĀGARA

As to the Persian version of Somadeva’s collection of stories, we are lucky not to be dependent solely on the few fragments of text from the imperial manuscript. We can reconstruct the scope of the translation that was once produced for Akbar with the help of a hitherto nearly unnoticed copy of the Persian Kathāsaritsāgara, indexed as Ms. 2410 in the India Office (henceforth I.O.) Library.39 According to Hermann Ethé, there is an ex libris identifying this manuscript as having formerly been the property of Richard Johnson (d. 1807), who acquired numerous Persian manuscripts during his stay in India as an employee of the East India Company.40 From 1780 to 1782, he lived in Lucknow, working as head assistant to the Resident, and was in contact with Antoine Polier (d. 1795) and Claude Martin (d. 1800), former officers in the British army. Polier and Martin had managed to make a fortune serving under the nawab of Lucknow since 1773 and 1776, respectively, and, much the same as the new elite in Lucknow and the young nawab Asaf al-Dawla (d. 1797) himself, they were avid art collectors—an avocation they engaged in due partly to their aesthetic interests and partly to the conventions of a high social status.

Manuscripts and pictures were especially appreciated, and the Lucknow bazaar had become the place in India where one could buy the most exquisite artefacts, many of which had once belonged to the impoverished old aristocracy of Delhi and the Mughal heartlands.41 Richard Johnson’s collection was in no way inferior to that of Polier and Martin. He not only bought in the Lucknow art market, but also had painters, poets, and writers make special works for him.42 Hence, it was not at all unusual that he commissioned the Kathāsaritsāgara in question. This was, as Hermann Ethé had already mentioned,43 a copy of a manuscript that was once part of the extensive collection of his good friend44 Claude Martin, who must have been in possession of Akbar’s book when he permitted Richard Johnson to prepare a duplicate. After Martin’s death in 1800, his estate was completely sold at auction and Akbar’s Kathāsaritsāgara probably ended up in the possession of an unknown buyer.45

The illustrations of Johnson’s manuscript are even more important than its text: it turns out that they are exact copies of those in the imperial Mughal Kathāsaritsāgara. All the illustrations in Ms. I.O. 2410 (figs. 14–84 [after the Appendix]) are drawings on separate sheets of paper,46 each one partly covered with colored dots indicating the paint colors that were used in the corresponding original from the imperial manuscript. The drawings are loosely fastened to blank spaces on the folios: the plan was no doubt to later paint them directly onto the paper of the manuscript. There are several hints that the illustrations in Johnson’s copy were tracings of the original miniatures found in the imperial manuscript: besides the fact that the original pictures and the drawings correspond with each other exactly in their content, they are, above all, of the same size. In cases in which the originals are complete paintings and not just sections cut out from larger works, we can see the correspondence of the measurements between original and copy. Thus, illustrations (a) “The raja whose guest asked him for 500 dinars daily” (fig. 1), (c) “The tale of the cunning Siddhikari” (fig. 3), and (d) “The tale of Somaprabha” (fig. 4) have the same dimensions as their counterparts on folios 171a, 32b, and 44a of Ms. I.O. 2410 (figs. 82, 27, and 31). The fact that the drawing of “Cunning Siddikari” on folio 32b is actually a mirror image of the original painting further suggests that the pictures of Ms. I.O. 2410 were based on tracings of the works in the imperial manuscript: it is otherwise difficult to explain why the artist might have drawn the picture in this manner. The following pairs of original paintings and corresponding drawings also have the same dimensions: (g) “Episodes from the tale of Devadatta” (fig. 7) and the corresponding image on folio 81b (fig. 44); (i) “Shri Datta obtains a magical sword” and the picture on folio 22a (fig. 22); (n) “Beheading of a man at court” (fig. 10) and the drawing on folio 135a (fig. 63); (o) “A fire-breathing man carrying a sword-wielding man on his shoulders” (fig. 11) and the drawing on folio 47a (fig. 32); and, finally, (p) “A prince emerging from a huge fish” (fig. 12) and the picture on folio 72b (fig. 38).

Among the original illustrations, “The tale of Somaprabha” (d [fig. 4]) and “A man holding up a large flower before two women” (l [fig. 8])47 deserve special mention because they are among the few pieces with text fragments on their backs.48 A comparison with Ms. I.O. 2410 reveals that the corresponding illustrations
on folios 44a and 75a (figs. 31 and 40) are the same not only in size and all details but also in their position in the text. Here we see that the texts on the back of these illustrations exactly match those on the back of the drawings in the India Office copy.

THE TRANSLATOR OF THE KATHĀSARITSĀGARA

Since the first folios of Ms. I.O. 2410 are missing, we have no introduction that offers information on the translator and the date of translation. Moreover, the text abruptly breaks off in the middle of the ninth book and possesses no colophon. Hermann Ethé ascribed the text to the court poet Fayzi (d. 1595). One reason for this assumption may have been that Fayzi had already distinguished himself as a translator from Sanskrit with his rendering of *Lilāvati* (The Beautiful), a manual on arithmetic and geometry by the mathematician Bhaskaracharya (d. ca. 1185). However, there are no indications within the manuscript itself that justify Ethé’s assumption.

In his catalogue, D.N. Marshall lists Ms. I.O. 2410 under the works of Fayzi as well as under those of Badaʿuni. Indeed, the Muslim scholar ʿAbd al-Qadir Badaʿuni (d. ca. 1615) provides us with extensive information about the *Kathāsāritesāgara*. Today he is especially well known for his historical work *Muntakhab al-tawārīkh* (Selections from the Histories), a biting critique of the reign of Akbar, whose service he entered at the beginning of the *Ocean of Streams of Stories* had already been translated by order of Sultan Zayn al-ʿAbidi and that it been translated by order of Sultan Zayn al-ʿAbidi and that it been translated by order of Sultan Zayn al-ʿAbidi.

Since the sources mention only Badaʿuni in connection with the *Kathāsāritesāgara*, it seemed that this translation could be attributed to him. However, an edition of the text published by Tara Chand and Sayyid Amir Hasan ʿAbidi under the title *Daryā-yi asmār* reveals surprising new information: the manuscript in the India Office is not the only extant Persian copy of Somadeva’s collection of stories. There is another one, recorded as Ms. 2642, in the State Central Library of Hyderabad (Deccan). Although the colophon is missing and it, too, contains no date of composition, the preface, with information on the translator, is still in place. Contrary to expectations, it was not written by Badaʿuni, but by a certain Mustafa ibn Khaliqdad al-Hashimi al-ʿAbbasi. Not much more is known about him other than that he completed three translations. During the reign of Akbar he worked not only on the *Kathāsāritesāgara* but also on the *Pañcākhyāna*, a Jainist version of the *Pañcatantra*. Al-ʿAbbasi remained active under Jahangir (r. 1605–27), for whom he made a Persian translation of the Arabic *Kitāb al-Milal wa-l-nihal* (Book of Religions and Religious Sects) by al-Shahrestani (d. 1153), titled *Tawdīḥ al-milāl* and completed in 1612. The *Kathāsāritesāgara* in Hyderabad and the two aforementioned manuscripts also by al-ʿAbbasi, which are located in Delhi and Hyderabad, respectively, seem to have been written by the same scribe, on the same sort of paper with the same sort of ink. This suggests that all three manuscripts are either autographs or that they were copied by the same calligrapher.

We can only speculate as to when al-ʿAbbasi started his translation. His reference to Lahore, where he received Akbar’s orders, suggests a time between 1585...
and 1598, since the Mughal emperor abandoned his residence, Fatehpur Sikri, in 1585 and lived in Lahore for thirteen years. Proceeding on the assumption that Akbar became especially interested in literature from Kashmir after the annexation of the region and that he visited Srinagar in 1589, the time in question could be limited to 1590 and later. We may conclude from the Muntakhab al-tawārīkh that Badaʾuni finished his translation of the Kashmiri chronicle Rājataranguṇī in 1590–91 and started working on Somadeva’s stories about four years later. If al-ʿAbbasi also began his task about that time, why should there have been two persons working simultaneously on the same text unknownst to one another? Since neither of the two authors mentions the other, we cannot be sure to what extent Badaʾuni’s activities were connected with those of al-ʿAbbasi and to what extent al-ʿAbbasi’s text goes back to Badaʾuni’s.

Badaʾuni informs us that he was initially told to translate only the last book. After he had finished that task, he was ordered by Akbar to go over the first part, which had already been rendered into Persian under Zayn al-ʿAbidin. We do not know whether he ever finished this revision or not, but presumably Akbar entrusted al-ʿAbbasi with this task because Badaʾuni could not go on with his work for some reason or other. In this case, al-ʿAbbasi would have received his orders some time between 1595 and 1598. He writes:

The order was issued that he [sc. Khaliqdad al-ʿAbbasi] should summarize the book Brihat katā that Somadeva Batta, a Kashmiri brahman, had originally made into an abridged version, owing to its wordiness and length. By order of Sultan Zayn al-ʿAbidin, the famous ruler of Kashmir, a person had already translated this [text] into Persian.58

So al-ʿAbbasi himself made no translations of the Kathāsaritsāgara. His version of the work is just a revision of that part of the story that had already been rendered into Persian under Zayn al-ʿAbidin. There is no hint that Badaʾuni’s revision of the first part, if he ever made one, was incorporated into this text; his translation of the final, eighteenth book was not included either, since the two known manuscripts of the Persian Kathāsaritsāgara end in the ninth book.

Badaʾuni seems to have assumed the title Bahr al-asmār from the Kashmiri translation, while al-ʿAbbasi exchanged the Arabic word bahr for the Persian daryā, so that his title now reads Daryā-ye asmār. Al-ʿAbbasi describes the reduction of the Arabic vocabulary as an essential aim of his remodeling of the Kathāsaritsāgara, since he considers the medley of Persian and Arabic words a feature of an obsolete style that obscures the meaning of the text:

Under these circumstances, it is incumbent upon the writer to keep the expression clear from mixing with another language, which causes obsfuscation and obscurity of sense. He even has to take care to leave behind the task of eloquence, which diverts the attention of the listener from understanding the meaning by drawing out [the speech] and the metaphors, which are a veil over the intention. God preserve me from this, because abstruseness of speech and ambiguity of meaning belong to the way of worthlessness of expression, incorrectness of style, and defect in eloquence. Just as some deficient scholars, in order to deceive the laymen, mix Arabic and Persian words inappropriately, insult inkpot and pen, and blacken the immaculateness of the entirely innocent paper59...But since the [Kashmiri] translator mixed up the Persian so much with the Arabic, he [thereby] went away from the perception of the common people, and was also cut off from the attention of the higher classes because of an impurity of expression and a lack of precision; [since] by this the sense of his stories remained concealed from both groups and since the intention of the commander, which is admonition and sharpening of the mind, does not emerge from it, [now] Mustafa ibn Khaliqdad, the lowest of those who rub their forehead on the threshold of the one who is like the heavenly throne, is to write it in an easily understandable and distinct style, prepare the pen/arrow (kilk) of clear speech and, in consideration of the order of the original script, eliminate everything turning out to be an addition to the narrative and a disturbance of its intention.60

Badaʾuni similarly comments on his target in the treatment of Somadeva’s stories. He says that Akbar wanted him to rewrite the text, which had been translated by the order of Zayn al-ʿAbidin, “in a customary style,” because it had been “composed in generally unknown and obsolete Persian.”61

Al-ʿAbbasi’s preface shows that he is aware of the work’s textual history. He refers to Somadeva as a “Kashmiri brahman,” and describes the Kathāsaritsāgara as a
summary of the original Brhatkathā. Moreover, he elaborates on Somadeva’s introductory benedictions and the invocation of Mahadeva, though he does not mention Ganesha and Sarasvati, who likewise are called upon in these invocations. The detailed blessings with which Somadeva opens each of the remaining seventeen books were all omitted by al-ʿAbbasi. He further explains that when naming the chapters he oriented himself by the meanings of the original titles and hence refers to each of the eighteen books as a nahr, meaning “river,” following the Sanskrit lambaka, and the chapters contained in them as “waves” (Pers. sing. mawj), paralleling the use of the term taraṇga in Sanskrit.

Although al-ʿAbbasi’s Persian version is noticeably shorter than the Sanskrit text, the plots of the stories that he took up are more or less the same. Only some minor details of the tales have been Persianized. For instance, he translates the name Shri Datta as Ibn al-Dawla and, in the story of Putraka, he identifies Patali as the daughter not of a king but of a wālī (governor).

THE ILLUSTRATIONS OF THE KÂTHÂSAARITSÂGARA

Thanks to Johnson’s copy, it is now possible to see how the original illustrations were embedded in the text of the imperial Kâthâsaritsâgara and to identify them accurately. The second illustration we come across when leafing through Ms. I.O. 2410 shows the larger tableau from which the heretofore unidentified “Harem scene” (e [fig. 5]) seems to have been cut out. The picture, on folio 4b (fig. 15), is one of two illustrations belonging to the story known as “The founding of the city of Pataliputra.” In this tale, three brahman brothers on their way to see the god Kumara find accommodation in the house of the brahman Bochika, who gives them his three daughters in marriage, divides his property among them, and retires from the world to devote his life completely to prayer and asceticism (illustrated on fol. 2b [fig. 14]). During a famine, the brothers leave their wives, even though one of them is with child. According to the decree of Shiva, this child is given the name Putraka and lives under the protection of the god. Once grown, Putraka becomes king. His generous presents to brahmans entice Putraka’s father and his two brothers to the court. Although they are received with honor, they try to seize royal dignity for themselves and make plans to kill Putraka, who is forced to flee. On his long journey he comes into the possession of magical shoes that enable him to fly through the air. One day he learns about Patali, the beautiful daughter of the governor, and decides to fly at night to the palace. His arrival on an open terrace of the palace is the scene depicted on folio 4b.

The “Harem Scene” (e [fig. 5]), which is now in the Los Angeles County Museum of Art, was once enframed by two blocks of text. The text on top reads:

When one hour of the night was gone, he put on his shoes and flew in the passion of love like a bird. He landed at the palace of the wālī’s daughter and saw her as she was sleeping gracefully on her bed. He thought about a way to wake her up when suddenly one of the watchmen sang a verse fitting his situation.

The three men in front of the palace wall seem to have no special significance in this scene. Perhaps one of them is meant to be the watchman reciting the above-mentioned verse.

“Water sports” (h), is the central part of the picture on folio 15a (fig. 18) of Ms. I.O. 2410. The scene depicts the beginning of a story about King Satabahana and his wives, who, on a fine spring day, play in a pool and pour water over each other. When one of the queens tires of the game, she cries, “Mā .udakay!” (Skt. O lord, don’t harass me with the water!) But as the king is not versed in Sanskrit grammar and the formation of compound words, he understands “Harass me with refreshing sweets,” and orders the servants to bring sweets. When his wives make fun of him because of his ignorance, he stops playing and retires to his palace deeply depressed. The rest of the story explains how the king, with supernatural help, manages to learn Sanskrit grammar within six months and becomes happy again.

The illustration “Shri Datta obtains a magical sword” (i), which was copied on folio 22a (fig. 22), was correctly identified by Toby Falk.62 As mentioned above, Shri Datta is usually called Ibn al-Dawla in the Persian version of the text. He was a gift (datta means “given”) of the goddess Shri to his father Kalanemi (hence the name Shri Datta), and, since “Dawla” is the Persian equivalent of “Shri,” his name is translated as Ibn al-Dawla.
The counterpart of the painting “Chandamahasena cuts off pieces of his own flesh” (m [fig. 9]) is found on folio 25b (fig. 23) and illustrates the story of King Mahasena of Ujjayini, who wishes to have a wife of noble lineage and a sword appropriate to the power of his arms. One day, he goes to a temple of Chandika (i.e., Durga) and delights the goddess by cutting flesh from his own body and sacrificing it in the fire. The goddess appears to him, gives him a sword, and predicts that he will soon marry the daughter of a powerful demon. Moreover, she orders that henceforth his name will be Chandamahasena.

The copy of “A man hides in an elephant skin” (b [fig. 2]) appears on folio 28b of Ms. I.O. 2410 (fig. 25); it has not, until now, been ascribed to a particular story. It is one of two pictures illustrating “The story of Rupinika,” in which the courtesan Rupinika falls in love with the poor brahman Lohazanga (the Persian transcription of Skt. Lohajanga) and turns down all other suitors. Her mother, the old procuress Makaradams, is annoyed at Rupinika’s connection to this have-not and finds a way to drive Lohazanga out of the house. While the unhappy brahman is wandering about, he comes to a desert and seeks shelter from the sun in the skin of a dead elephant whose intestines have been eaten by jackals. When Lohazanga falls asleep, it starts to rain heavily and the skin is carried away by the water into the sea, where a giant bird finds it and takes it to the island of Lanka (i.e., Sri Lanka). The scene depicted in our illustration shows the bird hastily flying away upon opening the skin and seeing the man. Since the king of Sarandib thought that Lohazanga was in league with powers from the hidden world (ʿālam-i ghayb), he tried to please him with precious gifts. One of them was a giant bird from the offspring of the Simurgh that finally brought the brahman back to his beloved and enabled him to teach her mother a lesson, as we see in the next drawing, on folio 30a (fig. 26).

Two pictures from the Los Angeles County Museum of Art, “The tale of the cunning Siddhikari” and “The tale of Somaprabha” (c and d [figs. 3 and 4]), have been described at some length in an article by David T. Sanford and in the catalogue by Pratapaditya Pal. These scenes were copied onto folios 32b and 44a of Ms. I.O. 2410 (figs. 27 and 31), respectively. The painting “Episodes from the tale of the false ascetic” (f [fig. 6]), which was copied on fol. 37b (fig. 29) of Ms. I.O. 2410, is discussed in great detail by Joseph M. Dye in The Arts of India.

One of the original paintings formerly belonging to the Pan Asian Collection shows a fire-breathing man carrying a sword-wielding man on his shoulders (o [fig. 11]). If we compare this description with the drawings on folio 47a (fig. 32) of Ms. I.O. 2410, there is no doubt that it belongs to the story of the shrewd and courageous brahman Wideshaka, who, as a test of courage, repairs one night to a cemetery, where he beholds a religious mendicant (Skt. śramaṇa) using his magic power to make a corpse carry him to a temple. The legend on folio 47a reads: “The śramaṇa mounts the neck of the corpse, from whose mouth issue flames, and makes it carry him to a temple.” The sword in the hand of the monk is not mentioned in the text.

Another picture formerly in the Pan Asian Collection, “A woman holding court before female musicians and onlookers” (q [fig. 13]), can be assigned to the story of King Udayana; its counterpart in Ms. I.O. 2410 appears on folio 61a (fig. 35). After seeing very beautiful Vidyādhara women playing on wonderful musical instruments in a dream, the king’s consort, Basawadatta, wishes to see them in reality. To please the pregnant queen, the minister Yaugandarayana orders some women who look like Vidyādhara to make music for her.

A third illustration from the same collection, “A prince emerging from a huge fish” (p [fig. 12]), must have been cut out from a larger painting later copied on folio 72b (fig. 38), which depicts a scene from “The story of the Golden City.” In this tale, Shaktidewa is shipwrecked during his search for the Golden City and devoured by a giant fish, which is then caught by fishermen from the island of Utala. Since the fish is extraordinarily big, they drag it to Satibrata, the king of the island, who is highly astonished at the young man who emerges when the fish is cut open. In the illustration, we see Shaktidewa standing in the gutted fish, saluting the king on the shore.

A fragment from the Benkaim Collection (l [fig. 8]), which was generously made available for this publication, depicts a scene in the story of Ashokadatta; its
counterpart is found on fol. 75a of Ms. I.O. 2410 (fig. 40). In search of the mate for an anklet he once took from the horrible she-demon Bidyutshika, Ashokadatta once more encounters this consort of a rakshasa (Skt. rākṣasa [demon]) king, who offers him her daughter in marriage. Ashokadatta agrees to the marriage and flies with his mother-in-law to the Golden City of Tri-gantha, located on a peak of the Himalayan mountains. After living there comfortably for a while, he wishes to return to Benares. The Benkaim picture shows Ashokadatta bidding farewell to his wife and his mother-in-law, and obtaining two gifts from them: the desired anklet and a golden lotus. However, the painter took the liberty of deviating from the exact wording of the text, depicting an ordinary white lotus rather than a golden flower. Moreover, the anklet is not discernible; we can only assume that it is in the hand of Ashokadatta’s wife.

One of the most horrifying scenes of the Kathāsaritsāgara is to be found in the tale of the gambler Devadatta and the demon princess who cut open her abdomen to remove the embryo inside of her. This scene is depicted in “Episodes from the tale of Devadatta” (g [fig. 7]), and appears on fol. 81b of Ms. I.O. 2410 (fig. 44). The illustration has been described in detail by Joseph Dye.66

Next come fifteen drawings one after the other, for which the original paintings from Akbar’s imperial manuscript are no longer extant. It is not until fol. 125b (fig. 60) that we can recognize the inserted picture as a copy of a fragmentary page formerly in the Ehrenfeld Collection entitled “A king slays a mendicant as a god observes from the sky” (j).67 Based on the bits of text on the back, Ehnbom had suggested that this could have been an incident that occurred at the end of the tale of King Trivikramasena and a demon.68 As we can see now, though, it is actually an illustration of the story of King Bikramadita and a mendicant who wants to sacrifice the king in order to obtain magical powers. King Bikramadita is warned in a dream of what is to happen and cuts off the mendicant’s head with a stroke of his sword. After this, the “Lord of divine treasures” (i.e., Kubera) appears and grants him a favor.

The last fragment from the former Pan Asian Collection that can be identified, “Beheading of a man at court” (n [fig. 10]), depicts two incidents from “The story of King Chirayu and his minister, Nagarjuna,” found on folio 135a of Ms. I.O. 2410 (fig. 63). Well versed in pharmacology, King Chirayu’s wise minister Nagarjuna made an elixir of life that would allow him and the king to live a long life without illness. One day, the son of King Chirayu, Jiwahara, proudly tells his mother that his father has appointed him crown prince. But his mother explains to him that due to the longevity of his father, who is now eight hundred years old, he will have no chance to survive him and ascend to the throne. Nevertheless, she explains to her son that every day at noon Nagarjuna calls upon the poor to ask him for gifts. She says that he, Jiwahara, should go there and ask the minister for his head: since Nagarjuna promises to grant every wish, he will surely let the prince cut off his head. The mother assumes that after Nagarjuna’s death the king will die from sorrow or retire to the forest and Jiwahara will be free to ascend to the throne. Following his mother’s advice, the prince goes to see the minister the next day but is not able to cut his neck, which had been hardened by the elixir. When this news reaches King Chirayu, he rushes out and learns from Nagarjuna that the minister himself caused the delay in order to see the king one last time. The minister then sprinkles on the prince’s sword crumbs of a drug that he had prepared to reverse the effects of the elixir and the young man cuts off his head with one blow.

The first part of the story is depicted in the background: the young man and the older woman on the terrace must be Jiwahara and his mother hatching their plan to kill Nagarjuna. The second part takes place in the foreground: the plates, bowls, and cans to the right hint at the distribution of food to the poor in the house of the minister every day at noon. On the left-hand side, we see the king and his retinue. The beheaded Nagarjuna lies in the midst of the courtyard, while Jiwahara with his sword raised next to the corpse is easily recognizable as the assassin. The prince is thus depicted twice in this illustration.

Flying through the air with or without aid is a frequent theme in the Kathāsaritsāgara. In “The story of Parityagasena,” his son Indivarasena creates a large chariot that can fly through the air with the help of a magical sword that he received from the goddess Parvati. One day, Indivarasena places his golden pal-
ace, his two wives, and his brother in this chariot and returns to his home town, where people behold his landing with astonishment. This scene is depicted in the painting "Indivarasena, his wives Khadgadamstra and Madanamstra, and his younger brother Anicchasena travel magically to the city of Iravati" (k), which Daniel Ehnbom identified in his catalogue of the Ehrenfeld Collection. We find its pendant on folio 138b of Ms. I.O. 2410 (fig. 66).

The first picture in the list of extant paintings from Akbar’s manuscript found at the beginning of this article, “The raja whose guest asked him for 500 dinars daily” (a [fig. 1]), currently located in the San Diego Museum of Art, was thought to illustrate the story of the brahman Viravara, from the land of Malva, who demands this huge sum from the king every day. The basis of this interpretation was probably the text on the back of the picture. But as we can now see, this text belongs to the following story, the tale of King Lakadatta (Skt. Lakshadatta) and the beggar, whose name in the Sanskrit version is Labdhatta but who has no name in the Persian translation. This beggar waited patiently for five years at the gate of the royal palace, accompanying the king on the chase and into battle, where he always displayed his bravery. Nevertheless, Lakadatta bestowed no present on him. It is only at the beginning of the sixth year that the king remembers him, devising a special gift in the form of an orange (turunj) filled with jewels. However, the beggar does not recognize the value of the present and gives it away. The fruit finds its way back to the king, who delivers it again to the poor man. Only on the fourth attempt does the beggar become aware of the precious contents, when Lakadatta lets the orange drop so that the jewels pour out. The original picture and its copy on fol. 171a (fig. 82) of Ms. I.O. 2410 show the king in the center, seated on a simple throne under a canopy, while some courtiers stand around the dais. The beggar bows down in front of the canopy to pick up the orange, from which jewels can be seen to be spilling out.

CONCLUSION

To sum up, it was the original illustrations of the Kathāsārireśāgara, scattered over a number of collections, that allowed us to identify Ms. I.O. 2410 as a copy of the imperial manuscript. That copy in turn gives us a sense of the extent and range of the lost illustrations and of the contents of the extant pictures that had not been identified until now. Nine original illustrations from Akbar’s Kathāsārireśāgara were identified in this article: illustrations (a), (b), (e), (h), (j), (l), (o), (p), and (q). In addition, I discovered that there is a second manuscript in the State Central Library Hyderabad/Deccan (Ms. 2642) containing the preface of the Persian editor and disclosing his name as Mustafa ibn Khaliqdad al-Hashimi al-Abbasi.

At the beginning of this article, I stated that the original manuscript of the Persian version of the Kathāsārireśāgara had been made for Akbar. However, we should note that Joseph M. Dye expressed doubts concerning the imperial origin of the extant illustrations of the Kathāsārireśāgara. Comparing them with those made for the Harivamsa, he concluded that “these illustrations do lack the complexity, minute finish, and delicacy of documented imperial works from roughly the same period,” so that “possibly, this manuscript was produced for a late 16th century Mughal nobleman or courtier who wished to have a Persian translation of a Hindu text.”

With respect to the quality of the pictures, Dye may be right in his categorization of the Kathāsārireśāgara as a manuscript not of the highest standard. But this does not necessarily exclude its production at the Mughal court. After all, the efforts expended on the illustration of a manuscript bear a relation to its political use. It is not entirely coincidental that great efforts were made to illustrate historical manuscripts with distinct references to Akbar’s Timurid and Chingissid lineage in order to hint at his inherited right to sovereignty. Persian translations of the Mahābhārata and the Rāmāyana, which are normative religious works for the Hindu population, were of political importance as well. Showpiece manuscripts such as these, which were found in the Jaipur Palace Museum, possessed twofold importance: to the Muslim onlookers, they demonstrated the magnitude of the Mughal empire, comprising much more than only Muslim subjects, while for the Hindu noblemen, they gave proof that their cultural heritage was properly respected. The Kathāsārireśāgara, by contrast, was a collection of tales that was obviously not intended to be
a showpiece; rather, it was meant to be a private source of amusement, similar to the Dārāb-nāma or the 'Iyār-i dānish.

Thanks to the preface by al-'Abbasi in the Hyderabad manuscript, we know that the present Kathāsaritsāgara was indeed translated for Akbar. Nothing in Ms. I.O. 2410 indicates that it was intended for a nobleman. Moreover, it would have been impossible for courtiers to have had a copy produced as long as there was no completely translated Persian text—as seems to have been the case here. It may be that Johnson’s copy breaks off in the middle of the ninth book because the rest of the work was lost. However, all the indications are that Akbar’s Kathāsaritsāgara was simply never finished. This supposition is all the more likely given the fact that the only other known manuscript of the Kathāsaritsāgara, in Hyderabad, ends at nearly the same passage in the ninth book.

Besides, Mustafa al-'Abbasi explains in his preface that he had been instructed to summarize the text that had already been translated into Persian by order of Zayn al-'Abidin. According to Bada’uni, this was only the first part of the Kathāsaritsāgara, although he does not mention exactly how many books this first part comprises. The last book of the Kathāsaritsāgara was translated by Bada’uni himself, although this seems to be lost now. Since al-'Abbasi does not mention any instructions to translate passages from the Ocean of Streams of Stories, there is thus far no indication that the eight and a half books missing between the text by al-'Abbasi and the last book translated by Bada’uni have ever been rendered into Persian.

In addition to the textual evidence, there are also some pictorial clues leading to the same conclusion. Most of the extant original paintings, that is to say thirteen of the eighteen—(e), (h), (i), (m), (b), (c), (f), (d), (o), (q), (p), (l) and (g)—belong to the first part of the text edited by al-'Abbasi (up to folio 81); another three, (j), (n), and (k), follow between folios 125 and 138, and one (a) is from the last part of his text. The eighteenth painting, “Three figures and four attendants with books” (r), could not be identified without personal inspection. In spite of the uncertainty concerning the last-named picture, we may proceed on the assumption that all the original illustrations come from the available Persian translation by al-'Abbasi and that none belongs to a passage not contained in his text. Hence, there are two pieces of evidence that the Persian translation of the Kathāsaritsāgara was never completed beyond the ninth book: first, the texts of the two known manuscripts end at nearly the same point in the ninth book, and second, we have no original pictures illustrating a passage beyond this book.

We know now of only one, incomplete, Persian version of the Kathāsaritsāgara, which was begun for Akbar but never finished. Consequently, it is very likely that the extant original paintings discussed above were likewise produced in the imperial workshop.

Orientalisches Institut
Halle, Germany

APPENDIX

The folios and illustrations of the manuscript in the India Office Library (Ms. I.O. 2410) are no longer in their original order. Approximately four folios are missing at the beginning. To avoid confusion, I have followed the current numbering; hence, the first folio of the manuscript is regarded as folio 1a. The following list enumerates the folios in their correct sequence: folios 1a–16b; folio 163; folios 17a–162b; folios 174a–188b; folios 164a–173b; folio 189. The catchword on folio 16b is wrong: it points to page 17a in the manuscript whereas in fact it should be followed by folio 163. After folios 89, 163, and 185, one folio is missing. The end of the printed text corresponds with folio 173b. Folio 189, which is not part of the Persian edition by Chand and 'Abidi,72 contains figure 84.

Some of the drawings are attached to the wrong page: figure 64 should be on folio 136b but is actually found on folio 137b; figure 65 belongs on folio 137b but is attached instead to folio 141b; finally, figure 67, on folio 136b, actually illustrates the text on folio 141b.

In the Persian translation edited by Chand and 'Abidi, the numbering of the chapters (mawj) starts anew in each book (nahr). To facilitate their location, the chapters in the list below are numbered continuously, as they are in the English and German translations by Tawney73 and Mehlig,74 respectively. The captions are taken from the translations by Tawney and Mehlig; in the Persian
version, the beginning of each tale is either not marked at all or just by a short hikāyat (story) by way of a title.

The Illustrations of Ms. I.O. 2410

The following list provides the reader who is already familiar with the contents of the stories with brief descriptions of what is depicted in the images. The information in the second line refers to the relevant passages in the text, i.e., where the scene depicted can be found in the Persian text edited by Chand and ʿAbidi (henceforth “Persian ed.”), the English translation by Tawney, and the German translation by Mehlig.

A picture usually depicts the episode in the immediately preceding text, although in some cases the drawings refer to later passages of the book, e.g., figures 33, 47, and 77. Occasionally, various scenes of the illustrated story are depicted in one and the same picture. Longer explanations will be provided below only in instances where the contents of the illustrations do not reflect the substance of the text.

The names of persons and locations are transcribed as the Persian text relates them: for example, the Sanskrit वायु appears as a व. In cases where the Sanskrit writing is no longer discernible, it is inserted in brackets to aid the reader. All measurements should be understood as height by width.

1. Fol. 2b, 16.7 x 13.1 cm (fig. 14)
Persian ed., 20; Tawney, 1:19; Mehlig, 19.
Book I (Katāpīthā), chapter 3
“The founding of the city of Pataliputra”
After enquiring about the origin and family of three brahman brothers, the brahman Bochika gives them his three daughters in marriage.

2. Fol. 4b, 28.2 x 19.2 cm, two text panels in the picture (fig. 15)
Persian ed., 25; Tawney, 1:23; Mehlig, 23.
Book I, chapter 3
“The founding of the city of Pataliputra” (continued)
With the help of his magic shoes, King Putraka flies up to the palace to see Patali, the beautiful daughter of the governor.

The central part of the original illustration (e [fig. 5]) is kept in the Los Angeles County Museum of Art.

3. Fol. 7a, 30.5 x 18.8 cm, one text panel in the picture (fig. 16)
Persian ed., 30; Tawney, 1:35–36; Mehlig, 32.
Book I, chapter 4
“The story of Upakosha, the wife of Vararuci, and her four lovers”
During a royal audience, Upakosha invokes her “household gods” to be witnesses against the merchant Hiranyakupta. After the four men who tried to seduce Upakosha are freed from the box in which the clever woman had managed to confine them, they stand with their hands in fetters and heads bowed in front of the king.

4. Fol. 11a, 28.5 x 19.6 cm, two text panels in the picture (fig. 17)
Persian ed., 40; Tawney, 1:53; Mehlig, 44.
Book I, chapter 5
Part of the story of Shivabarma
Prince Hiranyakupta betrays his friend, the monkey, to the lion and tries to throw him off a tree.

5. Fol. 15a, 29.5 x 18.2 cm, two text panels in the picture (fig. 18)
Persian ed., 49; Tawney, 1:69; Mehlig, 58.
Book I, chapter 6
“The story of King Satabahana”
King Satabahana and his wives play happily in a pool in the magic garden.

The central part of the original illustration (h) is preserved in a private collection.75

6. Fol. 18b, 17.9 x 17.6 cm (fig. 19)
Persian ed., 63; Tawney, 1:95; Mehlig, 77–78.
Book II (Katāmukha), chapter 9
“The story of Sahasranika, father of King Udayana”
Through his messenger, King Shatanika promises that he will help Indra in a battle and commits his son Sahasranika and the kingdom to the care of his principal minister and his commander-in-chief. It seems that the man kneeling on the seat opposite King Shatanika is Indra’s messenger, while the young man performing the taslim (a special form of greeting the emperor in Mughal India) in front of the dais may be the king’s son Sahasranika.
7. Fol. 19b, 19.7 x 13.8 cm (fig. 20)
Persian ed., 65; Tawney, 1:98; Mehlig, 81.
Book II, chapter 9
“The story of Udayana”
Sahasranaka’s pregnant consort, Mrigawati, is carried off by a giant bird (jānwar, lit. “animal”) from a tank filled with red dye, and the king falls down fainting.

8. Fol. 21b, 19.5 x 13.2 cm (fig. 21)
Persian ed., 69; Tawney, 1:107–8; Mehlig, 87.
Book II, chapter 10
“The story of Shri Datta (i.e., Ibn al-Dawla) and Mrigavati”
When trying to save a woman from drowning in the Ganga, the young Ibn al-Dawla is pulled into the depths and suddenly turns up in a garden near a temple of Mahadeva.

9. Fol. 22a, 16.1 x 13.7 cm (fig. 22)
Persian ed., 70; Tawney, 1:109; Mehlig, 88.
Book II, chapter 10
“The story of Ibn al-Dawla”
In order to help the daughter of the demon king Bali, Ibn al-Dawla kills a lion, who was actually an enchanted Yaksha (a nature spirit or low-ranking god), and in return obtains a sword to conquer the world.

The original illustration (i) is kept in a private collection.

10. Fol. 25b, 17.3 x 16.7 cm (fig. 23)
Persian ed., 79–80; Tawney, 1:125; Mehlig, 104–5.
Book II, chapter 11
“The story of King Chandamahasena”
By offering his own flesh, King Mahasena pleases the goddess Chandika (Chandika is an epithet of Durga) and receives a sword as a reward.

The original illustration (m [fig. 9]) is part of a private collection.

11. Fol. 27a, 16.8 x 15.9 cm (fig. 24)
Persian ed., 82; Tawney, 1:134; Mehlig, 110.
Book II, chapter 12
“The story of King Udayana” (continued)
A number of soldiers sent by King Chandamahasena emerge from an artificial elephant and capture King Udayana.

12. Fol. 28b, 29.6 x 18.8 cm, two text panels in the picture (fig. 25)
Persian ed., 85; Tawney, 1:142; Mehlig, 117.
Book II, chapter 12
“The story of Rupinika”
Lohazanga (Skt. Lohajanga), a young brahman, crawls out of an elephant’s hide that was carried by a giant bird to the island of Lanka.

The central part of the original illustration (b [fig. 2]) is kept in the San Diego Museum of Art.

13. Fol. 30a, 17.2 x 13.7 cm (fig. 26)
Persian ed., 88; Tawney, 1:147; Mehlig, 122.
Book II, chapter 12
“The story of Rupinika” (continued)
The procuress Makaradams, who has been fooled by Lohazanga, waits on a high column in front of a temple to be brought into paradise by Vishnu. We see Makaradams, as the text describes, with a necklace of skulls (ustukhān-hā dar rishta), waiting atop the column. Lohazanga, dressed as Vishnu, appears to stand at the bottom of the column.

14. Fol. 32b, 16.4 x 13.6 cm (fig. 27)
Persian ed., 94; Tawney, 1:157–58; Mehlig, 131–32.
Book II, chapter 13
“The cunning Siddikari”
The clever Siddhikari stole the treasures of a merchant from Khurasan. On her way home, she dupes a thief into hanging himself. Afterwards, she fools the servant of the merchant: believing her oath of love, he wants to kiss her, but she bites off his tongue. When the horrified merchant sees the dead man and his bleeding servant, he thinks that this must be the work of a demon and gives up pursuing her further.

The original illustration (c [fig. 3]) is kept in the Los Angeles County Museum of Art. The drawing in Ms. I.O. 2410 is the mirror image of the original.
15. Fol. 34b, 19.6 x 13.1 cm (fig. 28)
Persian ed., 98; Tawney, 1:163; Mehlig, 137–38.
Book II, chapter 13
“The story of Dewasmita”
In an assembly of all the subjects, Dewasmita asks the king to hand over the four slaves who have escaped from her.

16. Fol. 37b, 15.5 x 12.8 cm (fig. 29)
Persian ed., 108–9; Tawney, 2:5; Mehlig, 151.
Book III (Lavanaka), chapter 15
“The story of the hypocritical ascetic”
An ascetic who wishes to smuggle the beautiful daughter of a merchant inside a chest into the cell of his monastery finds not the girl inside but a furious monkey, which bites off his nose and tears off his ears. Meanwhile, the daughter of the merchant enjoys herself with a young prince on a boat.

Unlike the Sanskrit text, the Persian version mentions the barque (kishtā) of the prince. The original illustration (f [fig. 6]) is kept in the Virginia Museum of Fine Arts.

17. Fol. 41b, 18.6 x 12.8 cm (fig. 30)
Persian ed., 118; Tawney, 2:29; Mehlig, 169.
Book III, chapter 16
“The story of King Udayana” (continued)
After a long separation, King Udayana and his consort, Basavadatta, happily embrace in the house of Basavadatta’s brother, Gopalaka.

18. Fol. 44a, 12.4 x 13.5 cm (fig. 31)
Persian ed., 124; Tawney, 2:42–43; Mehlig, 180.
Book III, chapter 17
“The story of Somaprabha”
Every night, the celestial nymph Mah-para-i (Skt. Somaprabha) meets another nymph and listens to heavenly music with her. With the help of the fire-god Agni, Somaprabha’s curious husband finds out where she goes each night. They change themselves into bees and watch her nightly activities.

The original illustration (d [fig. 4]) is found in the Los Angeles County Museum of Art.

19. Fol. 47a, 13.1 x 13.4 cm (fig. 32)
Persian ed., 132; Tawney, 2:62; Mehlig, 199.
Book III, chapter 18
“The story of Wideshaka”
By his magic power, a religious mendicant (shramana) forces a corpse to carry him to a temple.

The original illustration (o [fig. 11]) formerly belonged to the Pan Asian Collection.

20. Fol. 54a, 15.9 x 13.5 cm (fig. 33)
Persian ed., 152; Tawney, 2:104; Mehlig, 240–41.
Book III, chapter 20
“Kubalayawali and the witch Kalaratri”
The details in the picture do not match the immediately preceding text. What we see is presumably Kubalayawali and two demons devouring the flesh of a corpse in front of them. A young man hides behind some trees. This must be Sundaraka, although he only appears in subsequent stories.

21. Fol. 56a, 15 x 13.1 cm (fig. 34)
Persian ed., 156; Tawney, 2:110–11; Mehlig, 243–44.
Book III, chapter 20
“Sundaraka and the witches”
Sundaraka flies through the air with the royal palace until he reaches Prayaga. When he sees a king bathing in the Ganga, he stops and plunges into the river.

22. Fol. 61a, 9.6 x 13.5 cm (fig. 35)
Persian ed., 172; Tawney, 2:138; Mehlig, 264.
Book IV (Narabāhanadattajanana), chapter 22
“The story of Udayana” (continued)
In order to please the pregnant Basawadatta, the minister Yaugandarayana tells some women who look like Vidyādhara to play all sorts of musical instruments.

The original illustration (q [fig. 13]) formerly belonged to the Pan Asian Collection.

23. Fol. 65a, 13.5 x 13.3 cm (fig. 36)
Persian ed., 182; Tawney, 2:154; Mehlig, 282–83.
Book IV, chapter 22
“The story of Jimutabahana”
The Garuda (Pers. garura ya’ni simurgh) devours Jimutabahana, the king of the Vidyādhara, who had assumed the form of a serpent. Jimutabahana sacrifices himself for Shankasuda, who also demands to be consumed.
24. Fol. 68b, 12.2 x 13.5 cm (fig. 37)
Persian ed., 190; Tawney, 2:170–71; Mehlig, 295.
Book V (Chaturdarika), chapter 24
“The story of King Udayana and his son Narabahanadatta” (continued)
The king of the Vidyādhara, Shaktibega, appears in front of King Udayana and his consort, Basawadatta, to see Prince Narabahanadatta.

25. Fol. 72b, 12.8 x 12.8 cm (fig. 38)
Book V, chapter 25
“The story of the Golden City (Kanakapuri)”
Fishermen from the island of Utala (Skt. Utsthala) catch a large fish. When they cut it open in front of their king, Shaktidewa, who later receives the name Shaktibega, emerges from its belly alive.

The original illustration formerly belonged to the Pan Asian Collection (p [fig. 12]).

26. Fol. 74a, 14.5 x 13.3 cm (fig. 39)
Book V, chapter 25
“The story of Ashokadatta and Bijayadatta”
Ashokadatta, the son of a brahman, unintentionally helps the female demon Bidyutshika to eat a corpse. Enraged by this, he wants to kill her, but she extricates herself from his grip and only her jewelled anklet remains in his hands.

27. Fol. 75a, 14.6 x 13.6 cm (fig. 40)
Persian ed., 206; Tawney, 2:207; Mehlig, 330.
Book V, chapter 25
“The story of Ashokadatta” (continued)
Ashokadatta bids farewell to his wife and her mother, Bidyutshika, and obtains the desired anklet, as well as a golden lotus.

The original illustration (l [fig. 8]) is part of the Catherine and Ralph Benkaim Collection.

28. Fol. 76a, 16.7 x 13.5 cm (fig. 41)
Persian ed., 207; Tawney, 2:209–10; Mehlig, 334.
Book V, chapter 25
“The story of Ashokadatta” (continued)
While Ashokadatta is gathering golden lotuses from the lake of King Kapalaswat (Skt. Kapalasphota), the rakshasa king appears and, upon seeing him, remembers his former brahman incarnation as Ashokadatta’s brother Bijayadatta. He gets back his human shape and falls at his brother’s feet.

29. Fol. 78a, 14 x 12.8 cm (fig. 42)
Book V, chapter 26
“The story of the Golden City” (continued)
In the palace of Candraprabha, Shaktidewa discovers mysterious resting places where three of the princess’s sisters lie. When he leaves the palace, he sees a beautifully saddled horse near a pond, but while attempting to mount the horse, he is thrown into the water.

30. Fol. 79a, 16.2 x 13.3 cm (fig. 43)
Persian ed., 214; Tawney, 2:222–23; Mehlig, 344.
Book V, chapter 26
“The story of the Golden City” (continued)
In the palace of Candraprabha, Shaktidewa discovers mysterious resting places where three of the princess’s sisters lie. When he leaves the palace, he sees a beautifully saddled horse near a pond, but while attempting to mount the horse, he is thrown into the water.

31. Fol. 81b, 13.8 x 13.3 cm (fig. 44)
Persian ed., 219; Tawney, 2:234; Mehlig, 355.
Book V, chapter 26
“Dewadatta, the gambler”
The brahman Dewadatta takes the embryo of the demon princess Bidyutpraba to the ascetic Jalapada. Bidyutpraba kneels with her belly cut open in front of a pool of blood.

The original illustration (g [fig. 7]) is kept in the Virginia Museum of Fine Arts.

32. Fol. 83b, 11.5 x 13.1 cm (fig. 45)
Persian ed., 226; Tawney, 3:4–5; Mehlig, 365.
Book VI (Madanamanchuka), chapter 27
“The story of the merchant’s son in Takshila”
In order to teach him a lesson, the king of Takshila makes the son of a merchant walk around the city with a vessel filled to the brim with oil. If he happened to spill so much as one drop, the two men following him with drawn swords had orders to kill him instantly.

33. Fol. 86b, 16 x 13.2 cm (fig. 46)
Persian ed., 235; Tawney, 3:18; Mehlig, 380.
Book VI, chapter 28
“The story of Kalingadatta, king of Takshila”
Disappointed that his wife bore him a daughter, King Kalingadatta seeks comfort in a temple of Buddha and listens to the religious speech of a monk.

34. Fol. 90a, 18.7 x 12.9 cm (fig. 47)
Persian ed., 244; Tawney, 3:40; Mehlig, 399.

Book VI, chapter 29
“The story of Kalingadatta” (continued)
Somaprapa, the daughter of the demon Maya, makes friends with Kalingasena. To please her, she brings a chest full of dolls that move with the help of her knowledge of magic.

The illustration does not exactly match the preceding text, since the attendance of the king during the performance of Somaprapa’s magic tricks occurs later in the text.

35. Fol. 93a, 15.6 x 13.6 cm (fig. 48)
Persian ed., 252; Tawney, 3:52–53; Mehlig, 411.

Book VI, chapter 29
“The story of Kirtisena”
Having overheard the words of a female demon, Kirtisena, dressed as a man, figures out how to free King Basudatta from the centipedes in his head with the help of a tube and a vessel of cold water.

36. Fol. 97b, 25.6 x 14 cm (fig. 49)

Book VI, chapter 31
“The story of Usha und Aniruddha”
Usha recognizes among the pictures painted by her friend Chitraleka the man whom she will marry.

37. Fol. 100b, 19 x 12.8 cm (fig. 50)
Persian ed., 271; Tawney, 3:96; Mehlig, 441.

Book VI, chapter 32
“The story of the brahman’s son Bishnudatta and his seven foolish companions”
On their way to the town of Walabi, Bishnudatta and his companions have to spend the night at the house of a young woman. Two murders occur and the eight brahmans are in danger of being held responsible. Bishnudatta, however, manages to convict the young woman of this twofold murder.

The two decapitated corpses on the terrace of the house are inconsistent with the wording and the logic of the story, according to which the woman had buried her lover in an ash heap. Hence, there can only be one body on the terrace.

38. Fol. 104a, 11.2 x 12.7 cm (fig. 51)
Persian ed., 283; Tawney, 3:116ff; Mehlig, 461.

Book VI, chapter 33
“The story of King Shrutasena”
The brahman Agnisharma is warned by seven brahmans not to behold the beautiful Princess Bidutidyota (Skt. Vidyuddyota), because if even a hermit looks at her, he will become a prisoner of the god of love (Pers. sulṭān-i ʿishq).

39. Fol. 105b, 28.2 x 19.7 cm (fig. 52)
Persian ed., 283; Tawney, 3:117; Mehlig, 461.

Book VI, chapter 33
“The story of the weasel, the owl, the cat, and the mouse”
The weasel, the owl, the cat, and the mouse all live in a tree, which is depicted together with all the animals mentioned in the right margin of the folio. A farmer ploughing occupies the margin below the text.

40. Fol. 106a, 7.3 x 13.2 cm (fig. 53)
Persian ed., 292; Tawney, 3:134; Mehlig, 476.

Book VI, chapter 34
“The story of Birupacha”
The god of wealth, Bayshrawana (Skt. Kubera-Vaishravana), curses his servant Birupacha to be reborn as a mortal, since by his order some brahmans were slaughtered.

Some elements of the illustration can not be reliably identified: in the foreground we see a number of big-bellied vessels, doubtlessly containing the treasures of
Bayshrawana. Behind them are the brahmans being killed by a demon with his sword. The god is visible on the right side of the picture. However, the two brahmans to the left of Kubera and the two demons on the right side of the god pose some problems. They are possibly Birupacha and his servant, depicted first in demon form and then in the human shape they had to assume after the god had cursed them.

42. Fol. 111a, 17.2 x 19.4 cm (fig. 55)  
Persian ed., 295; Tawney, 3:138; Mehlig, 482.  
Book VI, chapter 34  
“The story of King Udayana and his son Narabahanadatta” (continued)  
By her magic skills Somapraba creates a heavenly garden as a wedding present for Narabahanadatta and Madanamanchuka, the daughter of Kalingasena. King Udayana, his consort, and the ministers arrive. They are received by Kalingasena.

43. Fol. 114a, 14 x 12.7 cm (fig. 56)  
Persian ed., 302; Tawney, 3:147; Mehlig, 493.  
Book VI, chapter 34  
“The story of King Udayana and his son Narabahanadatta” (continued)  
The wedding ceremony of Narabahanadatta and Madanamanchuka, the human incarnations of the god of love and his heavenly consort, Rati. They will one day return to heaven in their godly forms.

44. Fol. 116b, 10.4 x 13.2 cm (fig. 57)  
Persian ed., 310; Tawney, 3:162; Mehlig, 502.  
Book VII (Ratnaprabha), chapter 35  
“The brave King Bikramatunga”  
Dattasharma, the son of a brahman, tries to demonstrate to King Bikramatunga how he makes gold out of copper with the help of a special powder. However, all his attempts fail, because an invisible demon keeps taking it away.

Contrary to what is described in the text, Dattasharma turns around to look at the demon, who hurries off, although only King Bikramatunga has the ability to see him.

45. Fol. 119a, 10.5 x 13.1 cm (fig. 58)  
Persian ed., 315; Tawney, 3:171; Mehlig, 512.  
Book VII, chapter 36  
“The story of King Ratnadit (Skt. Ranadhipati) and the white elephant”  
The king’s flying elephant is severely injured by a Simurgh and can only recover if a chaste woman touches it with her hand. However, none of the eighty thousand royal wives helps to cure him.

46. Fol. 122a, 6.4 x 13.2 cm (fig. 59)  
Persian ed., 324; Tawney, 3:187; Mehlig, 526.  
Book VII, chapter 37  
“The story of Nishchayadatta”  
Nishchayadatta, the son of a merchant, and four beggars spend the night in an empty temple. A female demon approaches some beggars and by her charms and music playing on the kinnara (an ancient Indian string instrument) turns one of them into a ram.

47. Fol. 125b, 8.8 x 13.7 cm (fig. 60)  
Persian ed., 335; Tawney, 3:211; Mehlig, 545.  
Book VII, chapter 38  
“The story of King Bikramadita and the treacherous mendicant”  
In order to obtain magical powers, a mendicant wants to sacrifice the king. But King Bikramadita is warned in a dream and cuts off the head of the mendicant with a stroke of his sword. After this, the “Lord of divine treasures” (i.e., Kubera) appears and grants him a favor.

The whereabouts of the original illustration (j) are unknown to the author.77

48. Fol. 133a, 11.5 x 12.8 cm (fig. 61)  
Persian ed., 355; Tawney, 3:245; Mehlig, 579.  
Book VII, chapter 40  
“The story of King Bilasashila and the physician Tarunachanda”  
The personnel of the royal household and the dignitaries of the kingdom pay their respects to the “rejuvenated” king who sits together with Tarunachanda in an underground cave.

49. Fol. 133b, 15.4 x 19.7 cm (fig. 62)  
Persian ed., 356; Tawney, 3:247–48; Mehlig, 582.  
Book VII, chapter 40  
“The story of King Bilasashila and the physician Tarunachanda” (continued)
Tarunachanda discovers a corpse suspended from a fig tree. Raindrops falling on the corpse and flowing into the river turn into golden lotuses.

By the power of his magic sword, Indivarasena creates a large chariot that can fly through the air. He places his golden palace, his two wives, and his brother in it and returns to his home town, where the people behold his landing with wonder.

The whereabouts of the original illustration (k) are unknown to the author.78

The story of King Chirayu and his minister, Nagarjuna
After consulting his mother (in the background), the crown prince Jivahara asks the generous minister, Nagarjuna, for his head; the minister indeed gives him permission to cut it off (in the foreground).

The original illustration (n [fig. 10]) is part of a private collection.

The story of King Chirayu and his minister, Nagarjuna (continued)
While sitting on a tree, Narabahanadatta mortally wounds with his sword a lion that had killed two of his horses. A man in the foreground on the left hurries away with a dagger in his hand. This can only be Gomukha, although there is no reference in the text to him climbing down the tree.

The story of Narabahanadatta (continued)
Indivarasena cuts off the head of the demon Jamadamsha (Skt. Yamadamstra) with the magic sword he had received from the goddess Parvati.

Indivarasena and Anichasena

By the power of his magic sword, Indivarasena creates a large chariot that can fly through the air. He places his golden palace, his two wives, and his brother in it and returns to his home town, where the people behold his landing with wonder.

The whereabouts of the original illustration (k) are unknown to the author.78

The story of Arthalobha and his wife, Manapara
The king and Manapara observe the battle between the merchant Sukhadhara (Skt. Sukhadhana) and the avaricious royal doorkeeper Arthalobha. Arthalobha is thrown out of the saddle and carried off the battlefield by two of his servants.

The story of Arthalobha and his wife, Manapara (continued)
Narabahanadatta and Princess Karpurika are married.

The story of Surajpraba
In a duel with the Vidyadhara Damodara, King Surajpraba vanquishes his enemy. However, before he can cut off his head, the god Narayana (i.e., Vishnu) appears and stops him. The text gives no hint as to the identity of the gods fighting in the sky.

The story of Surajpraba (continued)
King Chandrapraba, his son Surajpraba, and all his ministers have gathered in the assembly hall, when suddenly the ground splits open and the asura (demon) king Maya rises from the crevice.
A friend of King Mahasena named Gunasharma can tell by the sound of a sāz (Skt. Viñā ) that the hair of a dog is hidden inside one of the strings. In order to prove this, he wets the string and twirls it until the dog hair comes out.

63. Fol. 180b, 16.3 x 13.1 cm (fig. 76)  
Persian ed., 448; Tawney, 4:95; Mehlig, 737.  
Book VIII, chapter 49  
“The story of King Mahasena and the brahman Gunasharma” (continued)  
Due to the false accusations of the queen, Gunasharma has fallen from grace and is attacked by the king and his guards. He disarms some of them and binds them together with their hair, while killing others on his way out.

64. Fol. 183a, 15.1 x 12.2 cm (fig. 77)  
Persian ed., 454; Tawney, 4:110; Mehlig, 748.  
Book VIII, chapter 50  
“The story of Surajpraba” (continued)  
The story describes the battle between humans and their followers led by Surajpraba and the Vidyāḍhara, who fight for Shrutasharma. Gods and demons are present as observers and occasionally interfere with the action.

The pictorial representation precedes the textual one. Immediately under the illustration we read: “Mahamaya slew Kuberadatta, who sometimes assumed the form of a serpent and sometimes that of a mountain; at other times he looked like a tree, and occasionally like a Simurgh, like a thunderbolt (Pers. bagra, Skt. vajra), the weapon of Indra, or like a fire.”

Indeed we can see a snake, a little mountain, a tree, and a Simurgh in the upper left-hand corner of the drawing. The right half of the illustration is occupied by a group of men armed with swords, bows, and arrows, while some armed demons stand in the left front. Presumably, these two groups represent the gods and demons mentioned in the text. The identity of the young woman who steps between the two armies and announces something there is uncertain. She may be Siddhi, a sister of Danu (consort of the Rishi Kashyapa). She is mentioned only some pages later (Persian ed., p. 458), when she appeals to the gods and demons in the name of Danu to prevent war between them.
After a beggar has waited patiently for five years at the gate of the royal palace, the king finally presents him with an orange (turunj) filled with jewels. However, the beggar does not recognize the value of the present and gives it away. The fruit finds its way back to the king, who delivers it again to the poor man. Only on the fourth attempt does the beggar become aware of the precious contents, when Lakadatta lets the orange drop so that the jewels spill out.

The original illustration (a [fig. 1]) is kept in the San Diego Museum of Art.

On the right side of the picture there is a group of armed men. They seem to be members of the hunting party, although, according to the text, they had been separated from the prince and hence should not be seen here.

Chamarabala is in a battle against five kings: King Samarajita (on his horse, on the left side) has already been captured, while king Pratabachandra lies fatally wounded on his horse.
Fig. 14. The brahman Bochika promising his daughters to three brothers. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 2b. (Photo: courtesy of the British Library)

Fig. 15. King Putraka in the palace of the beautiful Patali. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 4b. (Photo: courtesy of the British Library)

Fig. 16. Upakosha charging the four men who tried to seduce her. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 7a. (Photo: courtesy of the British Library)

Fig. 17. Prince Hiranyagupta and his friend, the monkey, in a tree. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 11a. (Photo: courtesy of the British Library)
Fig. 18. King Satabhana and his wives in a pool. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 15a. (Photo: courtesy of the British Library)

Fig. 19. King Shatanika and Indra’s messenger. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 18b. (Photo: courtesy of the British Library)

Fig. 20. Queen Mrigawati carried off by a giant bird. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 19b. (Photo: courtesy of the British Library)

Fig. 21. Ibn al-Dawla’s adventures with the granddaughter of the demon king. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 21b. (Photo: courtesy of the British Library)
Fig. 22. Ibn al-Dawla killing a lion and obtaining a sword to conquer the world. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 22a. (Photo: courtesy of the British Library)

Fig. 23. King Mahasena offering his own flesh to the goddess Chandika. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 25b. (Photo: courtesy of the British Library)

Fig. 24. The soldiers of King Chandamahasena emerging from an artificial elephant. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 27a. (Photo: courtesy of the British Library)

Fig. 25. Lohazanga on the island of Lanka. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 28b. (Photo: courtesy of the British Library)

Fig. 27. The cunning Siddikari. Somadeva Bhaṭṭa, *Kathāsaritsāgara*. London, British Library, Ms. I.O. 2410, fol. 32b. (Photo: courtesy of the British Library)

Fig. 28. Dewasmita and her four slaves. Somadeva Bhaṭṭa, *Kathāsaritsāgara*. London, British Library, Ms. I.O. 2410, fol. 34b. (Photo: courtesy of the British Library)

Fig. 29. The story of the hypocritical ascetic. Somadeva Bhaṭṭa, *Kathāsaritsāgara*. London, British Library, Ms. I.O. 2410, fol. 37b. (Photo: courtesy of the British Library)
Fig. 30. King Udayana and his consort meeting after a long separation. Somadeva Bhaṭṭa, *Kathāsaritsagarā*. London, British Library, Ms. I.O. 2410, fol. 41b. (Photo: courtesy of the British Library)

Fig. 31. Mah-para-i and a celestial nymph listening to music. Somadeva Bhaṭṭa, *Kathāsaritsagarā*. London, British Library, Ms. I.O. 2410, fol. 44a. (Photo: courtesy of the British Library)

Fig. 32. A religious mendicant forces a corpse to carry him to a temple. Somadeva Bhaṭṭa, *Kathāsaritsagarā*. London, British Library, Ms. I.O. 2410, fol. 47a. (Photo: courtesy of the British Library)

Fig. 33. Kubalayawali and two demons devouring the flesh of a corpse. Somadeva Bhaṭṭa, *Kathāsaritsagarā*. London, British Library, Ms. I.O. 2410, fol. 54a. (Photo: courtesy of the British Library)
Fig. 34. Sundaraka and the flying palace. Somadeva Bhāṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 56a. (Photo: courtesy of the British Library)

Fig. 35. The pregnant Basawadatta pleased by musicians. Somadeva Bhāṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 61a. (Photo: courtesy of the British Library)

Fig. 36. The Garuda devours the king of the Vidyādhara. Somadeva Bhāṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 65a. (Photo: courtesy of the British Library)

Fig. 37. The Vidyādhara king in front of King Udayana and his consort. Somadeva Bhāṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 68b. (Photo: courtesy of the British Library)
Fig. 38. King Shaktidewa emerging from the belly of a large fish. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 72b. (Photo: courtesy of the British Library)

Fig. 39. Ashokadatta with the anklet of a female demon. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 74a. (Photo: courtesy of the British Library)

Fig. 40. Ashokadatta with a golden lotus. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 75a. (Photo: courtesy of the British Library)

Fig. 41. Ashokadatta meeting his long-lost brother. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 76a. (Photo: courtesy of the British Library)
Fig. 42. Shaktidewa flying past the Bar tree above the fiery abyss. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 78a. (Photo: courtesy of the British Library)

Fig. 43. Shaktidewa in the mysterious palace of Candra-prabha. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 79a. (Photo: courtesy of the British Library)

Fig. 44. Dewadatta and the embryo of the demon princess. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 81b. (Photo: courtesy of the British Library)

Fig. 45. A lesson for a merchant’s son in Takshila. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 83b. (Photo: courtesy of the British Library)
Fig. 46. King Kalingadatta in a temple. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 86b. (Photo: courtesy of the British Library)

Fig. 47. Somaprabha magically moving her dolls. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 90a. (Photo: courtesy of the British Library)

Fig. 48. Kirtīsena freeing King Basudatta from the centipedes in his head. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 93a. (Photo: courtesy of the British Library)

Fig. 49. Usha and the pictures painted by her friend Citraleka. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 97b. (Photo: courtesy of the British Library)
Fig. 50. Bishnudatta and his seven companions in the house of a murderess. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 100b. (Photo: courtesy of the British Library)

Fig. 52. A weasel, an owl, a cat, and a mouse living in a tree. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 105b. (Photo: courtesy of the British Library)

Fig. 51. Seven brahmans warning Agnisharma against beholding the princess. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 104a. (Photo: courtesy of the British Library)

Fig. 53. The cat in the hunter’s noose. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 106a. (Photo: courtesy of the British Library)
Fig. 54. The god of wealth and his servant, who killed some brahmans. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 109b. (Photo: courtesy of the British Library)

Fig. 55. The heavenly garden of Somaprabha. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 111a. (Photo: courtesy of the British Library)

Fig. 56. The wedding ceremony of Narabahanadatta and Madanamanchuka. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 114a. (Photo: courtesy of the British Library)

Fig. 57. A demon defeating Dattasharma’s attempts to make gold. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 116b. (Photo: courtesy of the British Library)
Fig. 58. An elephant that can be healed only by a chaste woman. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 119a. (Photo: courtesy of the British Library)

Fig. 59. A female demon changing a traveller into a ram. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 122a. (Photo: courtesy of the British Library)

Fig. 60. King Bikramadita killing a deceitful mendicant. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 125b. (Photo: courtesy of the British Library)

Fig. 61. The “rejuvenated” king in an underground cave. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 133a. (Photo: courtesy of the British Library)
Fig. 62. Tarunachanda discovering a corpse suspended from a fig tree. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 133b. (Photo: courtesy of the British Library)

Fig. 63. The generous minister Nagarjuna decapitated by the crown prince. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 135a. (Photo: courtesy of the British Library)

Fig. 64. Narabahanadatta killing a lion. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 137b. (Photo: courtesy of the British Library)

Fig. 65. Indivarasena cutting off the head of the demon Jamadamsha. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 141b. (Photo: courtesy of the British Library)
Fig. 66. Indivarasena, his wives, and his brother in a flying chariot. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 138b. (Photo: courtesy of the British Library)

Fig. 67. The story of Arthalobha and his wife, Manapara. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 136b. (Photo: courtesy of the British Library)

Fig. 68. The wedding ceremony of Narabahanadatta and Karpurika. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 143b. (Photo: courtesy of the British Library)

Fig. 69. Narayana preventing Surajpraba from killing Damodara. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 147b. (Photo: courtesy of the British Library)
Fig. 70. The asura (demon) king Maya appearing before King Chandrapraba. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 148b. (Photo: courtesy of the British Library)

Fig. 71. Chandrapraba and Surajpraba visiting King Bali in the underworld. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 152a. (Photo: courtesy of the British Library)

Fig. 72. Surajpraba on his throne while the gods look down from the clouds. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 156a. (Photo: courtesy of the British Library)

Fig. 73. Surajpraba seizing the fire-breathing dragon. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 158a. (Photo: courtesy of the British Library)
Fig. 74. Gods and demons fighting over the nectar of immortality. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 161a. (Photo: courtesy of the British Library)

Fig. 75. Gunasharma finding a hair of a dog in the strings of a sāz. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 178a. (Photo: courtesy of the British Library)

Fig. 76. Gunasharma fighting against the royal guards. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 180b. (Photo: courtesy of the British Library)

Fig. 77. A battle between humans and the Vidyādhara. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 183a. (Photo: courtesy of the British Library)
Fig. 78. Surajpraba and Shrutasharma, the king of the north and the king of the south. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 184b. (Photo: courtesy of the British Library)

Fig. 79. Kusha meeting Rama and Lachmana for the first time. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 188b. (Photo: courtesy of the British Library)

Fig. 80. A warrior impressing King Mahabaraha with his heroic deeds. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 165b. (Photo: courtesy of the British Library)

Fig. 81. The old king, Sagaradatta, and his wife settling down in Prayaga. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 169b. (Photo: courtesy of the British Library)
Fig. 82. King Lakadatta giving an orange filled with jewels to a beggar. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 171a. (Photo: courtesy of the British Library)

Fig. 83. Narabahanadatta at a pond with golden lotuses. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 173a. (Photo: courtesy of the British Library)

Fig. 84. Chamarabala in a battle against five kings. Somadeva Bhaṭṭa, Kathāsaritsāgara. London, British Library, Ms. I.O. 2410, fol. 189b. (Photo: courtesy of the British Library)
NOTES

Author’s note: This article is in part a result of the research project “Indo-Persische Übersetzungsliteratur” located at the Institute of Oriental Studies and the Institute of Indology (Martin Luther Universität Halle-Wittenberg) and sponsored by the German Research Foundation.


2. A. C. Ardeshir, “Mughal Miniature Painting (with Illustrations from the Collection of Mr. A. C. Ardeshar [sic] of Bombay),” Roopa-Lekha 1, 2 (1940): 19–34.


4. Prof. John Seyller kindly drew my attention to the Ehrenfeld Collection and the two illustrations of the Kathāsārītāgāra in the Virginia Museum of Fine Arts. Moreover, he informed me of a picture in the Benkaim Collection (the one labelled (l) in the list provided at the beginning of this article) and six originals formerly belonging to the Pan Asian Collection (m–r) that were sold to a private collector around 1983.

5. Binney, Indian Miniature Painting, 50, no. 26b. Note that the titles of the eighteen illustrations from the imperial manuscript are provided here in accordance with the way they are identified in the catalogues and articles in which they are mentioned. In cases where these titles are either wrong or imprecise, they have been altered in the captions to more accurately reflect the contents of the paintings.

6. Ibid., no. 26a.


9. Alice N. Heeramaneck, Masterpieces of Indian Painting from the Former Collections of Nasli M. Heeramaneck (Verona, 1984), 156, pl. 151; Pal, Indian Painting, 213–14, no. 52.


11. Ibid., no. 82.

12. Heeramanec, Masterpieces of Indian Painting, 156, 182, pl. 150.


14. Daniel J. Ehnbom, Indian Miniatures: The Ehrenfeld Collection (New York: Hudson Hills Press, in association with the American Federation of Arts, 1985), 40–41, no. 11. The Ehrenfeld Collection has been dispersed. This item was sold by Sotheby’s on June 16, 2009 as sale LO9724. I thank Prof. Seyller, who kindly provided this information.

15. Ibid., 40–41, no. 10.

16. I would like to thank Prof. Seyller for the information he provided on the measurements and descriptions.

17. Description and measurements by Prof. Seyller.


19. Description and measurements by Prof. Seyller.


21. Description and measurements by Prof. Seyller.

22. Description and measurements by Prof. Seyller.

23. Description and measurements by Prof. Seyller.

24. Description and measurements by Prof. Seyller.

25. See n. 18 above.


30. Winternitz, History of Indian Literature, 1–4; Mehlig, Somadeva: Der Ozean der Erzählungsströme, 2:777–78; Mylius, Geschichte der altindischen Literatur, 161–62.


34. Ibid., 9:117.
35. Concerning the guideline of DANDIN that a mahākāvyā is always to start with a benediction, cf. MLIUS, Altindische Literatur, 161.
37. Ibid., 2:801.
38. Ibid., 2:797–800, with reference to a story translated in 2:552ff.
42. Ibid., 63–64.
43. Ethé, Catalogue of Persian Manuscripts, vol. 1, no. 1987. I am grateful to Dr. Ursula Sims-Williams, Curator of the Iranian Collections in the British Library, who sent me two photos that show Johnson’s ex libris as well as his inscription on one of the endpapers of the book, which reads “copied from Col. Martin’s copy.”
45. Llewellyn-Jones, Man of the Enlightenment, 96, 367. Unfortunately, the 94-page inventory of Claude Martin from July 1801 (British Library, no. 76 in L/AG/34/27/24) does not mention either an illustrated Kathāsāratīsāgara or even a Persian manuscript. We can only find a note on p. 83 concerning a list that was sent to Calcutta of 505 Persian books.
46. I again thank Dr. Ursula Sims-Williams for the information she so kindly provided regarding peculiarities of the manuscript that could not be discerned on the microfilm.
47. I thank Prof. Seyller for the measurements.
48. There are also a few lines of text on the back of the two illustrations in the Virginia Museum of Fine Art; cf. Dye, Arts of India, 242–43, nos. 81 and 82.
54. The only known manuscript of the Paṅcākhāyaṇa is kept in the National Museum of Delhi, no. 62, 272 folios, 20 x 11.5 cm.
55. Tawdīḥ-al-milal, Osmania University, Hyderabad, Ms. 157/132.
56. Cf. ʿAbbāsī, Chand, ʿAbīdī, and Nāʿīnī, Paṅcākhāyaṇa, 12.
57. Cf. ʿAbbāsī, Daryā-yi asmār, 4.
58. Ibid.
59. Ibid., 3.
60. Ibid., 4.
64. Pal, Indian Painting, 212–14, nos. 51 and 52.
65. Dye, Arts of India, 241, no. 81a.
66. Ibid., 242–43, no. 82.
67. Ehnbom, Indian Miniatures, 41, no. 11.
68. Ibid., 40.
70. Dye, Arts of India, 241.
72. See n. 53 above.
73. See n. 18 above.
74. See n. 5 above.
75. See n. 7 above.
76. See n. 13 above.
77. See n. 14 above.
78. See n. 15 above.
The muqarnas (a system of projecting niches used for zones of transition and for architectural decoration) is one of the key motifs of Islamic art. The use of these decorative elements has not influenced other cultures a great deal, with a few exceptions. The muqarnases still present in Palermo are a rare case of non-Islamic manifestations of the form; to be exact, they were built by Islamic craftsmen, but commissioned by the Normans.

What follows is a detailed analysis of the muqarnases found at the Zisa of Palermo, a palace commissioned in 1164 by Guglielmo I d’Altavilla (r. 1154–66), who intended to use it as a sollatium, a place of delight and summer repose (fig. 1). Beginning with an examination of the muqarnas in the central niche of the iwan—a tri-lobed hall with a fountain located on the ground floor of the Zisa—this paper provides a methodology for analyzing the composition of this decorative motif, which is made up of simple elements, although at first sight they appear to be very complex (fig. 2). The muqarnases of the Zisa are here analyzed with respect to their basic components and registers, and compared with similar elements belonging to the Eastern and Western Islamic traditions (see Appendix, which also contains a glossary of relevant terms). The aim of this work is to find the key to identifying the place of origin of the artisans who crafted the muqarnases of the Zisa, although the results are not expected to provide definitive answers to the question.

The muqarnas is a three-dimensional composition created by assembling, in a variety of combinations, simple prismatic elements, comparable to portions of vaults and composed according to precise rules, in overlapping corbelled levels. The disposition of such elements, as well as their size and form, can vary according to geographical location, the historical period to which they belong, the part of the building to which they are applied, and the materials used to build them. The dimensions of the elements can range from just a few centimeters, as in the case of the Moroccan muqarnas, to meters, as in the Iranian Friday Mosque of Isfahan. The size depends not only on the building materials—much larger muqarnases can be created from stone than from wood, the latter ones measuring as little as five to ten centimeters—but also on the period of construction. Sometimes an element is present at different scales in the same composition.

The materials employed for the construction of the muqarnas vary according to the region of the Islamic world under consideration. In Syria, Egypt, and Turkey, muqarnases are made of stone, the predominant local building material, which requires great precision of execution. In North Africa, the muqarnas is made of plaster and wood. In Iran and Iraq, they are made of bricks, sometimes covered with plaster or ceramic. While orthogonal geometry is required to generate a muqarnas from brick, plaster gives greater freedom of composition because it allows for a way to cope with angles that may not necessarily be 45° or 90°. Furthermore, it lends itself to solving difficult junctions and to constructing special details. Muqarnases can be found on vaults, domes, pendentives, cornices, corbels, capitals, and generally anywhere it is necessary to connect two vertical, non-coplanar surfaces, or to solve, as in the case of the dome, the transition between a square and a circle through the fragmentation of the pendentive.

The etymology of the Arabic term muqarnas has not yet been established. In medieval Arabic dictionaries, the word has no architectural meaning. According to Yasser Tabbaa, it appeared for the first time in the twelfth
Several scholars agree that it comes from the Greek word korōnís, meaning “cornice,” although, as Tabbaa says, this origin “is not confirmed in any Arabic or Persian source.”

The chronology and geographical origins of the muqarnas are not yet certain. Some scholars date the muqarnas to the end of the eighth century in Syria, others to the ninth century in Iran, still others to the eleventh century in North Africa or Baghdad. What is certain, however, is that by the twelfth century the muqarnas had become a common characteristic in the decorative arts of all territories of the Islamic world, and that different local decorative traditions favored the development of regional variations. Among the oldest examples of muqarnas in the Western world, Fernández-Puertas includes those present in Palermo—on the ceiling of the Cappella Palatina, commissioned by Roger II (d. 1154), and in the Zisa and the Cuba, a palace built in 1180 by Guglielmo II d’Altavilla.

According to one of the most reliable theories, the functional origin of the muqarnas goes back to the corner tripartite squinch, which was used for the first time in domes in Iran in the tenth century to enable the smooth transition from the square base of the walls to the circular dome. Écochard argued that the structure of these early corner squinches anticipated what would later become the muqarnas. The matter of the link between two different forms had already been resolved in Roman architecture through the use of the pendentive. According to Hautecoeur, it was in the Maghreb that the cells that constitute the muqarnas were first detached from the wall, thus abandoning the shape of bas-reliefs, to hang in isolation similar to stalactites. Already in the al-Qarawiyyin Mosque of Fez (expanded to its present size by the Almoravid Sultan Ali bin Yusuf between 1134 and 1143) and in the Tlemcen Mosque (1136) in northwestern Algeria, we see that domes supported by squinches were replaced by a ceiling generated by the combination of overlapping elements similar to squinches and to other portions of vaults.

THE MUQARNASES OF THE ZISA

The muqarnases found in Sicily are all in Palermo and primarily in the Zisa. The best-known examples are
located in three niches of the iwan, but there are interesting muqarnases on all three levels of the building and in various rooms, all with different configurations (fig. 3). Similar ones are located symmetrically in relation to the transverse axis of the building. They decorate the vaults of niches and the crownings of the windows.

The muqarnas of the central niche of the iwan in the Zisa is a stone composition, founded upon a rectangular geometric plan. According to Écochard, as with the brick muqarnas originally used in Mesopotamia and Iran, the construction of this muqarnas required the use of orthogonal geometry.19 It consists of twelve overlapping corbelled registers, formed by joining elements of the same height (30–40 cm). The niche measures 4.16 x 2.08 x 5.53 meters and the first register is 5.86 meters above ground. From a constructive point of view, each register is created by the superimposition of two rows of sandstone ashlar blocks.20 Unlike other stone examples such as those found in Syria, the Zisa muqarnas has no sharp corners. It was originally covered with plaster, which was removed in 1940 during a restoration campaign because it was wrongly believed to be of a later date than that of the original construction of the muqarnas. On the contrary, the plaster had been used to give a finer definition to details otherwise not attainable with the local porous sandstone. Direct observation, through some of the gaps, leads me to suppose that these muqarnas cells have no structural function; in fact, they have a thin profile, like shells. According to Lucien Golvin and Yasser Tabbaa, they were carved out after the construction of the wall.21 In each corner of the niche, the individual units of the muqarnas are based on horizontal projecting stone slates rotated at an angle of 45°, as is clearly visible in the right-hand corner between registers 3 and 4, and between registers 6 and 7 (fig. 4).

The Zisa muqarnas has eight basic elements—six with rectangular and triangular plans (fig. 5[a–c], elements A, D, E, F, G, H), as well as one formed from the dissection of a basic element with a vertical plane (fig. 5a, element B), and one from the combination of two similar elements (fig. 5a, element C).22 The elements are derived from prisms. One prism (element A) has a square plan whose sides are equal to 1. Two prisms with rectangular plans (elements B and C) are portions of another prism with a square plan whose sides are equal to 1. Four prisms (elements D, E, F, and H) have isosceles triangular plans with summit angles of 90°; in each one, two sides of the triangle are equal to 1, while the third side is equal to \(\sqrt{2}\). One prism (element G) has an isosceles triangular plan with a summit angle of 45°, two sides equal to 1, and the third side equal to 0.766.

In this study, these basic units were compared with the corresponding units of the Eastern and Western Islamic traditions (figs. 6[a–c] and 7; also see the Appendix, which, as mentioned above, contains the detailed analysis of the Eastern and Western elements and a glossary of the terms used below).

**Prismatic elements with a rectangular plan**

*Element A*, corresponding to the *t’stiya masdūda* of the Eastern Islamic tradition, or to the first type of *conça*, here referred to as *conça (1)*, of the Western Islamic tradition, is obtained by subtracting a barrel vault from a prism with a square plan, thus creating a half-barrel vault. The element has a rectangular supporting base (fig. 5a).

*Element B*, corresponding to the *t’stiya masdūda* of the Eastern Islamic tradition, or to the *conça (1)* of the Western Islamic tradition, is obtained by cutting element A with a vertical plane parallel to its side faces. It has a rectangular supporting base and its height can be equal to that of two registers (fig. 5a).

*Element C*, corresponding to the *t’stiya masdūda* of the Eastern Islamic tradition, or to the *conça (1)* of the Western Islamic tradition, is obtained by putting together the main faces of either two element As or two element Bs, respectively. The element has two rectangular supporting bases (fig. 5a).

**Prismatic elements with a triangular plan**

*Element D*, corresponding to the *sirwāliyya* of the Eastern Islamic tradition, or to the *atacia* of the Western Islamic tradition, is obtained by subtracting an inclined barrel vault from a right-angled triangular prism. The generatrix of the barrel vault is perpendicular to the hypotenuse of the triangular base. The element has two triangular supporting bases (fig. 5b).
Fig. 3. Location of the muqarnases on the three levels of the Zisa, Palermo. Analysis based on an ideal reconstruction of the plans of the Zisa. (Redrawn from Giuseppe Bellafiore, *La Zisa di Palermo* [Palermo, 2001], tables A, B, and C)
**Element E**, corresponding to the *sirwāliyya sha’ira* of the Eastern Islamic tradition, or to the *medio cuadrado* of the Western Islamic tradition, is similar to a squinch. It is generated by subtracting from a prism with a right-angled triangular plan a Roman cross vault with a raised keystone and a square base. The element has two triangular supporting bases on the same level and a rectangular one placed at a lower level than the first two (fig. 5b).

**Element F**, corresponding to the *medio cuadrado abierto por lo más ancho* (2) of the Western Islamic tradition, is similar to the triangular portion of a cross vault with a square supporting base. It is generated by subtracting from a prism with a right-angled triangular plan a Roman cross vault with a raised keystone and a square base (fig. 5b).

**Element G**, corresponding to the *lūza* (2) of the Eastern Islamic tradition, or to the *dumbaque grullillo* of the Western Islamic tradition (see Appendix), is obtained by subtracting an inclined barrel vault from a prism with an isosceles triangular plan with a summit angle of 45°. The element has a triangular supporting base (fig. 5c).

**Element H**, is similar to a squinch or a niche with a curved section. It is generated by subtracting from a prism with a right-angled triangular plan, a hemispherical dome on a cylindrical tambour. Element H has a right-angled triangle supporting base from which a half circle has been subtracted. The element has no equivalent among those described in the Appendix belonging to the Eastern and Western Islamic traditions (fig. 5c). It seems plausible, however, to hypothesize a comparison with element A3 (our fig. 8) in Owen Jones’s study.

---

Fig. 4. The stone muqarnas of the central niche of the iwan in the Zisa, Palermo. Left) The virtual model. Right) A photograph of the right-hand corner, with registers 3 and 4, and 6 and 7 highlighted in lavender. (Drawing and photo: Vincenza Garofalo)
Fig. 5a. Geometric studies of the eight basic elements (designated A–H) of the muqarnas of the central niche of the iwan in the Zisa, Palermo. (Drawings: Vincenza Garofalo)

on the muqarnas vaults of the Alhambra in Granada, although in his two-dimensional diagrams it is not easy to understand the three-dimensional development of that element.  

Comparing the prismatic elements of the central niche of the iwan of the Zisa with the analogous base elements deduced from the analysis of the Islamic Western and Eastern traditions (see Appendix), we can infer that the units of the Zisa resemble more closely the Western Islamic elements (figs. 6 and 7). This leads me to assert that the artisans who crafted the work originated in the Islamic West (i.e., North Africa). Such a thesis is also confirmed by the fact that some examples of muqarnas in the Zisa (fig. 9) have hanging elements that, according to Al-Asad, are typical of the Islamic West. Some muqarnases of the Zisa also feature an octagonal motif that has an eight-pointed star and an eight-petalled flower inside. This kind of pattern is recurrent in Moroccan muqarnases, as well as in Spanish ones, as we can see in the ceilings of the al-Qarawiyyin Mosque in Fez, work on which began in 1134, and in the vault of the monastery of Las Huelgas, near Burgos in Spain, dated 1187 (fig. 10).
The plan of the muqarnas of the central niche of the iwan in the Zisa

To build a muqarnas, two-dimensional patterns are usually used as guides. These patterns are based on a limited number of geometric shapes, produced by joining together specific points that lie along the lines of construction of the patterns themselves. These basic forms, created through repetitions, rotations, and by mirroring, correspond, in plan, to the constitutive prismatic elements of the muqarnas. In these layouts, the spatial conception of the muqarnas depends on the corbelling contours of the levels.

From an analysis of the earliest known drawings of muqarnas, it is evident that the profiles and sections of the muqarnas were not usually drawn, because it was sufficient to relate the height and depth of the units proportionally, as the Timurid mathematician and astronomer Ghiyath al-Din Jamshid ibn Mas’ud al-Kashi explained in 1427 in his treatise *Miftāḥ al-ḥisāb* (Key to Arithmetic) (see Appendix).

The patterns were often drawn on a square grid; this served a dual function: it helped craftsmen to enlarge the drawings to full scale on site and to compute the amount of required building materials. The scheme could be changed in size but not in terms of the relationship between the individual parts. To build the muqarnas, it was sufficient to enlarge the grid to scale and prepare and assemble all the components. In the patterns known to us, there are sometimes units coded with colors or dots to distinguish the different registers. This codification provides some guidance regarding the
structure of the three-dimensional composition, but it is not enough to give a correct, three-dimensional interpretation of the plan. In fact, if we consider the number of elements that can originate from the same geometrical shape, it is evident that there was never just one version possible. In the medieval period, the process of converting patterns into three-dimensional compositions was a secret closely guarded by craftsmen and known only to members of the guilds.28

The patterns that underlie the construction of a muqarnas can be grouped into a few basic types: patterns with an orthogonal symmetry, based on a grid of intersecting lines that form angles of 45°, 90°, and 135°, which generate shapes by combining, rotating, or mirroring squares, triangles, and other basic geometric figures; patterns with a central symmetry generated by the rotation of a polygon within a circle;29 and patterns with a radial symmetry, whose basic grid consists of concentric circles, divided into equal arches by equidistant radiuses. In this last case, the registers, usually composed of a combination of polygons, can also include stars, inscribed in concentric circles.

Heterogeneous patterns are often formed from combinations of these basic systems. The development and increasing complexity of the patterns show the evolution of the compositions of the muqarnas.

The plan of the muqarnas of the central niche of the iwan in the Zisa has a rectangular pattern whose width is twice its depth (fig. 11). The composition is strictly geometric and is based on an orthogonal grid in which the profiles of the registers are generated through the rotation of several squares, at 45° angles (fig. 12). The centers of such rotations coincide with some points of intersection of the lines forming the basic grid. The plan is symmetrical with respect to the cross axis, the corners, and a horizontal line placed approximately one-third from the bottom of the pattern. Square, triangular, and diamond shapes are the constituent elements. This pattern is among the simplest in Palermo. However, its three-dimensional composition appears complex because each register, except for the top two, is formed by assembling several different components and a variety of combinations among the basic elements (figs. 13[a–c] and 14).30 This type of composition rarely appears in the Eastern Islamic world, where
the muqarnas is usually created through the repetition of the same element on an entire level and often on subsequent levels, too.

Comparing the muqarnases of the Zisa with other extant examples in the Islamic world is not an easy task because over the centuries muqarnas structures have been modified, rebuilt, and in some cases completely covered by other structures. From a careful observation of a side niche, it is clear that the muqarnases of the iwan of the Zisa have also undergone changes that can probably be ascribed to reconsiderations during the construction stage or to works done later on the iwan (fig. 15). The elements of which the muqarnas of the central niche of the iwan is composed show evident similarities with those of the al-Qarawiyyin Mosque in Fez, which, as mentioned above, was built in 1134 (about twenty years before the Zisa), as well as with those of the Great Mosque of Tinmal in Morocco, built by the Almohad sovereign ‘Abd al-Mu’min in 1153. However, the composition of the elements is different on the whole, as was the construction technique used to build them.

OTHER EXAMPLES OF MUQARNAS IN PALERMO

Near the Zisa is the Santissima Trinità Chapel, which once belonged to the palace itself. On the short sides of the rectangular span of the presbytery are two symmetrical cornices with muqarnases that bring the dimensions of the bay to a square configuration on which stands the dome (fig. 16). They are generated by the triple repetition of a composition of elements that jut out gradually and are arranged in three registers, ending with three squinches. The similarity with other compositions present at the Zisa is quite evident, although in this building the muqarnases have a different function—to support the dome.

The most ancient example of a muqarnas in Palermo, datable to around 1131, is represented by the richly painted wooden ceiling of the nave of the Cappella Palatina, situated in the Palazzo Reale (fig. 17). The chapel, which was commissioned by Roger II, has a nave and two side aisles. The nave is covered by a large muqarnas wooden ceiling (fig. 18), whose plan, according to Écochard, looks very similar to that of the ceiling of the al-Qarawiyyin Mosque in Fez. The muqarnases are arranged in five registers along the perimeter of the ceiling of the nave. They hold and support three rows—one on each side of the ceiling, along with one in the middle—each containing eleven centric elements disposed lengthwise (small octagonal pavilion vaults and domes inscribed in eight-pointed stars in the two rows along the perimeter, with square elements in the central row), along with two sets of ten eight-pointed stars containing flowers with eight petals (a motif already found at the Zisa). At the vertices of the large octagons that contain the eight-pointed stars there are hanging elements similar to those of the Zisa. The wooden structure, which appears quite poor in quality on the extrados, is made up of wooden lists arranged with great skill and held together with fiber-wood bandages and animal glue. This structure was originally self-bearing, but, due to past restoration works, at some points the load now rests on a system of girders with the help of wooden tie-beams. On the intrados, however, the ceiling is richly decorated with paintings depicting court life. Another example of a muqarnas in the Palazzo Reale is located in the Torre Pisana (fig. 19), where there is a niche in a secondary room with muqarnases quite similar to those of the Zisa, although they appear to have been modified during restoration.

There are other monuments in Palermo from the Norman period that still bear examples or traces of muqarnases, namely, the Cuba, the Cathedral, the Castle of Favara in Maredolce, and the Scibene Palace (probably twelfth century).

In the Cuba, there are just a few fragments of a muqarnas left on the southern wall of the hall (fig. 20). It seems to have been plastered and elegantly decorated with motifs resembling woven ribbons. Compared with those of the Zisa, the muqarnas in the Cuba appears more richly chiselled but not as old. The few remaining traces do not allow us to fully understand the general development of this refined and unique example of the muqarnas in Palermo. In fact, the only parts of the muqarnas still visible are the lower registers, which have in the right-hand corner a four-level squinch.
Fig. 6a. Corresponding elements of the Eastern Islamic tradition, the Western Islamic tradition, and the Zisa. In each case, the elements are drawn as orthogonal and axonometric projections, accompanied by the description of the planimetric proportions. (Drawings: Vincenza Garofalo)
<table>
<thead>
<tr>
<th>EASTERN ISLAMIC ELEMENTS</th>
<th>WESTERN ISLAMIC ELEMENTS</th>
<th>ELEMENTS OF THE ZISA</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
<td><img src="image3" alt="Diagram" /></td>
</tr>
<tr>
<td>Sirwāliyya sha‘ira</td>
<td>Medio cuadrado</td>
<td>Element E</td>
</tr>
<tr>
<td>aa</td>
<td>bb</td>
<td>cc</td>
</tr>
<tr>
<td><img src="image4" alt="Diagram" /></td>
<td><img src="image5" alt="Diagram" /></td>
<td><img src="image6" alt="Diagram" /></td>
</tr>
<tr>
<td>Medio cuadrado abierto</td>
<td></td>
<td>Element F</td>
</tr>
<tr>
<td>por lo más ancho (2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig. 6b.
<table>
<thead>
<tr>
<th>EASTERN ISLAMIC ELEMENTS</th>
<th>WESTERN ISLAMIC ELEMENTS</th>
<th>ELEMENTS OF THE ZISA</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Eastern Islamic Elements" /></td>
<td><img src="image2" alt="Western Islamic Elements" /></td>
<td><img src="image3" alt="Elements of the Zisa" /></td>
</tr>
</tbody>
</table>

**Fig. 6c.**

*Lūza (2)*  
*Dumbaque grullillo*  
*Element G*
A METHODOLOGY FOR STUDying MUqARNAS: THE EXTANT EXAMPLES IN PALERMO

Fig. 7. From top to bottom: The geometric genesis of the prismatic elements sirwāliyya sha‘īra of the Eastern Islamic tradition, medio cuadrado of the Western Islamic tradition, and the analogous element (E) of the Zisa. (Drawing: Vincenza Garofalo)

Fig. 8. Simple elements of the muqarnas and its composition in five registers. (After Owen Jones, Plans, Elevations, Sections and Details of the Alhambra, 2 vols. [London, 1842], 1: pl. X)

Fig. 9. Stone muqarnas with hanging elements (stalactites) (circled in red), in niche I (see fig. 3) at the Zisa, Palermo. (Photo: Vincenza Garofalo)
In the Castle of Favara in Maredolce, in a room next to the chapel, there are only faint traces of the muqarnas once present there. The ruins of the Scibene Palace reveal a hall similar to an iwan, with a central niche decorated with muqarnas vaults, of which, again, few traces remain.

The latest examples of muqarnas—datable to 1184–85, according to Bellafiore—are in the Cathedral of Palermo. In a niche in the southern apsidal tower is a small vault, covered with plaster, similar to one at the Zisa (fig. 21). It consists of four registers of overlapping corbelled elements culminating in a floral motif that is contained in an eight-pointed star. In the external gallery of the southwestern tower are stone muqarnases generated by the repetition of five groups of elements (fig. 22). These compositions appear as bas-reliefs in the lower part of the structure and they gradually jut out. Like the muqarnas of the apsidal tower, they also culminate with the well-known motif of the eight-pointed star containing a flower with eight petals.

In the course of this research, all the muqarnases of Palermo were organized in a table and catalogued...
Fig. 12. Geometric analysis of the twelve registers of the muqarnas of the central niche of the iwan in the Zisa, Palermo. The left half of each drawing shows simultaneously the upper and lower faces of the registers; the supporting bases are blackened. The right half of each drawing shows, on the other hand, the simplified profile of the register, in which each element is a square, a triangle, or a rhombus. (Drawing: Vincenza Garofalo)
according to the type of plan and monuments to which they belong (fig. 23). The plans of the muqarnases in Palermo built in the Norman period are all based on orthogonal geometry, and through the rotation of squares they create all sorts of different shapes such as polygons, stars, and flowers. This study has identified some variants that are also based on the orthogonal system, but are composed of figures obtained by the rotation of polygons within circles (fig. 23).  

**The plans of the muqarnases in Palermo**

Plans 1 and 2, on a rectangular scheme, are composed of two overlapping orthogonal grids, rotated at 45° angles. Each plan is symmetrical with respect to the cross axis. Plan 1 is generated by the repetition of the same motif; the plan of the jutting cornice that supports the dome of the Santissima Trinità Chapel belongs to this type (fig. 24a). Plan 2 is an extension of plan 1, with the addition of other lines. The plans of the muqarnas of the central niche of the iwan and of another eight examples in the Zisa, as well as those of the muqarnas of the Cuba and of the Torre Pisana in the Palazzo Reale belong to this type (fig. 24a).

Plans 3 and 4 are schemes based on central symmetries, which are generated by the rotation of squares within an orthogonal grid. In the middle of the composition, the rotation of two squares inscribed in a circle at 45° angles generates two concentric octagons and, within them, a star with eight points (formed by joining the vertices of the octagon) and a flower with eight petals. Both of these plans are recognizable in the extant examples of the Cathedral (fig. 24a). Plan 3, which represents the repetition of half of plan 4, is detectable in the external gallery of the southwestern tower. Plan 4 is present in the niche of a tower near the apse.

Plan 5, based on a rectangular scheme whose width is double its depth, is a further development of plan 4. The scheme, symmetrical along the cross axis, has a specular composition, generated by the rotation of squares within concentric circles, at angles of 45°. An eight-pointed star and an eight-petalled flower are inscribed in the octagon generated in the center of these compositions. Five examples of this type of plan are present in the Zisa (fig. 24b).

Plan 6, based on a rectangular scheme whose width is double its depth, is a further development of plans 4 and 5. In both the top right- and the top left-hand corner of the composition, we find an octagonal shape containing an eight-pointed star and an eight-petalled flower. In the center of the composition, the octagonal shape is inscribed in a rectangle. Examples of this type of plan are found at the Zisa, in the side niches of the iwan (fig. 24b).

Plan 7, based on a rectangular scheme whose depth is equal to three-quarters of its width, shows a composition generated by the rotation of a large square within an orthogonal grid, at a 45° angle. Inside this figure, there are other square shapes that, when rotated, produce various octagons and generate a star with eight points and a circle in the center of the composition. In the top right- and left-hand corners, octagons circumscribe eight-pointed stars. Two examples of this plan are present in the Zisa (fig. 24b).

Plan 8, based on an elongated rectangular scheme, is formed by a rigid grid of orthogonal lines whose points of intersection are the centers of rotation of the squares that generate the octagonal shapes containing the motif of the eight-pointed star and the eight-petalled flower. The ceiling of the Cappella Palatina in the Palazzo Reale belongs to this type (fig. 24a).

**ISLAMIC EXAMPLES? SOME OPEN-ENDED QUESTIONS**

In conclusion, it is important to point out that my hypothesis regarding the origin of the workers who built the muqarnases of the Zisa can be based only on the extant evidence. It is quite likely that the key elements required to reach a definitive conclusion have completely disappeared. It is not easy to presume a direct derivation from known Islamic examples, both because Islamic influences in Sicily could have been introduced by craftsmen coming from various places of origin and because the territories included under Islamic rule are farflung, and have not yet been fully analyzed from an architectural point of view, making it difficult to carry out an exhaustive comparison.
Fig. 13a. The location of each element in the different registers of the central niche of the iwan in the Zisa, Palermo. (Drawing: Vincenza Garofalo)
Fig. 13b. Virtual model of the central niche of the iwan at the Zisa in Palermo, showing the location of the elements in the different registers. (Drawing: Vincenza Garofalo)
Element A: in registers 4, 9
Element B: in registers 1, 2, 3, 4, 6, 7, 9
Element C: in registers 5, 6, 7, 8, 10, 11, 12
Element D: in registers 2, 3, 4, 5, 6, 7, 9, 10, 11
Element E: in registers 2, 3, 4, 5, 8, 9, 12
Element F: in registers 3, 6, 10
Element G: in registers 5, 10
Element H: in registers 6, 8

Fig. 13c. Plan of the central niche of the iwan at the Zisa in Palermo, showing the location of the elements in the different registers simultaneously. (Drawing: Vincenza Garofalo)
A clear origin for the examples of Islamic art found in Sicily has not yet been established, and the studies conducted so far have neither proved the existence of nor uncovered architecture built with certainty during Arab rule. A resemblance to one or more similar Islamic structures is not enough to assert a direct relationship. According to Marçais,\(^46\) there is a strong analogy between the plan of the Zisa in Palermo and those of some buildings in the Berber Qal’a Bani Hammad, the first capital of the Hammadid emirs (founded by Hammad ibn Buluqqin in 1007), in Algeria.\(^47\) As far as the muqarnas is concerned, Marçais finds a great similarity between those of the Zisa and the ones in the North African Tlemcen Mosque. According to Golvin, however, the fragments of plaster found among the ruins of the Qasr al-Salam and the Qasr al-Manar at Qal’a Bani Hammad\(^48\) are comparable to muqarnas. They are similar to the extant examples of Palermo, particularly the muqarnas in the Cappella Palatina, while the muqarnases of the Zisa are undoubtedly more laborious and articulate. Furthermore, for Golvin, Norman art in Sicily was strongly influenced by Fatimid-Zirid art, even though it is not yet clear whether its geographical origin was the central Maghreb or Ifriqiya.\(^49\) Hoag found that Sicilian architecture was more similar to the Zirid architectures of Asir and Qal’a Bani Hammad than to that of Fatimid Egypt.\(^50\) Such a thesis is partially confirmed by Jonathan Bloom, who asserts that the muqarnas vaults used in Sicily and North Africa in the twelfth century appear in Egypt only in the middle of the fourteenth century.\(^51\) According to Michel Écochard, muqarnases were built contemporaneously in Fez and in Palermo, with the same geometric technique: see the stone muqarnas in the Zisa and the wooden ceiling of
A METHODOLOGY FOR STUDYING MUQARNAS: THE EXTANT EXAMPLES IN PALERMO

Fig. 16. Cornice with muqarnas in the Santissima Trinità Chapel in Palermo. (Photo: Vincenza Garofalo)

Fig. 17. Left) Muqarnas cornices supporting the painted wooden ceiling of the nave of the Cappella Palatina in the Palazzo Reale, Palermo. (Photo: courtesy of Fabrizio Agnello)
Right) Virtual model of a portion of the wooden ceiling. (Drawing: Vincenza Garofalo)
Fig. 18. The painted wooden ceiling of the Cappella Palatina in the Palazzo Reale, Palermo. (After Roberto Calandra, Alessandro La Manna, and Vincenzo Scuderi, eds., Palazzo dei Normanni [Palermo, 1991], 105)

Fig. 19. The seven registers of the muqarnas of the Torre Pisana in the Palazzo Reale, Palermo. (After Calandra, La Manna, and Scuderi, eds., Palazzo dei Normanni, 193)
a methodology for studying muqarnas: the extant examples in Palermo

Fig. 20. Remaining fragments of the muqarnas on the southern wall of the hall at the Cuba, Palermo. (Photo: Vincenza Garofalo)

Fig. 21. Niche in the southern apsidal tower of the Cathedral of Palermo. (Photo: Vincenza Garofalo)

Fig. 22. The stone muqarnases in the external gallery of the southwestern tower of the Cathedral of Palermo. (Photo: Vincenza Garofalo)
<table>
<thead>
<tr>
<th>CATHEDRAL</th>
<th>PALAZZO REALE</th>
<th>ZISA</th>
<th>CUBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAN 1</td>
<td>SOUTHWESTERN TOWER</td>
<td>NICHE A</td>
<td>HALL</td>
</tr>
<tr>
<td>PLAN 2</td>
<td>SOUTHERN APSIDAL TOWER</td>
<td>NICHE R</td>
<td></td>
</tr>
<tr>
<td>PLAN 3</td>
<td>TORRE PISANA</td>
<td>NICHE Q</td>
<td></td>
</tr>
<tr>
<td>PLAN 4</td>
<td>NICHE L</td>
<td>NICHE J</td>
<td></td>
</tr>
<tr>
<td>PLAN 5</td>
<td>NICHE N</td>
<td>NICHE K</td>
<td></td>
</tr>
<tr>
<td>PLAN 6</td>
<td>NICHE O</td>
<td>NICHE E</td>
<td></td>
</tr>
<tr>
<td>PLAN 7</td>
<td>NICHE G</td>
<td>NICHE J</td>
<td></td>
</tr>
<tr>
<td>PLAN 8</td>
<td>NICHE H</td>
<td>NICHE M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NICHE I</td>
<td>NICHE S</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAPPELLA PALATINA</td>
<td>NICHE B</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NICHE C</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NICHE P</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 23. Classification of the muqarnases of Palermo according to type of plan and the monuments to which they belong. (Drawing: Vincenza Garofalo)
Figs. 24 a and b. Patterns of muqarnases in Palermo. Detailed analysis of an example for each type of plan identified in fig. 23. (Left column) The chosen examples. (Photos: Vincenza Garofalo, except the last, which is taken from Calandra, La Manna, and Scuderi, eds., *Palazzo dei Normanni*, 105)

Right column) Schematic analysis of each plan. Each succeeding register is identified by a deeper shade of gray. The right side of each plan is simplified into squares, triangles, and lozenges, while the left side shows the supporting bases of the simple elements. When viewed vertically, the sequence shows an evolution from a simpler to a more complex type of plan. (Drawings: Vincenza Garofalo)
Fig. 24b.
the Cappella Palatina. The same complex technique was reproduced a few years later in the main portal of the māristān (hospital) of Nur al-Din in Damascus. As Yasser Tabbaa has argued, these muqarnas examples in Damascus are based on Iraqi models from Baghdad. This leads me to assume that there were personal contacts between craftsmen.

Eugenio Galdieri has raised an important issue that leaves all the possibilities open to further studies, surveys, and excavations in Sicily: he wonders how it could be that after 264 years of Islamic domination there was no trace of building activity carried out during that period. He asks if it might be possible that the Normans, although they tolerated and valued Muslim culture and accepted their lifestyle, destroyed everything, only to rebuild soon after, using the same style and craftsmen. What is certain is that the Arabic legacy in Sicily is still evident today in, for example, the words and phonemes of the dialect, the irrigation systems used in citrus plantation, the cuisine, and the songs of the carters, so similar to those of the Tunisian camel-drivers.

One also has to question whether there existed earlier North African muqarnas examples from the Aghlabid period (800–909), a dynasty that also ruled Sicily and was the vassal of the Abbasid court in Baghdad. While these questions remain open to conjecture, this essay has shown that the muqarnas examples analyzed here share a similar geometry with North African models.

Faculty of Architecture, University of Palermo
Palermo, Italy

APPENDIX

The elements that constitute the muqarnas are comparable to small portions of vaults, although they have no structural function. Their shape can vary according to the geographic area to which they belong. Therefore, it is possible to distinguish the elements typical of the muqarnas in the Central and Eastern regions of the Islamic world from those typical of the medieval Western Islamic version, traditionally known as the muqarnas (fig. 25[a–d]; figs. 25–30 are grouped together after the glossary). The faces of the prismatic elements that make up the muqarnas of the Eastern tradition show a broken profile, which Pauty calls “Persian,” made by cutting the base prism with a section that Fernández-Puertas calls the consa. The geometric construction of this profile (fig. 26) can be compared with the one described in great detail by Ghiyath al-Din ibn Mas‘ud al-Kashi in his treatise Key to Arithmetic. The prismatic elements that comprise the muqarnas of the Eastern tradition can have a rectangular, triangular, or rhomboidal base (fig. 27[a and b]). In the rectangular plans, the shorter side is equal to 1 and the longer side is equal to $\sqrt{2}$. The isosceles triangular plans have summit angles of 45° and 90°, respectively; the two like sides are in each case equal to 1, while the third side is equal to 0.766 and $\sqrt{2}$, respectively.

In the following analysis, reference has been made to the guidelines provided by al-Kashi for the purpose of drawing the broken profiles of the solids that constitute the basic elements of the muqarnas (fig. 26). The selected elements and their names are deduced from the studies of Paccard and Castéra (see note 27 below). The elements are drawn by subtracting from prisms either barrel vaults or cross vaults of pointed section, obtained by the extrusion of a mixtilinear profile (i.e., one consisting of straight lines and a curve) (fig. 27[a and b]).

Prismatic elements with a rectangular plan

The t’siya masdūda is similar to a rectangular portion of a barrel vault formed by the extrusion of a mixtilinear profile with a rectangular supporting base (fig. 27a). It is also generated by subtracting a vault from a prism with a rectangular plan. The generatrix of the vault is oriented in the same direction as the major sides of the rectangular base and the directrix has the mixtilinear profile described by al-Kashi.

The t’siya maftūha is formed by subtracting a barrel vault, obtained by the extrusion of a mixtilinear profile, from a t’siya masdūda (fig. 27a). The generatrix of the vault is perpendicular to the major sides of the rectangular base and the directrix has the mixtilinear
profile described by al-Kashi. It is similar to a barrel vault with a lunette\textsuperscript{61} (groins) with two rectangular supporting bases.

**Prismatic elements with a triangular plan**

The *danbūq* is obtained by subtracting a vault from a prism with a right-angled triangular plan (fig. 27a). The generatrix of the vault is oriented in the same direction as the hypotenuse of the triangular base and the directrix has the mixtilinear profile described by al-Kashi. The element can also be generated by cutting the *t’stiya masdūda* with three vertical planes. It has a triangular supporting base and is similar to a triangular portion of a barrel vault.

The *sirwāliyya*, also known as the *būja*, is obtained by subtracting a vault from a prism with a right-angled triangular plan (fig. 27a). The generatrix of the vault is perpendicular to the hypotenuse of the triangular base and the directrix has the mixtilinear profile described by al-Kashi. The element can also be generated by cutting the *t’stiya masdūda* with two vertical planes. It has two triangular supporting bases and can also be regarded as the union of two halves of the *danbūq*.

The *sirwāliyya sha’ira* (for stucco workers), or the *sha’ira* (for painters), is used for the corner elements. It is formed by subtracting a cross vault with a square base from a prism with right-angled triangular plan (fig. 27a). It resembles a squinch. The element, which can also be obtained through the union of two *sirwāliyyas*, has two triangular supporting bases on the same level and a rectangular base placed at a lower level than the first two.

The first type of *lūza*, here called *lūza (1)*, is generated by subtracting a vault from a prism with an isosceles triangular plan (fig. 27b). The generatrix of the vault is oriented in the same direction as the base of the triangular plan and the directrix has the mixtilinear profile described by al-Kashi. The element can also be generated by cutting the *t’stiya masdūda* with three vertical planes. It is similar to a triangular portion of a barrel vault with a trapezoidal supporting base. The *lūza (2)* is generated by subtracting a vault from an isosceles triangle prism (rotated 180° as compared with the previous version) (fig. 27b). In this case as well, the generatrix of the vault is oriented in the same direction as the base of the triangular plan and the directrix has the mixtilinear profile described by al-Kashi. It is similar to a triangular portion of a barrel vault with a triangular supporting base.

**Prismatic elements with an almond-shaped or rhomboidal plan:**

The *lūza (3)* is similar to a triangular portion of a barrel vault with a triangular supporting base (fig. 27b). It is generated by subtracting a vault from a prism with an almond-shaped plan that has two opposite angles of 90°, while the other two angles are, respectively, 45° and 135°. The element can also be generated by cutting the *t’stiya masdūda* with four vertical planes. According to Paccard,\textsuperscript{62} it is used only for the circular dome (*tassa*) or for the crowning of a central dome (*shāshiyya*).

The *katif* is obtained by uniting two different triangular-based *lūza*-elements (i.e., *lūzas [1] and [2]*) with a prism with an isosceles triangular plan that has a 45° summit angle (fig. 27b). The element has a triangular supporting base.

The *shīr* is generated by subtracting two pointed barrel vaults from a prism with a rhomboidal plan (fig. 27b). The element has two triangular supporting bases on the same level and a rhomboidal one placed at a lower level than the first two.

**THE ELEMENTS OF THE MUQARBAS IN THE WESTERN ISLAMIC TRADITION**

The term *muqarbas* refers to the architectural technique typical of the medieval Islamic West that is the equivalent of the muqarnas in the Central and Eastern regions of the Islamic world. The word *muqarbas* may derive from the Greek term *krēpis*, which means “base.”\textsuperscript{63} In Spanish, the word evolved into *mocárabe*, and may also be related to the Arabic *mokrab* (solid, firm, bound).\textsuperscript{64} Under the entry for *mukarbas* in the *Encyclopédie de l’Islam*,\textsuperscript{65} it is stated that the *mocárabe* is derived from
one of four prisms (jairas), one of which has a rectangular plan whose shorter side is equal to 1, while the longer side is equal to $\sqrt{2}$. The other three prisms have an isosceles triangle base with summit angles of 45°, 90°, and 135°, respectively; the two like sides of each prism are equal to 1, while the third side is equal to 0.766, $\sqrt{2}$, and 1.848, respectively.

The faces of the prismatic elements that comprise the muqarbas of the Western tradition, which Fernández-Puertas calls adarajas, are made by cutting the basic prism with a profile, known as a guillillo, that derives from a quarter of a cylinder (fig. 28). The guillillo is created by drawing on the face of a jaira a quarter of a circle with a radius equal to six-sevenths of the width of the jaira. The last seventh of the remaining thickness is called the patilla (small base) and is the supporting base of the adaraja. Fernández-Puertas lists seven primary adarajas and seven secondary ones. The elements of the Western Islamic tradition are also described as mocárabes\(^{66}\) in the seventeenth-century manuscript by Fray Andrés de San Miguel. In his work, Fray Andrés wrote about plantillas,\(^\text{67}\) which are shapes used to produce the single elements of the mocárate (fig. 29); he also described the exact proportions and method for drawing them.

A study by Enrique Nuere analyzes the elements described by Fray Andrés de San Miguel in his manuscript, and introduces others observed in Spanish examples.\(^\text{68}\) According to Nuere, all the elementary adarajas can be divided into four families: conças, medio cuadrados, dumbaques, and jairas. The conça family includes rectangular-plan adarajas ($5 \times 7$ units), which are all variants of the same basic element. In the medio cuadrado family, whose plan consists of an isosceles right triangle with legs (Lat. catheti\(^\text{69}\)) equal to 5 units and a hypotenuse equal to 7 units, are the atacía, the medio cuadrado abierto por lo más ancho, and the medio cuadrado por tabla. Belonging to the dumbaque family, whose plan consists of an isosceles triangle with a summit angle of 45° and sides equal to 5 units, are the dumbaque, the media jaira cortada por la espalda, the dumbaque grullillo, the grullillo, and the almenédilla. Finally, the jaira family, whose plan consists of a rhombus with consecutive angles of 45° and 135° and sides of 5 units, includes the jaira, the media jaira, the jaira ciruelo, and the jaira ahorcada.

In this essay, for the purpose of drawing the prismatic elements of which the muqarbas of the Western Islamic tradition is composed, reference has been made to the guidelines provided by Fernández-Puertas. The selected elements and their names are deduced from the study conducted by Enrique Nuere.\(^\text{70}\) The elements are drawn by subtracting barrel vaults or cross vaults of semicircular section from prisms (fig. 30[a–e]).

**Prismatic elements with a rectangular plan**

The first type of conça, here referred to as conça (1) and analogous to the t’siya masdūda, is similar to a portion of a barrel vault with a rectangular supporting base (fig. 30a). According to the classification made by Fernández-Puertas, it is a primary element. It has two other versions (similar to the t’siya maftūha) that have the same name and are generated by subtracting a barrel vault from the conça (1). The generatrix of the vault is perpendicular to the major sides of the rectangular base of the conça. If the barrel vault and the conça have the keystone at the same height, the element is similar to a half cross vault—conça (2) (fig. 30a). If the keystone of the barrel vault is lower, the element is similar to a portion of a barrel vault with a lunette—conça (3) (fig. 30a). The second and third versions have two rectangular supporting bases and, according to Fernández-Puertas, are secondary elements.

**Prismatic elements with a right-angled triangle plan**

The atacía, which is analogous to the sirwālīyya, is generated by subtracting a barrel vault from a prism with a right-angled triangular plan (fig. 30b). The generatrix of the barrel vault is perpendicular to the hypotenuse of the triangular base. The element can also be generated by cutting conça (3) with two vertical planes. According to the subdivision made by Fernández-Puertas, it is a secondary element.

The medio cuadrado abierto por lo más ancho (1), analogous to the danbūq, is generated by subtracting a barrel vault from a prism with a right-angled triangular plan (fig. 30b). The generatrix of the barrel vault is oriented in the same direction as the hypotenuse of the triangular
base. It is similar to a triangular portion of a barrel vault with a triangular supporting base. The element can also be generated by cutting the conça (1) with three vertical planes. According to the classification made by Fernández-Puertas, it is a primary element. Another version, the medio cuadrado abierto por lo más ancho (2), is generated by subtracting a cross vault with a square base from a prism with a right-angled triangular plan (fig. 30b). In this case, it is a triangular portion of a cross vault with a square base and, according to the subdivision made by Fernández-Puertas, it is a secondary element.

The medio cuadrado, which is analogous to the sirwāliyya sha’ira, is generated by subtracting a cross vault with a square base from a prism with a right-angled triangular plan (fig. 30b). It resembles a squinch. The element, which can also be formed through the union of two sirwāliyyas, has two triangular supporting bases on the same level and a rectangular one placed at a lower level than the first two.

The medio cuadrado por tabla is generated by subtracting a barrel vault from a prism with a right-angled triangular plan (fig. 30b). The generatrix of the barrel vault is oriented in the same direction as the hypotenuse of the triangular base. The element can also be generated by cutting the conça (1) with three vertical planes. It resembles a triangular portion of a barrel vault with a trapezoidal supporting base; according to the classification made by Fernández-Puertas, it is a primary element.

Prismatic elements with an isosceles triangular plan that has a 45° summit angle

The dumbaque, analogous to the lūza (1), is generated by subtracting a barrel vault from a prism with an isosceles triangular plan (fig. 30c). The generatrix of the barrel vault is oriented in the same direction as the base of the isosceles triangle. The element can also be generated by cutting the conça (1) with three vertical planes. It is similar to a triangular portion of a barrel vault with a triangular supporting base. According to the subdivision made by Fernández-Puertas, it is a primary element.

The dumbaque grullillo, which is analogous to the lūza (2), is generated by subtracting a barrel vault from a prism with an isosceles triangular plan (fig. 30c). The generatrix of the barrel vault is oriented in the same direction as the base of the isosceles triangle. The element can also be generated by cutting the conça (1) with three vertical planes. It is similar to a triangular portion of a barrel vault with a triangular supporting base. According to the subdivision made by Fernández-Puertas, it is a primary element.

The grullillo is generated by subtracting an octagonal cross vault, or two barrel vaults, from a prism with an isosceles triangular plan (fig. 30c). It is similar to a triangular portion of an octagonal cross vault with a rhomboidal supporting base. According to the subdivision made by Fernández-Puertas, it is a secondary element.

The media jaira cortada por la espalda is generated by subtracting a barrel vault from a prism with an isosceles triangular plan (fig. 30c). The generatrix of the barrel vault is perpendicular to the base of the isosceles triangle. It has two triangular supporting bases and, according to the subdivision made by Fernández-Puertas, it is a secondary element.

The almendrilla, which is analogous to the lūza (3), is generated by subtracting a barrel vault from a prism with an almond-shaped plan that has two opposite angles of 90°, while the other two angles are, respectively, 45° and 135° (fig. 30c). The element can also be generated by cutting the conça (1) with four vertical planes. It is similar to a portion of a barrel vault with a triangular supporting base.

Prismatic elements with an isosceles triangular plan that has a 135° summit angle

Media jaira is the name that Enrique Nuere gives to three elements with an isosceles triangular plan (fig. 30d). Media jaira (1) is generated by subtracting a barrel vault from a prism with an isosceles triangular plan. The generatrix of the barrel vault is oriented in the same direction as the base of the isosceles triangle. The element can also be generated by cutting the conça (1) with three vertical planes. It is similar to a triangular
portion of a barrel vault and has a triangular supporting base; according to the subdivision made by Fernández-Puertas, it is a primary element. The media jaira (2) is generated by subtracting a barrel vault from a prism with an isosceles triangular plan. The generatrix of the barrel vault is oriented in the same direction as the base of the isosceles triangle. The element can also be generated by cutting the conça (1) with three vertical planes. The element has a trapezoidal supporting base; according to the subdivision made by Fernández-Puertas, it is a primary element. (The difference between media jaira (1) and media jaira (2) is the direction of the prism.) The media jaira (3) is generated by subtracting a barrel vault from a prism with an isosceles triangular plan. The generatrix of the barrel vault is perpendicular to the base of the isosceles triangle. The element is also generated through the union of two halves of a dumbaque grullillo. It has two triangular supporting bases and, according to Fernández-Puertas, it is a secondary element.

Prismatic elements with an almond-shaped or rhomboidal plan

The first type of jaira (jaira [1]), which is analogous to the katif, has a rhomboidal plan; it is obtained through the union, along the shorter diagonal of the rhomboidal plan element, of a dumbaque, a dumbaque grullillo, and an isosceles triangular base with a summit angle of 45° (fig. 30e). The element has a triangular supporting base. A second version, jaira (2), is generated by subtracting two barrel vaults from a prism with a rhomboidal plan or by combining two dumbaques: it has a hexagonal supporting base (fig. 30e).

The jaira ahorcada is generated by subtracting a barrel vault from a prism with a rhomboidal plan or by combining two dumbaque grullillos; it has two triangular supporting bases (fig. 30e).

The jaira ciruelo (analogous to the shīʾār) is generated by subtracting two barrel vaults from a prism with a rhomboidal plan (fig. 30e). The element has two triangular supporting bases on the same level and a rhomboidal one placed at a lower level than the first two.

A muqarnas can also have floral, polygonal, or star-shaped elements. In the Islamic West, particularly in Spain and North Africa, the vaults sometimes present tapered and suspended elements. It is for this reason that the muqarnas vaults are also known as stalactites.

According to Rosintal, one of the main rules for the construction of a muqarnas is the bifurcation of each element from the top: two other units split off, then another two from each of the latter, and so on, until the composition is completed. The elements that constitute the muqarnas can be assembled in various ways. The orientation of an edge also affects the one close to it, so their profiles must match or should be able to be reconciled. For the sake of consistency, it is important to respect the rules of continuity and ensure that two elements next to each other have their joined edges oriented in the same direction. The variety of elements employed in building a muqarnas also depends on what it is made for: e.g., fewer elements are needed to craft a muqarnas for a cornice than are needed to construct one for a ceiling.
Terms based on André Paccard, Traditional Islamic Craft in Moroccan Architecture, pp. 564–76, and transliterated by Roberta Giunta

būja, flower bouquet, a central motif, another term used by plasterers for the sirwāliyya

danbūq (for Paccard denbūq), a main piece of the muqarnas, the key piece

katif, katf (for Paccard ktaf, ktef), a shoulder or rounded shape

lūza, almond, used only for the tassa (cupola) or the shāshiyya (cap)

sha’ira (for Paccard sha’ira or shi’ira), a strand of hair, a very fine motif, another term used by the plasterers for the sirwāliyya sha’ira

shāshiyya, cap (used in reference to a central dome)

shī’ār (for Paccard charbiyia or chiira), a fine hair

sirwāliyya (for Paccard serwaliya), a trouser-shaped motif, another term for the būja

sirwāliyya sha’ira (for Paccard serwaliya sghira), small trousers, a name used in particular by plasterers for the angle pieces and as another term for the sha’ira

tassa, cupola

T’stiya masdūda or tsiya masdūda (for Paccard t’stiya mesdūda or tsiya mesdūda), a closed motif

T’stiya maftūha or tsiya maftūha (for Paccard t’stiya meftūha or tsiya meftūha), an open motif

Terms based on A. Fernández-Puertas, Encyclopédie de l’Islam, s.v. “Muqarbas”

adarajas, the prismatic elements that comprise the muqarbas

consa, the broken profile of the faces of the prismatic elements that make up the muqarnas of the Eastern tradition

guillillo, the shape used to cut jairas and generate adarajas

jairas, the four prisms from which mocárabes are created

mocárabe, the Spanish term for muqarbas (the Western version of the muqarnas)

patilla, a small base

* * *

Terms based on Enrique Nuere, La carpintería de armar española, pp. 128–250

adarajas, the prismatic elements that comprise the mocárabe

almendrilla, a prismatic element with an almond-shaped plan

atacia, an adaraja obtained from a medio cuadrado (a triangular prism that is cut perpendicular in the back by a plantilla)

conça (F. A.), conza (L. A.), one of the adarajas that make up a mocárabe, it derives from a rectangular prism cut with a shape in its longest side, forming two legs on the opposite side

dumbaque, a triangular prism used to produce adarajas
dumbaque ciruelo (F. A.), half of a jaira ciruelo

grullillo, a shape similar to a medio cuadrado abierto por lo más ancho but narrower, or an adaraja with a triangular plan that starts with a small section at the bottom and looks like a crane

jaira, an element consisting of two isosceles triangle prisms, the union of which generates a rhomboidal prism; it has two different versions consisting of two equal or unlike prisms

jaira ahorcada, the combination of two halves of a jaira

jaira ciruelo (F. A.), the combination of two halves of a dumbaque ciruelo, or, rather, of two halves of a rhombus

jaira rubí (F. A.), a jaira ciruelo with the addition of one or two legs in one or both of the vertices of the major axis of the rhombus

media jaira, a prismatic element with an isosceles triangular plan that is made up of other similar elements alongside the back

media jaira cortada por la espalda, a prismatic element with an isosceles triangular plan

medio cuadrado, a triangular prism similar to the atacía, from which it differs in the cut of its faces

medio cuadrado abierto por lo más ancho, a prismatic element with a right-angled triangular plan cut along its longest side

medio cuadrado por tabla, a prismatic element with a right-angled triangular plan

mocrab, solid, firm, bound

plantilla, a shape used to produce the single elements of the mocárabe
Figs. 25[a–d]. Comparison of the architectural elements of the muqarnas of the Eastern Islamic tradition (on the left) with the analogous architectural elements of the *muqarbas* of the Western Islamic tradition (on the right). (Drawing: Vincenza Garofalo)

<table>
<thead>
<tr>
<th>ELEMENTS TYPICAL OF THE EASTERN ISLAMIC TRADITION</th>
<th>ELEMENTS TYPICAL OF THE WESTERN ISLAMIC TRADITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Tʻstiya masdūda" /></td>
<td>![Conça (1)]</td>
</tr>
<tr>
<td><img src="image2" alt="Tʻstiya maftūha" /></td>
<td>![Conça (2)]</td>
</tr>
<tr>
<td><img src="image3" alt="Tʻstiya masdūda" /></td>
<td>![Conça (3)]</td>
</tr>
</tbody>
</table>

Fig. 25a.
<table>
<thead>
<tr>
<th>ELEMENTS TYPICAL OF THE EASTERN ISLAMIC TRADITION</th>
<th>ELEMENTS TYPICAL OF THE WESTERN ISLAMIC TRADITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Sirwāliyya" /></td>
<td><img src="image2.png" alt="Atacia" /></td>
</tr>
<tr>
<td><img src="image3.png" alt="Danbūq" /></td>
<td>![Medio cuadrado abierto por lo más ancho (1)]</td>
</tr>
<tr>
<td><img src="image4.png" alt="Sirwāliyya sha’ira" /></td>
<td>![Medio cuadrado abierto por lo más ancho (2)]</td>
</tr>
<tr>
<td><img src="image5.png" alt="Medio cuadrado por tabla" /></td>
<td><img src="image6.png" alt="Medio cuadrado por tabla" /></td>
</tr>
</tbody>
</table>

Fig. 25b.
<table>
<thead>
<tr>
<th>ELEMENTS TYPICAL OF THE EASTERN ISLAMIC TRADITION</th>
<th>ELEMENTS TYPICAL OF THE WESTERN ISLAMIC TRADITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Lūza (1)" /></td>
<td><img src="image" alt="Dumbaque" /></td>
</tr>
<tr>
<td><img src="image" alt="Lūza (2)" /></td>
<td><img src="image" alt="Dumbaque grullillo" /></td>
</tr>
<tr>
<td><img src="image" alt="Lūza (3)" /></td>
<td><img src="image" alt="Grullillo" /></td>
</tr>
<tr>
<td><img src="image" alt="Media jaira cortada por la espalda" /></td>
<td><img src="image" alt="Almendrilla" /></td>
</tr>
</tbody>
</table>

Fig. 25c.
<table>
<thead>
<tr>
<th>ELEMENTS TYPICAL OF THE EASTERN ISLAMIC TRADITION</th>
<th>ELEMENTS TYPICAL OF THE WESTERN ISLAMIC TRADITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katif</td>
<td>Media jaira (1)</td>
</tr>
<tr>
<td></td>
<td>Media jaira (2)</td>
</tr>
<tr>
<td></td>
<td>Media jaira (3)</td>
</tr>
<tr>
<td>Shi‘ār</td>
<td>Jaira (1)</td>
</tr>
<tr>
<td></td>
<td>Jaira (2)</td>
</tr>
<tr>
<td></td>
<td>Jaira ahorcada</td>
</tr>
<tr>
<td></td>
<td>Jaira ciruelo</td>
</tr>
</tbody>
</table>

Fig. 25d.
Fig. 26. Left) The four plans of the muqarnas elements, as described by al-Kashi. Right) The method to draw the profile of an element, as described by al-Kashi. (After Mohammad Al-Asad, “The Muqarnas: A Geometric Analysis,” in Gülru Necipoğlu, *The Topkapı Scroll: Geometry and Ornament in Islamic Architecture. Topkapı Palace Museum Library MS. H. 1956* [Santa Monica, Calif., 1995], 353, fig. 2)
### EASTERN ISLAMIC ELEMENTS

<table>
<thead>
<tr>
<th>Element</th>
<th>Planimetric Proportions</th>
<th>Planimetric Views</th>
<th>Geometric Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>T'siya masdūda</td>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
<td><img src="image3" alt="Diagram" /></td>
</tr>
<tr>
<td>T'siya maftūha</td>
<td><img src="image4" alt="Diagram" /></td>
<td><img src="image5" alt="Diagram" /></td>
<td><img src="image6" alt="Diagram" /></td>
</tr>
<tr>
<td>Danbūq</td>
<td><img src="image7" alt="Diagram" /></td>
<td><img src="image8" alt="Diagram" /></td>
<td><img src="image9" alt="Diagram" /></td>
</tr>
<tr>
<td>Sirwāliyya</td>
<td><img src="image10" alt="Diagram" /></td>
<td><img src="image11" alt="Diagram" /></td>
<td><img src="image12" alt="Diagram" /></td>
</tr>
<tr>
<td>Sirwāliyya sha’ira</td>
<td><img src="image13" alt="Diagram" /></td>
<td><img src="image14" alt="Diagram" /></td>
<td><img src="image15" alt="Diagram" /></td>
</tr>
</tbody>
</table>

*Fig. 27a.*

Fig. 27, a and b. Classification and geometric analysis of the elements of the Eastern Islamic tradition. From left to right: the planimetric proportions; the elements obtained by subtracting either barrel vaults or cross vaults from prisms; planimetric views of the intersections of the vaults and prisms that generate the elements (in red); the elements obtained by cutting a prism or a basic element with one or more vertical planes, or from the combination of two similar elements; planimetric views of the latter constructions, where broken lines represent the vertical planes. (Drawing: Vincenza Garofalo)
Fig. 27b.
ADARAJA

Fig. 28. Profile and plans of the elements of the muqarbas, which are called adarajas. (After A. Fernández-Puertas, Encyclopédie de l'Islam (Leiden, 1960–2007), s.v. "Mukarbas," pl. XLIV)

Fig. 29. Plantillas, the shapes used to draw the elements of the mocárabe, as described by Fray Andrès de San Miguel. (After Enrique Nuere, La carpintería de lazo [Malaga, 1990], reproduction of a page of the manuscript by Fray Andrès)
Fig. 30a. Classification and geometric analysis of the elements of the Western Islamic tradition. From left to right: the planimetric proportions; the elements obtained by subtracting either barrel vaults or cross vaults from prisms; planimetric views of the intersections of the vaults and prisms that generate the elements (in red); the elements obtained by cutting a prism or a basic element with one or more vertical planes, or from the combination of two similar elements; planimetric views of the latter constructions, where broken lines represent the vertical planes. (Drawing: Vincenza Garofalo)
## Western Islamic Elements

<table>
<thead>
<tr>
<th>Element Description</th>
<th>Diagram 1</th>
<th>Diagram 2</th>
<th>Diagram 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atacia</td>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
<td><img src="image3.png" alt="Diagram" /></td>
</tr>
<tr>
<td>Medio cuadrado abierto por lo más ancho (1)</td>
<td><img src="image4.png" alt="Diagram" /></td>
<td><img src="image5.png" alt="Diagram" /></td>
<td><img src="image6.png" alt="Diagram" /></td>
</tr>
<tr>
<td>Medio cuadrado abierto por lo más ancho (2)</td>
<td><img src="image7.png" alt="Diagram" /></td>
<td><img src="image8.png" alt="Diagram" /></td>
<td><img src="image9.png" alt="Diagram" /></td>
</tr>
<tr>
<td>Medio cuadrado</td>
<td><img src="image10.png" alt="Diagram" /></td>
<td><img src="image11.png" alt="Diagram" /></td>
<td><img src="image12.png" alt="Diagram" /></td>
</tr>
<tr>
<td>Medio cuadrado por tabla</td>
<td><img src="image13.png" alt="Diagram" /></td>
<td><img src="image14.png" alt="Diagram" /></td>
<td><img src="image15.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>

Fig. 30b.
<table>
<thead>
<tr>
<th>Western Islamic Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dumbaque</td>
</tr>
<tr>
<td>Dumbaque grullillo</td>
</tr>
<tr>
<td>Grullillo</td>
</tr>
<tr>
<td>Media jaira cortada por la espalda</td>
</tr>
<tr>
<td>Almendrilla</td>
</tr>
</tbody>
</table>

Fig. 30c.
### WESTERN ISLAMIC ELEMENTS

<table>
<thead>
<tr>
<th>Media jaira (1)</th>
<th>Media jaira (2)</th>
<th>Media jaira (3)</th>
</tr>
</thead>
</table>

Fig. 30d.
<table>
<thead>
<tr>
<th>WESTERN ISLAMIC ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram of Jaira (1)]</td>
</tr>
<tr>
<td>![Diagram of Jaira (2)]</td>
</tr>
<tr>
<td>![Diagram of Jaira ahorcada)]</td>
</tr>
<tr>
<td>![Diagram of Jaira ciruelo)]</td>
</tr>
</tbody>
</table>

Fig. 30e.
NOTES

Author’s note: This paper is a result of research undertaken for my doctorate in Surveying and Representation of Architecture and the Environment, completed at the University of Palermo, in association with the University of Reggio Calabria Italy in 2003. I would like to thank Dr. Adele Mormino, Superintendent of the Sicilian Department for Cultural and Environmental Heritage in Palermo, for allowing me to survey the muqarnases of the Zisa and to photograph the Zisa and the Cuba. I would also like to thank the Curia of Palermo for granting me permission to photograph the Cathedral of Palermo and the Chapel of Santissima Trinità alla Zisa. I am grateful to the architects Eugenio Galdieri and Fabrizio Agnello (University of Palermo) and to Professors Giuseppe Pagnano (University of Catania) and Michele Inzerillo (University of Palermo) for sharing my enthusiasm for this research and for their valuable advice. Special thanks to Professor Roberta Giunta of the University of Napoli “L’Orientale,” for the transliteration of the Arabic terms, and to Dr. Fina Calì, for her help with the English translation.

1. Examples of muqarnas from cultures outside of the Islamic world can be found in Spain and Palermo, as well as in Armenian churches. See Armen Ghazarian and Robert Ousterhout, “A Muqarnas Drawing from Thirteenth-Century Armenia and the Use of Architectural Drawings during the Middle Ages,” *Muqarnas* 18 (2001): 141–54.

2. With the arrival of the Normans in Sicily in 1060, the Muslims lost control of the Western Mediterranean, but this did not lead to a diminishing of their presence in Sicily. The Normans integrated to such a degree with the Muslims already present in the territory that they adopted their organization of government and court traditions, as well as their building typologies and construction techniques. The Norman use of Islamic architectural elements would be attributable, according to Brenk, to the willingness on the part of Roger II to subordinate Islamic iconography to the Normans’ ideology of power: see Beat Brenk, *Il concetto progettuale degli edifici reali in epoca normanna in Sicilia*, Quaderni dell’Accademia delle Arti del Disegno 2 (Florence, 1990), as quoted in Gianluigi Ciotta, *Muqarnas: A Geometric Analysis* (Paris, 1954).


4. The Zisa of Palermo is also known as the Palace, or Castle, of Zisa. For an extensive bibliography on the Zisa and the other monuments of Palermo mentioned in this essay, see Rosario La Duca, *Repertorio bibliografico degli edifici pubblici e privati di Palermo, Parte seconda: Gli edifici fuori le mura* (Palermo, 1997).

5. Historical sources date the building to 1164, even if in the past it was considered of probable Islamic foundation.

6. During the restoration of the eastern iwan in the Friday Mosque at Isfahan, in addition to the extant Safavid muqarnas, traces of larger Seljukid ones were found. Eugenio Galdieri, *Esfahān: Masğid-i Ğum’a, Restorations 1, 3* (Rome, 1984), 33, 48, and 50, fig. 50.

7. Innovative materials such as fiberglass and associated advanced technologies are also employed today.


14. A squinch is an architectural structure used to provide a transition from a square to a polygonal or circular base on which to construct a dome.


17. See Hautecoeur, “De la trompe,” 46. The author numbers the muqarnas of the Zisa among the first examples of this type.


19. Ibid., 76.
20. The study of the Zisa muqarnas was preceded by a topographic survey carried out by the present author with the architects Silvia Sgariglia and Salvatore Giardina. This survey was fundamental to learning about these seemingly complex structures, which are actually made up of simple elements. To draw the topographic survey, the present author conducted an extensive study of the geometry of the muqarnas, which was crucial for understanding its characteristics. See Vincenza Garofalo, “Dal rilievo topografico al modello virtuale. La Zisa di Palermo,” in *Dall’architettura concreta al modello immateriale. Il rilievo digitale nelle sue valenze euristiche. Atti del seminario di studi, Reggio Calabria, 30 aprile 2004*, ed. Valeria Macri (Reggio Calabria, 2005), 46–51; Vincenza Garofalo, “Il rilievo dei muqarnas della nicchia centrale dell’iwan alla Zisa di Palermo,” in *Atti del Convegno: Tecnologie per comunicare l’architettura* (Ancona, 2004), 333–34.


22. The basic elements are arranged in different combinations in each register. Some of these combinations are repeated in the composition (fig. 14).

23. Rosintal calls this type of squinch a “Byzantine niche.” For further investigation, see Rosintal, *Pendentifs*, 3–47. Other examples of this type can be found in the Church of Santa Maria Maddalena and in the Chapel of San Filippo at the Favara in Palermo.

24. Some of Jones’s drawings of the basic elements are ambiguous: for example, the true shape of elements A3 and C3 is unclear. See Owen Jones, *Plans, Elevations, Sections, and Details of the Alhambra: From Drawings Taken on the Spot in 1834 by Jules Goury and in 1834 and 1837 by Owen Jones*, with a complete translation of the Arabic inscriptions, and an historical notice of the kings of Granada from the conquest of that city by the Arabs to the expulsion of the Moors, by Mr. Pasqual de Gayangos, 2 vols. (London, 1842–45).


26. The oldest known example of muqarnas drawings is a plaster tablet dating to the Ilkhanid period. It was found by chance during the excavations undertaken in 1959 by the German Archaeological Institute of Teheran at Takht-i-Sulayman, in Iran. See Harb, *Ilkhanidische Stalaktitengewölbe*, 9–11.

27. See Gülru Necipoğlu’s interesting study of the Topkapi scroll. Probably created by late medieval Iranian master builders, it belongs to the Islamic scrolls tradition, which was once quite common. The scrolls had several geometric drawings: sketches of vaults, architectural ornaments, and epigraphic panels. The Topkapi scroll provides a catalogue of ideal types that demonstrate late Timurid-Türkmen architectural practice. These geometric drawings are generated by square, triangular, and polygonal grids, and are still used today in Iran, Iraq, and Morocco. Necipoğlu, *Topkapi Scroll*, 9 and 48. See also André Paccard, *Traditional Islamic Craft in Moroccan Architecture*, trans. Mary Guggenheim (Saint-Joriz, France, 1980), and Jean-Marc Castéra, *Arabesques: Art décoratif au Maroc* (Paris, 1996).


29. Michel Écochard provides some possible combinations that are generated by the rotation—within a half square—of regular polygons around their center of symmetry. Écochard, *Filiation*, 93.

30. According to Jean-Marc Castéra, every muqarnas plan contains “a trick,” an exception to the rule of the composition that allows the structure to be closed. In fact, in the transition from register 10 to register 11 we can see that the vertices of the overlapping triangular elements do not coincide (fig. 11). See Castéra, *Arabesques*, 322–25.


33. Inveges wrote that the chapel was built by Count Roger, probably in 1094. See Patrizia Scafidi, “La cappella della Zisa,” in *Castelli, dimore, cappelle palatine: Inediti e riletture di architetture normanne in Sicilia*, ed. Anna Maria Schmidt (Palermo, 2002), 243–79.

34. Écochard notes the similarity between the ceiling plan of the Cappella Palatina in Palermo and that of the Mosque al-Qarawiyyin in Fez. The reference to the Moroccan muqarnas thus appears again. See Écochard, *Filiation*.

35. An accurate description of the wooden structure and of the last restoration work that affected the chapel is in Mario Li Castri and Tiziana Campisi, “The Muqarnas Wooden Dome: Its Origin and Meaning,” *Muqarnas* 93.


37. The figures painted on the ceiling of the chapel are similar to those engraved in the fragments found at Qal’a Bani Ham-
mad, datable to the eleventh or early twelfth century. Some palm-shaped motives are similar to those present in the Qal’a Bani Hammad and on the ceiling of the Mosque of Kairouan in Tunisia. This led Golvin to suggest similarities between these plaster elements and the muqarnas of the Cappella Palatina.

38. The Cathedral today is the result of many changes and additions made over the centuries. For a bibliography, see Ciotta, La cultura architettonica, 192 n. 2, and Guido Di Stefano, Monumenti della Sicilia normanna (Palermo 1955), 53–58.

39. According to Michele Amari and Vincenzo Di Giovanni, the castle was built during the period of Arab domination, around the year 1000. According to Romualdo Salernitano and Ugo Falcando, it is attributable to Roger II, and datable to about 1150. See Michele Amari, Storia dei Musulmani di Sicilia (Florence, 1854–72), 843; Vincenzo Di Giovanni, “Il Castello e la chiesa della Favara di San Filippo a Mare-dolce in Palermo: Note e svariamenti,” in Archivio Storico Siciliano, n.s., 22 (1897): 301–74; Romualdo Salernitano, “Chronicon,” in Rerum Italicarum Scriptores, 8, 1, ed. C. A. Garufi (Città di Castello, 1935), 232–33; Ugo Falcando, Epistola ad Petrum Panormitae Ecclesiae Thesaurarium, ed. G. B. Siragusa, Fonti per la Storia d’Italia pubblicate dall’Istituto Storico Italiano 22 (Rome, 1897), 87.

40. See Giuseppe Spatrisano, La Zisa e lo Scibile di Palermo (Palermo, 1982), 63–84. For an extensive bibliography, see La Duca, Repertorio bibliografico.

41. According to Marçais, there is a great similarity between the fragments of the muqarnas in the Cuba and those of the North African Tlemcen Mosque. See Marçais, L’architecture musulmane, 122–23.

42. See Giuseppe Bellaiole, La Zisa di Palermo (Palermo, 2001), 110.

43. For an extensive bibliography, see “Bibliografia di Rosario La Duca,” in La Cattedrale di Palermo: Studi per l’ottavo centenario dalla fondazione, ed. Leonardo Urbani (Palermo, 1993).

44. The plans of the muqarnas in Palermo that are examined in this work were not surveyed; rather, they were drawn after being observed directly. The analytical procedure here described can be applied to any muqarnas structure, no matter its actual size, to understand the rules governing its composition.

45. One of these niches shows remarkable similarities with the plan and the layout of the elements on the vault of the Monastery of Las Huelgas, near Burgos in Spain (1187) (fig. 10).

46. See Marçais, L’architecture musulmane, 122–23.

47. See Eugenio Galdieri, “Sull’architettura islamica in Sicilia: Lamento di un architetto ignorante sopra una architettura inesistente,” Rivista degli Studi Orientali 74, 1–4 (2000): 58 n. 37. Galdieri asserts that architecture should be considered in its spatial connotation and that comparisons based only on plans are a misleading “abstraction of convenience.”


53. Ecochard, Filiation, 76.


56. Behrens-Abouseif, Encyclopédie de l’Islam, s.v. “Muqarnas”; Fernández-Puertas, Encyclopédie de l’Islam, s.v. “Mukárba.” However, sometimes this distinction is highly problematic, given the exchange of influences—especially the dissemination of the muqarnas from Iraq to dependent courts in the Abbasid period. See Tabbaa, “Muqarnas Dome: Its Origin and Meaning”; Necipoğlu, Topkapı Scroll.

57. In this essay, Pauty speaks about the Persian profile with regard to Egyptian squinches, which were strongly influenced by Persian art. The images of some examples presented by the author show that the profiles of the cells of the muqarnas appear substantially similar to that described by al-Kashi. See Pauty, “Contribution à l’étude des stalactites,”129–53.

58. The broken profile distinguishes the Eastern elements from the Western ones; the profiles of the faces of the latter derive from a quarter of a cylinder. Fernández-Puertas, Encyclopédie de l’Islam, s.v. “Mukárba.”

59. This is the oldest example currently known regarding literature on the muqarnas. A very important drawing by al-Kashi illustrates the method for obtaining the exact profile in elevation of a unit of a muqarnas. According to this drawing, the height of a unit should be approximately equal to twice its depth and units of the same register generally have the same height. See the analysis of the al-Kashi text in Al-Asad, “Muqarnas: A Geometric Analysis,” 349–59; Lisa Golombek and Donald Wilber, The Timurid Architecture of Iran and Turan (Princeton, N.J., 1988), 164; Yvonne Dold-Samplonius and Silvia L. Harmsen, “The Muqarnas Plate Found at Takht-i Sulayman: A New Interpretation,” Muqarnas 22 (2005): 85–94.

60. The geometrical schemes that follow are a part of a more detailed analysis in Vincenza Garofalo, “I muqarnas: Metodologia per uno studio. La nicchia centrale dell’iwan alla Zisa di Palermo” (PhD diss., Università di Palermo, 2003).
61. A vault with lunettes is obtained by the intersection of two barrel vaults of different sizes that are perpendicular to each other.
62. See Paccard, *Traditional Islamic Craft*.
64. Diego López de Arenas, *Carpintería de lo blanco y Tratado de alarifes y de relojes de sol* (Madrid, 1867).
66. In the seventeenth century, Andrés de San Miguel, a Carmelite friar and architect, wrote a manuscript containing architectural drawings and instructions to build mocárabes (the Spanish term used to describe muqarnas, or better, muqarbas, as the motif was known in the West). See Enrique Nuere, *La carpintería de lazo: Lectura dibujada del manuscrito de Fray Andrés de San Miguel* (Málaga, 1990), and Enrique Nuere, *La carpintería de armar española* (Madrid, 1989).
67. According to Fray Andrés, to trace the profile we need a shape seven units high, which divides the base of the element into seven or five parts, one of which is the leg. To draw conças and atacias we need a profile that divides the longer side of the rectangular prism into seven parts. Two of the parts form the legs and the other five the diameter of the semicircle that creates the profile. To draw the jaira rubí, dumbaque ciruelo, and media jaira por la espalda, we need a profile that divides the longer side of the rectangular prism into five parts, two of which constitute the legs of the element. See Nuere, *La carpintería de lazo*.
68. Ibid.
69. The cathèti of a right-angled triangle are the two sides that are adjacent to the right angle.
70. The explanation of the Spanish terms is found in López de Arenas, *Carpintería de lo blanco y Tratado de alarifes*, 171–83.
71. In the church of San Giovanni degli Eremiti in Palermo there is an example of this type of squinch. Rosintal counts this type among the Byzantine ones, which derive from the Persian types. See Rosintal, *Pendentifs*, 3–47.
72. For an explanation of the Persian techniques for building a muqarnas, see ibid., 57–71.
75. According to Paccard, *Traditional Islamic Craft*, 564, “[t]he transcription of these words is very close to the one, more phonetic, of the maallems [sic].” Roberta Giunta is Professor of Archaeology and History of Islamic Art at the University of Napoli “L’Orientale.” It should be noted that Professor Giunta’s transliterations were slightly revised to conform to the system followed in *Muqarnas*.
76. Nuere developed a glossary that contains several terms used in carpentry, citing the sources consulted for each term, e.g., Diego López de Arenas (here abbreviated L. A.) or Fray Andrés de San Miguel (here F. A.).
77. See n. 76 above.
This inquiry investigates the geometric and structural features of the wooden ceiling covering the nave of the Cappella Palatina in the Royal Palace (Palazzo Reale) of Palermo. I do not offer here either an in-depth historical analysis or a detailed description of the rich and interesting paintings decorating the ceiling. Such issues have been widely investigated, mainly by art and architecture historians. Rather, a brief discussion of the history of the Cappella is meant to draw attention to some of the previous studies on the cultural influences underlying the artistic and architectural features of this building in order to contextualize my findings on the geometric layout of the ceiling covering the nave.

Today, the ceiling of the nave of the Cappella Palatina appears to be the sole surviving example of this type of complex, painted carpentry in Islamic culture. Given the absence of other similar examples, it could be argued that the ceiling is the peculiar product of multicultural Norman Sicily, and reflects the influence of its patron, Roger II (r. 1130–54). It is distinguished from similar artifacts in Islamic art mainly by the material of which it is made and the technique used to construct it. Most muqarnas vaults are made of stone or stucco, with single elements that are carved or molded. In the ceiling of the Cappella Palatina, however, the spatial layout of the muqarnas is produced by a segmentation of the form: that is, it is divided into arch-shaped primary panels and into secondary hidden panels, which act as centerings for the placement of thin wooden elements that form the surface of the small vaults. No other ceiling like that of the nave of the Cappella Palatina has survived in Sicily, but we will see that it must have served as the inspiration for the consoles of a later ceiling in Palermo.

This first study of the geometric and constructive features of the ceiling is just one contribution to the research that has been conducted regarding the origin of the craftsmen and the cultural influences underlying the ceiling and its creation. The precise drawing of a reference grid, which will be described below, and the relations between that grid and the drawing of the shape of the vertical primary elements, referred to as “EL” panels in the following discussion, demonstrate that the ceiling was meant to be not a peripheral creation but a unique and magnificent expression of Islamic culture. The Norman kingdom put an end to two centuries of Islamic domination in Sicily, even as it maintained relations with Islamic countries in North Africa and demonstrated an appreciation for Islamic art and architecture. The establishment of the Norman kingdom did not interrupt the influence of Islamic culture on art and architecture in Sicily. We see the remains of this impact in the ceiling of the Cappella Palatina, as well as in some palaces in Palermo that are still standing—the Zisa, the Cuba, and the Scibene—all of which were commissioned by Norman kings.

METHODOLOGY AND THESIS

Between 2005 and 2009, the Cappella Palatina underwent an accurate and comprehensive restoration, financed by a generous grant from Reinhold Wurth and directed by the Soprintendenza per i Beni Culturali of Palermo. The provisional structures used by the restorers allowed for new and closer views of the mosaics and other decorations, and gave researchers the chance to observe the ceiling from a privileged per-
Some of the best previous inquiries on the Cappella presumably also used provisional structures, either to get detailed photographs, such as, for instance, the ones published in Ugo Monneret de Villard’s *Le pitture musulmane al soffitto della Cappella Palatina in Palermo*, or to survey the ceiling. The precise drawings done by Andrea Terzi in the late nineteenth century, which are discussed below, must have been based on measurements and observations attainable at that time only by actually touching the ceiling by hand.

The results of the research here reported are based on 3D laser-scanning data of the eastern end of the wooden ceiling and on a survey of the dimensions of the entire nave. Indeed, 3D laser scanning has profoundly transformed the approach to cultural heritage analysis and documentation. Laser scanners quickly measure the 3D coordinates of a large number of points (usually referred to as a “point cloud”) of the visible surfaces of an object; they also photograph the scanned area and link color values (RGB) to each surveyed point. With 3D laser scanning, scholars are able to examine an artifact in detail, allowing for both geometric analyses and the study of the quality and position of any colored feature. The 3D scanners are usually classified as long, medium, or close-range, depending on the distance allowable between the device and the object. The data measured in this inquiry were collected via a close-range optical triangulation laser scanner, a highly accurate device that can detect distances of less than 1 millimeter; it is usually positioned at about 1.5 meters from the object and the scan is performed in a few seconds. Several scans of the area under examination were collected; they were registered to form one point cloud, which became the basis for the geometric analysis described in this paper.

There have been several studies devoted to the geometric analysis of the muqarnas vaults, mainly as a way to reconstruct the horizontal grid pattern of the vaults. The analysis of the elevation has often been regarded as a secondary matter, since it was assumed that the height of the tiers of the muqarnas was determined by the dimensions of the vaults and by the 1:2 ratio of the sides of the rectangle inscribing the basic element, in accordance with the description furnished by al-Kashi in his treatise *Miftāḥ al-ḥisāb* (Key to Arithmetic). Laser scanning and 3D modeling software allow in-depth inspection of the three-dimensional features of the muqarnas vaults, offering the opportunity for new studies on the relations between the grid patterns and the elevations.

As indicated above, laser scanners have generally been considered an effective technology for documenting cultural heritage; they are particularly useful with respect to the issue of conservation. In this study, I attempt to demonstrate that laser-scanning data can be employed to reconstruct the “reference drawing” of the ceiling of the Cappella Palatina and that relations between the reference grid and the elevation of the muqarnas vaults can be discerned by means of 3D metric data. I argue that this relation should not be regarded as a distinguishing feature of the ceiling of the Cappella Palatina, but rather as a common practice of craftsmen in Islamic and in premodern European art and architecture: “[I]n the Topkapı and Tashkent scrolls abstract designs generated from modular geometric grids unencumbered by specific measurements were meant to be proportionally adapted to buildings and local materials at the construction time.... Elevations were deduced by means of geometric procedures also common to Gothic building practice in which learning the method of projecting three-dimensional forms from two-dimensional templates played a central role.”

THE CAPPELLA PALATINA AND ITS CEILING

The Cappella Palatina is located in the Royal Palace of Palermo, at the western edge of the historical town (fig. 1). The history of the foundation and construction of the Royal Palace, though widely investigated, is still uncertain. What seems definite is that the site was selected as the residence of the Normans when Robert Guiscard (d. 1085) and his brother, Count Roger (d. 1101), conquered Palermo in 1072. They began building the palace on the ruins of a previously fortified site, as a counterpart to the fortified Muslim residence located by the sea at the eastern edge of the old town. Count Roger’s son, Roger II (d. 1154), took advantage of the succession dispute that broke out following the death of Pope Honorius II, and was proclaimed king of Sicily by Anacletus II (d. 1138) in December 1130. We know that Roger II was the patron of the Cappella Palatina (fig. 2).
Roger II was quite an interesting figure: named king by a Latin pope, he was known to wear Islamic clothing, thus embodying the multicultural climate of medieval Sicily, where Byzantine, Islamic, and Jewish cultures coexisted. His life is testimony to the effort and joys involved in synthesizing such different cultures and ways of life. The Cappella Palatina is a powerful visible expression of this cultural intent: its decorative program transforms a standard planimetric scheme in the assemblage of two distinct areas, a holy eastern space (the sanctuary, with transept, choir, and apses) and a secular space in the nave and aisles. Most historians agree on this assertion, pointing out that the nave was the king’s area. It has also been argued that Roger II had a privileged place from which to listen to the liturgy, a balcony on the north wall of the northern transept arm, and that even the mosaics were oriented to the king’s line of vision.8

In 1132, the Cappella was granted the status of a parochial church and dedicated to Saint Peter the
Apostle. In a document signed by Roger II himself in 1140, he declared:

And so, with the seven forms of the grace of the Savior stirring us, in honor of God, whose mercy makes us prosper, and of the Blessed Virgin Mary, and of all the Saints, with the highest devotion, we have built a church dedicated to Saint Peter, Prince of the Apostles, in our Royal Palace in Palermo.

Another valuable testimony is the Greek inscription at the base of the dome covering the sanctuary:

Other kings of old erected sanctuaries to other Saints; but I, Roger, mighty ruling king, [dedicate this church] to the foremost of the Lord’s disciples, the leader and the archpriest Peter, to whom Christ entrusted His church, which He Himself had consecrated by the sacrifice of His blood...The third indiction...the fifty-first year in the correct measurement after 6000 and 600 years had elapsed in an ever moving cycle.

This inscription provides evidence of the role played by Roger II in the construction and decoration of the Cappella. The inscription is written in the mosaics at the base of the tambour of the dome, which suggests that both the mosaics and the tambour were put in place at the same time. The calculation of the year 6651 is also noteworthy: Luigi Boglino remarks that this was “the Greek way to compute the years,” since in the Byzantine calendar the world was supposedly created in the year 5508 B.C. The year of the inscription may therefore be determined by subtracting 5508 from 6651, that is, 1143; most historians agree on this dating.

We should note that in 1143 the Byzantine calendar was no longer used in western Europe. The date of the inscription, together with many other documents, thus reveals the strong presence of Byzantine culture in Sicily, as well as the weak influence of Latin culture.

Another valuable document is the sermon preached in the Cappella by Philagatos Kerameos in the presence of Roger II. Referring to the king, Philagatos notes that he has built [this church] as if a foundation and a protection for his palaces; large, most lovely, and distinguished by a fresh beauty; brilliant with lights, shining with gold, glittering with mosaics, and bright with paintings. He who has seen it many times, marvels when he sees it again, and is as astonished as if he were seeing it for the first time, his gaze wandering everywhere.

As to the ceiling, one can never see enough of it; it is wonderful to look at and to hear about. It is decorated with delicate carvings, variously formed like little coffers; all flashing with gold, it imitates the heavens when, through the clear air, the host of stars shines everywhere.
The ceiling is richly decorated with paintings and Kufic inscriptions. Previous studies on the paintings agree on the absence of a coherent iconographic project. Monneret de Villard, the first to produce a comprehensive essay on the paintings, asserts that they refer to the pleasures and habits of life at the king’s court; hunters, drinkers, dancers, and musicians thus complement Roger II’s majesty (fig. 4). The Kufic inscriptions around the eight-pointed stars, translated by Michele Amari, celebrate the glory of the king and wish him health, wealth, and power (fig. 5).

As has been previously pointed out, the arrangement of the nave itself must have been different during the time of Roger II. His successor, William I (r. 1154–66), is believed to have commissioned the mosaic decorations in the aisles and in the nave. Maria Andaloro refers to the third part of Philagatos’s sermon in support of her hypothesis that the walls were covered with richly decorated textiles during the time of Roger II. It would seem, therefore, that William I’s intention was to mitigate the strong Islamic character of the nave.

Most scholars are in agreement concerning both the influence of eastern Islamic culture on the paintings on the ceiling and the remarkable parallels between its geometric and spatial layout and North African maghribi architecture. Recently, further influences from western medieval culture have also been pointed out in order to support the hypothesis that the ceiling is to be regarded as a product of the cultural milieu of Norman Sicily.

An echo of the wooden muqarnas can be found two hundred and thirty years later (1377–80), in the flat ceiling covering the Sala Magna in the Steri of Palermo. The beams, decorated with painted wooden panels, are supported by small, rough consoles driven into the walls and covered with a muqarnas wooden element, whose constructive technique seems to be a citation of the ceiling in the Cappella Palatina (fig. 6).

THREE STUDIES OF THE CEILING OF THE CAPPELLA PALATINA

The bibliography on the Cappella Palatina is particularly extensive. As noted above, most of these works are by art and architecture historians who have focused their attention mainly on the mosaics, the dating of...
Fig. 5. The ceiling of the nave of the Cappella Palatina, Palermo: an eight-pointed star and the Kufic inscription that frames it. (Photo: Maria Antonietta Badalamenti and Domenico Carbone)

Fig. 6. The Palazzo Steri in Palermo: the ceiling of the Sala Magna and the wooden consoles. (Photos and 3D model: Fabrizio Agnello)

the Cappella and its decorations, and the origin of the craftsmen who built it. While most of the bibliography relevant to my analysis has already been cited, I will here focus briefly on the studies conducted by Monneret de Villard; Amari, Cavallari, Boglino, and Carini; and, most recently, Grube and Johns. 

Le pitture musulmane al soffitto della Cappella Palatina in Palermo, published in 1950 by Ugo Monneret de Villard, is a detailed analysis of both the history of the ceiling and the artistic and cultural influences that affected its design. Predicating his conclusions on a precise examination of the paintings themselves, as well
as on his expansive knowledge of the Islamic world and its art, the author proposes some hypotheses on the origins of the craftsmen who built and painted the ceiling. Monneret de Villard’s study is based on detailed photographic documentation that was financed by several universities and scientific organizations in the U.S.A. The photos themselves were taken by the Gabinetto Fotografico Nazionale della Direzione Generale delle Belle Arti.

The nineteenth-century work La Cappella di San Pietro nella Reggia di Palermo is divided into chapters written by Michele Amari (d. 1889), Luigi Boglino (d. 1917), Saverio Cavallari (d. 1896), and Isidoro Carini (d. 1895), the most prominent scholars of their time working on the humanist and historic culture of Sicily. The book is enriched by the valuable and detailed drawings made by Andrea Terzi (fig. 7). Michele Amari was a leading connoisseur of Islamic art and culture whose books are to this day a reference for those who study Islamic culture in Sicily. In this work, he proposes an interpretation of the inscriptions around the eight-pointed stars in the central longitudinal area of the ceiling. In the foreword, the priest and librarian Luigi Boglino lists priests and other renowned men who had a role in the running of the Cappella. Saverio Cavallari, the author of surveys and drawings published in books on Sicilian archaeology and medieval architecture by the Duke of Serradifalco, examined Byzantine, Islamic, and Norman influences on the architecture of the Cappella. Isidoro Carini, a historian and archivist, compiled...
a bibliography on the Cappella and outlined the history of the Royal Palace. The colored drawings by Andrea Terzi depict details from the ceiling covering the nave, the sloping ceilings on the aisles, and the mosaics and marble decorations. Terzi’s black and white drawings of the plan and of the vertical sections of the Cappella are highly accurate and clearly the result of a good survey. They have been corroborated by metric data collected by means of modern technology. Obviously, these drawings do not take into account deformations that have occurred over the centuries (caused, for example, by construction materials that have fallen on the extrados of the ceiling), but the elements are correctly sized and proportioned.

The recent work by Ernst Grube and Jeremy Johns, The Painted Ceilings of the Cappella Palatina, published in 2005, is an important contribution to the study of the historical and artistic features of the ceiling. The book opens with an essay by Johns on the date of the ceiling. This is followed by the first complete translation of the ekphrasis by Philagatos Kerameos and then Grube’s analysis of the paintings.

Johns makes some interesting observations on the respective dating of the mosaics and the ceiling, predicated mainly on a new interpretation of the ekphrasis of Philagatos Kerameos and on the contributions of several scholars, including Ernst Kitzinger, Vladimir Zorić, Otto Demus, and Bruno Lavagnini. Particularly interesting is the analysis of the relation between the ceiling and the mosaics below it, based on a close observation of the molding placed between them. The essay by Grube aims to “impose some order on the considerable literature on the history, and the art and culture, of 12th-century Norman Sicily, and its relation to the eastern and western Muslim traditions to which it is so intensely linked.”

The ceiling is set upon a horizontal wooden cavetto molding whose lower end crosses the upper part of the windows that allow light into the nave (fig. 8; figs. 8–61 are grouped together at the end of the article). Upon first inspection of the entire ceiling, we detect a longitudinal and transverse symmetry; an axis of symmetry oriented at a 45° angle, which is repeated in each of the corners, appears as well. The ceiling is composed of a central horizontal field with a star-and-crosses pattern and hanging bosses; a muqarnas frame made of small vaulted niches arranged in five horizontal tiers makes the transition between the central field and the walls of the nave (figs. 9–11). Our geometric analysis is supported by a study of the extrados of the ceiling, which reveals, at least for the higher tiers of the muqarnas frame (i.e., the third, fourth, and fifth tiers), the position and form of the wooden elements of which the ceiling is made.

The main features of the field of the ceiling are twenty eight-pointed stars, here named “St,” arranged in two longitudinal lines (fig. 12). These stars are the result of overlaying two squares rotated at 45° angles to each other, a familiar scheme in Islamic art and architecture. The eight-pointed stars are inscribed in octagons, and rhomboidal bosses allow for the transition between them. Smaller, octagonal eight-pointed stars (“Oc”) are

**GEOMETRIC ANALYSIS**

The present analysis, based on data gathered by 3D laser-scanning and restricted to the eastern area of the ceiling, investigates the geometry of the orthogonal projection of the ceiling, as well as, through hypothesis, the geometric relationships between the horizontal projection and the spatial arrangement of the muqarnas frame.

The ceiling is set upon a horizontal wooden cavetto molding whose lower end crosses the upper part of the windows that allow light into the nave (fig. 8; figs. 8–61 are grouped together at the end of the article). Upon first inspection of the entire ceiling, we detect a longitudinal and transverse symmetry; an axis of symmetry oriented at a 45° angle, which is repeated in each of the corners, appears as well. The ceiling is composed of a central horizontal field with a star-and-crosses pattern and hanging bosses; a muqarnas frame made of small vaulted niches arranged in five horizontal tiers makes the transition between the central field and the walls of the nave (figs. 9–11). Our geometric analysis is supported by a study of the extrados of the ceiling, which reveals, at least for the higher tiers of the muqarnas frame (i.e., the third, fourth, and fifth tiers), the position and form of the wooden elements of which the ceiling is made.

The main features of the field of the ceiling are twenty eight-pointed stars, here named “St,” arranged in two longitudinal lines (fig. 12). These stars are the result of overlaying two squares rotated at 45° angles to each other, a familiar scheme in Islamic art and architecture. The eight-pointed stars are inscribed in octagons, and rhomboidal bosses allow for the transition between them. Smaller, octagonal eight-pointed stars (“Oc”) are
placed between the stars and the muqarnas frame; the longitudinal strip between the “St” stars is covered by squares here referred to as “Sq” (fig. 13).

The geometrical analysis was conducted with reference to a regular rectangle—the “reference rectangle”—corresponding to the horizontal section of the ceiling just above the cavetto molding. I am well aware that the horizontal section of the ceiling is not a regular rectangle, but I assume all elements considered in the geometrical analysis to be pure forms, thus ignoring the imperfections caused by the deformations that the structure has suffered in the last nine hundred years. The same method of simplification has been adopted in the analysis of the basic elements of the ceiling, almost all of which are deformed or have slightly shifted from their original position. The reference rectangle was divided in two by a longitudinal medial axis and the central points of “St,” referred to as C-1, were thus detected. Through points C-1 transverse and longitudinal straight lines were drawn. The distance between the longitudinal axis and the longitudinal lines through C-1 is named d; d+d is the side of a square centered on C-1. The distance between the square and the sides of the reference rectangle is d; that is to say, the transverse width of the ceiling is divided into six d-length units (fig. 14).

Assuming d to be the basic module of the grid and considering the ceiling as a whole, we discern a central grid and an external frame; the central grid consists of 10 pairs of d+d squares (with a 1:5 ratio); since each d+d square is made of four d-length squares, the central grid can also be regarded as consisting of 4 per 20 d-length squares (ratio 1:5); the external frame is d wide (fig. 15). The orthogonal projection of the 3D-surveyed data leads us to assume that the vertices of the d+d squares are the center points of both the twenty-four “Oc” small octagons bordering the central field and the nine “Sq” squares along the longitudinal axis of the ceiling. The center points of the “Oc”s are named C-2 and those of the “Sq”s are named C-3 (fig. 16).

Dividing each segment d into three parts, a secondary grid, made up of 36 cells per d+d square, is set up. We now draw circles circumscribing “St” and “Oc” (or “Sq”). These circles, respectively centered on C-1 and C-2 (or C-3), are tangent to each other. The tangency points are vertices of the secondary grid. The radius of the circle centered on C-2 is equal to the diagonal of the square unit in the secondary grid, while the radius of the circle centered on C-1 is equal to the length of the diagonals of two squares in the secondary grid (fig. 17).

Drawing two identical squares circumscribing the circle centered on C-2, rotated at 45° to each other, I direct the reader’s attention to the small right-angled isosceles triangles that result when the square whose sides are parallel to the reference rectangle is subtracted from the one that is oriented at 45°. Each triangle and its symmetrical counterpart play an important role in the following steps of my analysis. I next draw longitudinal and transverse straight lines connecting the hypotenuses of the symmetrical triangles. The area between such lines and the external edge of the reference rectangle is equal in length to the thickness of the panels in the first register (fig. 18).

The end points of the hypotenuses of the green triangles are the center points of concentric circles. The radius of the blue circle is half the length of the hypotenuse and the radius of the red circle is equal in length to the side of the triangle. The segment that is the difference between the radius of the red circle and that of the blue circle is named m (fig. 19).

The blue and red circles underlie the shape and size of a wooden vertical panel, here named EL-1. If we name the radius of the blue circle r, the width of the panel is r+m and the height is r+r+m. We may also say that the height of the EL-1 panel is equal to the diameter of the blue circle plus the segment m (fig. 20). The EL-1 panel is the basic element in the first, second, and third tiers: its width is kept unchanged, while its height is slightly resized (fig. 21).

A strict relation between the grid and the height of the muqarnas frame is thus supposed. This relation is probably due to a common feature of premodern architecture, namely, craftsmen’s use of the horizontal grid to draw the constructive vertical elements of the muqarnas frame. Other relations between elements of the tiers and the grid will be discussed below.

I will now point out the features of each tier in the muqarnas frame, including the geometry of the basic constructive elements and their relationship to the grid. The modular arrangement of the entire ceiling allows one to restrict analysis to a limited area. I will thus refer to the northeastern corner in the images that follow. The area under examination will be enlarged when describ-
ing the higher tiers (i.e., the fourth and fifth ones), in order to allow all the elements to be fully visible. Except for those related to the first tier, the images that follow show two tiers at a time, namely, the one under examination and the one below it. In each image, the grid is placed on a horizontal plan positioned at the baseline of the lower of the two tiers featured.

The first tier

EL-1 vertical panels are either parallel to the lines of the grid or oriented at 45° angles, sharing a common vertical edge placed on the point where the red circles intersect with the green longitudinal and transverse lines connecting the hypotenuses of the green triangles (fig. 22).

The secondary structural element in the first tier, here named EL-2, is drawn by simply rescaling the shape of EL-1; the width and length of the EL-2 panel are equal to the width and length of EL-1 minus \( m \) (fig. 23). The EL-2 panel is also the basic element in the fourth tier.

The EL-2 vertical panels in the first tier are oriented at 45° angles and arranged in right-angled pairs; their distance from the 45°-oriented EL-1 panels is equal to \( m \) (fig. 24). The EL-2 pairs are the sides of a right-angled isosceles triangle. On the hypotenuse of the triangle is set a panel pierced by an arch, whose radius also appears on the grid. A wider concentric circle defines the intersection line of the small vaults placed between that panel and the EL-2 panel. Concentric arches are quite common in the ceiling, probably as a result of the technique used to build it. Craftsmen would likely overlay two panels, respectively pierced with concentric curves, in order to have a support for the thin wooden elements that cover the empty spaces. The niche ends with a barrel vault that follows the profile of the smaller arch until it intersects with the vertical panels bordering the muqarnas frame (fig. 25).

At the corners of the ceiling, the axial symmetry is set upon the bisector of the right angle: the EL-1 and EL-2 panels are simply matched, thus forming two semicircular arches; the niches are placed in their usual positions (fig. 26).

I conclude my analysis of the first tier with a description of an element filling the empty right-angled corners between the EL-1 panels; it appears to be a simple barrel vault. The intersection between the vault and the 45°-oriented EL-1 panels should be an ellipse, but craftsmen were probably not concerned about that and simply attached to EL-1 panels further elements that were shaped with circular concentric arches and used as centerings to hold in place the thin, linear wooden elements that form the surface of the vault (figs. 27 and 28).

The second tier

The main constructive elements in the second tier are nothing but vertical EL-1 panels oriented according to the lines of the grid or rotated 45°; they are placed upon the upper corners of the EL-1 panels in the first tier. The orthogonal projection on the grid shows that the EL-1 panels are arranged to form, in combination with the vertical extension of some of the EL-1 panels in the first tier, right-angled isosceles triangles and rhombs (fig. 29). Pairs of EL-1 panels, rotated on the hypotenuse of the right-angled isosceles triangles, intersect each other to form pointed arches (fig. 30).

Triangular areas are covered by vaults that can be regarded as the quarter part of a cross vault whose ribs are circular; the arches of the vault are the result of the rotation of ribs around a vertical axis. Stone cross vaults built in Sicily and Spain up to the sixteenth century are based on the same geometrical layout. An arch in the back panel of the cross vault opens to a pointed niche covered by a barrel vault; the spatial sequence closely resembles the double niches in the first register (see fig. 25).

Rhombs are assumed to be the union of two isosceles triangles. The angle opposite the base of each of these triangles is 45°. The equal angles are therefore 67.5°; they are covered by two barrel vaults whose generative line is parallel to the base of the isosceles triangles. An element in the second tier has not yet been described—a pendentive placed at the right-angled corner and made up of EL-1 panels parallel to the lines of the grid, whose form can be assumed to be a part of a cross vault (fig. 31). The sequence of rhombs and right-angled isosceles triangles is interrupted by a flat rectangular panel placed above the pendentive in the first register (fig. 32).

The third tier

In the third tier, the EL-1 panels of the second register are vertically extended to create rectangular filled areas. Only the rectangles upon the 45°-oriented EL-1
panels, arranged in right-angled pairs, are visible from the intrados; the others are hidden by vaults (fig. 33).

In the orthogonal projection, visible rectangular panels form the equal sides of an isosceles “right-angled” triangle, on the hypotenuse base side of which we find the projection of a vertical panel pierced by a circular arch. The radius of the arch is drawn on the horizontal grid.

The triangular area is covered by half of a cross vault (fig. 34). We could also describe this triangle as the union of two right-angled triangles, each filled with a vault orthogonal to the hypotenuse (fig. 35). From a constructive point of view, this is the correct way, since in the extrados we can observe a panel dividing the big right-angled triangle in two halves.

In the orthogonal projection, the big right-angled triangle is mirrored on the hypotenuse. The sides of the new triangle are once again EL-1 panels oriented at 45°. The triangle is covered by the quarter part of a cross vault, similar to the one described when discussing the second tier (figs. 36 and 37). These mirrored right-angled isosceles triangles are arranged in pairs to form a square.

The rectangular area sharing one side with the square is filled with barrel vaults placed above the pendentives in the second tier; the directrix lines of such surfaces are simply an offset of the shape of the EL-1 panels that enclose the vault (fig. 38). The photo of the extrados well shows that the EL-1 panels are doubled by adding further panels, which act as centerings for the placement of the small wooden elements that make up the surface.

Other EL-1 panels are oriented 45° and arranged in pairs, with one of the panels framing the barrel vault mentioned just above. The last element to be described in the third tier is a barrel vault having a directrix line made of arcs of circles tangent to each other, and generatrices that are straight lines orthogonal to the plane of the directrix. The back of the barrel vault is the vertical extension of the flat, filled panel in the second tier; it is shaped to form the centering of the vault, a polygonal base line whose shape resembles a bonnet (figs. 39 and 40). The distance between the panels that frame the vault is fixed on the horizontal grid (fig. 41). Another craftsman’s trick underlies this element: the element cut from the front panel matches exactly the shape of the back panel. We see this hypothesis illustrated in figure 40, where the figure is drawn on only one panel, which is cut along the line. The back and front panels of the vault are therefore pieces of the same wooden board.

The fourth tier

Two attached rectangular panels are placed above the barrel vaults in the third register; the front panel is pierced by an arch whose circle is drawn on the grid, while the back panel is solid. The flat arches are connected to each other by additional vertical panels that are parallel to the side of the reference rectangle and pierced by an identical arch. These panels are intersected along the vertical axis of symmetry by other hidden panels, whose shape is half the arch. A niche is generated connecting the straight edges of the three panels with a cylindrical surface, and the circular edges with a quarter of a sphere. It is to be noted that half-panels, covered by the surface of the niche, clearly appear in the extrados.

Panels with flat arches share a vertical edge with a pair of EL-1 panels oriented orthogonally to the sides of the reference rectangle (fig. 42). The pairs of EL-1 elements frame a conical vault whose directrix, made of arcs of circles tangent to each other, is similar to the one in the “bonnet” vault mentioned above (fig. 43).

The shape of this polycentric arch recalls a particular geometric figure known in mathematics as “Archimedes’s saltcellar.” The area of this shape equals the area of the circle whose diameter is the axis of symmetry of the saltcellar (figs. 44–47).

The fifth tier

The panels with flat arches in the fourth tier are vertically extended to form the back panel of a conical vault identical in shape to the one mentioned above (fig. 48).

The conical vaults of the fifth tier form in orthogonal projection two sides of a square (three at the corners of the ceiling). At the corners of the square, small pendentives are inserted to make the transition to the octagon named “Oc” (figs. 49 and 50).

The front panels of the conical vaults in the fourth tier are vertically extended to the fifth; parallel panels are placed in the front and pierced with a polygonal arch. I refer to the shape of this arch in order to demonstrate once again that craftsmen did draw all types of shapes on the horizontal grid. The geometrical analysis of this
arch reveals that its shape is based on the main leitmotif of the horizontal grid, that is, a pair of squares rotated 45° to one another (fig. 51). Observing the extrados of the ceiling, we see that the front and back faces of the arch are parts of the same panel cut along the polygonal line, just as was seen in the surface of figure 40 (fig. 52).

The gap between the front and back panels of the polygonal arch is covered by a surface made of thin wooden elements (fig. 53). Other similar panels are arranged in pairs and oriented at 45° angles.

All the polygonal arches are joined to form an octagonal area covered by the eight-pointed stars referred to as “St” at the beginning of my analysis. The transition from the regular octagon to the star-shaped figure occurs through the bosses clearly visible from the nave (see fig. 13). The shape of the bosses is simply a copy of the polygonal arch mentioned above. The surface is made of planar rectangular elements set at 45° angles with respect to the panels bordering the octagon and intersecting each other on the diagonals of the octagon (fig. 54). The octagon is then covered by the eight-pointed star. The octagons and eight-pointed stars are, in the constructive point of view, autonomous elements acting just like caps (fig. 55).

In the orthogonal projection, the pairs of panels oriented at 45° play different roles, depending on their position inside the ceiling. The ones placed at the edge of the muqarnas frame border the square covered by the octagons referred to as “Oc.” Those placed in the inner area form all the sides of the squares referred to as “Sq,” which are aligned along the longitudinal axis of the ceiling (figs. 56 and 57).

CLOSING REMARKS

This study of the ceiling covering the nave in the Cappella Palatina of Palermo (fig. 58) was based on an analysis of geometrical forms in three dimensions utilizing 3D laser-scanning data and on my observations of the constructive elements of the extrados (fig. 59). My intention was to prove that a horizontal geometric grid not only served to regulate the proportion and extension of the elements but also acted as a guide for their size and spatial layout in three dimensions. The geometric analysis revealed that the profile of the vertical elements was drawn on the grid and that the drawing was executed in the areas of the grid corresponding to the orthogonal projection of the elements (fig. 60). Some elements are repeated, keeping their form with variable size, e.g., the conical vaults in the fourth and fifth tiers. Other elements are the result of different ways of covering the same figures, e.g., the mirrored triangles in the third level. The main geometric technique seems to have involved matching triangular forms in a variety of ways: squares are divided into two right-angled isosceles triangles, which are themselves divided into two further right-angled isosceles triangles; rhombs are created from the union of two non-right-angled isosceles triangles; and so on.

The main constructive elements seem to be two arch-shaped panels, El-1 appearing in the first, second, and third tiers and El-2 appearing in the first and fourth tiers. The shapes of the panels are intimately connected to one another (see figs. 20 and 23).

I have taken the method of construction into account only in particular areas, in order to specify the link between geometry and the constructive process. The bibliography provided in note 2 includes more detailed analyses, which point out the techniques used to connect wooden elements and the relation between the ceiling and the upper covering structures.

This analysis of the ceiling in the Cappella Palatina was based only on the geometric relations between the grid and the elevation. At the end of the analysis, the horizontal projection of the drawing of the ceiling was scaled with reference to the similar projection attained through 3D laser-scanning data (fig. 61). The strict correspondence between these two horizontal projections corroborates my hypothesis regarding the layout of the grid and demonstrates that the construction of the nave of the Cappella Palatina was closely connected with the construction of the ceiling. Roger II may be regarded as not only the commissioner but also the director of this enterprise, in which architecture and art are intimately related. We do not know much about the craftsmen involved in this endeavor but it must be assumed that they had to have been familiar with the Islamic method of building muqarnas vaults.

Faculty of Architecture, University of Palermo
Palermo, Italy
Fig. 8. The molding (in color) at the base of the ceiling. Over the molding is the first tier of the muqarnas frame. The lower edge of the molding fixes the higher end of the mosaic decorations on the walls of the nave; the windows that let light into the nave intersect with the molding. (Photo: Maria Antonietta Badalamenti and Domenico Carbone)

Fig. 9. The ceiling of the nave of the Cappella Palatina, Palermo. (Photo: Fabrizio Agnello)

Fig. 10. The ceiling of the nave of the Cappella Palatina, Palermo: northeastern end, detail of 3D laser-scanning data (above) and photo of the muqarnas frame (below). (Photo and 3D laser scan: Fabrizio Agnello, Maria Antonietta Badalamenti, and Domenico Carbone)
Fig. 11. The ceiling of the nave of the Cappella Palatina, Palermo: the muqarnas frame arranged in five horizontal tiers. (Photo: Maria Antonietta Badalamenti and Domenico Carbone)

Fig. 12. The ceiling of the nave of the Cappella Palatina, Palermo. Left) An image of the ceiling attained through laser-scanning data superimposed on the plan of the Cappella Palatina by Andrea Terzi. (After Amari et al., *La Cappella di San Pietro nella Reggia di Palermo*, pl. II.) Right) Magnification of the image of the ceiling.
Fig. 13. The ceiling of the nave of the Cappella Palatina, Palermo. Above) Perspectival view of laser-scanning data with the elements of the central field highlighted: eight-pointed stars (“St”) (yellow); octagons (“Oc”) (red); bosses (green); square (“Sq”) (blue). Below) Clockwise sequence: planimetric view of laser-scanning data, with elements highlighted and the red line marking the longitudinal axis of symmetry; an octagon; a square forming a cross with the bosses that surround it; and an eight-pointed star framed by bosses. (3D laser scans: Fabrizio Agnello; photos: Maria Antonietta Badalamenti and Domenico Carbone)

Fig. 14. The eastern end of the ceiling of the nave of the Cappella Palatina, Palermo. Above) Planimetric view of laser-scanning data with elements highlighted. Below) Geometrical scheme. Red line: longitudinal axis of symmetry; blue dots: centers of eight-pointed stars (C-1); blue lines: transverse and longitudinal straight lines through points C-1; black line: $d+d$ square centered on C-1. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 15. Planimetric view of the entire ceiling as derived from laser-scanning data, with geometric grid superimposed. Black lines: $d+d$ squares centered on C-1 points (blue dots); blue lines: grid divided into $d$-length squares. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 16. The eastern end of the ceiling: planimetric view derived from laser-scanning data and geometric scheme. Blue dots: C-1 points (not identified); red dots (C-2): center points of octagons; green dot (C-3): center point of squares (“Sq”). (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 17. Detail of the northeastern corner of the ceiling: planimetric view derived from laser-scanning data and geometric scheme. Blue lines: $d$-spaced grid; white lines: secondary grid; black lines: $d+d$ square. The red circle is centered on C-2 and the green circle is centered on C-1; the tangency point is the vertex of a square unit in the secondary grid. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 18. Detail of the northeastern corner of the ceiling; squares rotated at 45° circumscribing the red circle centered on C-2; gray areas: right-angled isosceles triangles between squares; green areas: specular copy of gray triangles; purple area: frame between the hypotenuse of the green triangles and the external edge of the grid. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 19. The northeastern corner of the ceiling: drawing of circles centered on the end points of the hypotenuses of the green triangles. Segment $m$ is the difference between the radius of the blue circle (equal in length to half the hypotenuse) and the radius of the red circle (equal in length to the two equal sides of the green triangle). (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 20. Geometric drawing of an EL-1 panel, based on blue and red circles drawn on the grid. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 21. Profile of the EL-1 panel and variations in the first, second, and third tiers (dimensions are measured in centimeters). (Image: Fabrizio Agnello)
Fig. 22. First tier: arrangement of the EL-1 panels (above) with photo (below). The grid is drawn on the horizontal plan below the first tier, whose elevation is approximately eleven meters above the floor of the nave. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photo: Maria Antonietta Badalamenti and Domenico Carbone)

Fig. 23. First tier: geometric scheme of the EL-2 panel (light red), which is drawn by rescaling the EL-1 panel (gray) so that the height and width are equal to EL-1 minus $m$. In the image on the right, EL-2 is superimposed on EL-1. (Images: Fabrizio Agnello and Maria Antonietta Badalamenti).

Fig. 24. First tier: the placement of the EL-2 panels. The radius of the green circles is equal to $m$. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 25. First tier: niche. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photo: Maria Antonietta Badalamenti and Domenico Carbone)
Fig. 26. First tier: corner niche. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photo: Maria Antonietta Badalamenti and Domenico Carbone)

Fig. 27. First tier: the pendentive. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photo: Maria Antonietta Badalamenti and Domenico Carbone)
Fig. 28. First tier: axonometric and planimetric view of the 3D model. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 29. Second tier: EL-1 panels. The orthogonal projection of the second tier on the grid is highlighted in purple. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 30. Second tier: cross vault and niche. Left, above) The intrados. Left, below) The extrados. Right) 3D model with lines showing that the pointed arch is built using the same arch shapes oriented at 45°. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photos of the intrados: Maria Antonietta Badalamenti and Domenico Carbone; photo of the extrados: courtesy of Mario Li Castri)
Fig. 31. Second tier. Left-hand images) Barrel vaults on rhombs. Middle images) Pendentive. Right) Photo with these elements highlighted. (Images: Fabrizio Agnello and Maria Antonietta Badalamenti; photo: Maria Antonietta Badalamenti and Domenico Carbone)

Fig. 32. Second tier: axonometric view. Cross vaults and niches (red); barrel vaults on rhombs (bright green); pendentives (blue); flat panel (yellow). The first tier is light green. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 33. Third tier: triangle-based niche. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 34. Third tier: geometrical layout of the niche on a right-angled isosceles triangle covered by half of a cross vault. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 35. Third tier: geometrical interpretation of the niche as the combination of two triangular niches sharing one side. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 36. Third tier: axonometric and planimetric view of the 3D model, vaults on right-angled isosceles triangles. In the orthogonal projection, triangles are joined along the hypotenuse, thus forming a square. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 37. Third tier: constructive elements of the vaults covering the two right-angled isosceles triangles. The shared hypotenuse is highlighted in yellow. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photo of the intrados: Maria Antonietta Badalamenti and Domenico Carbone; photo of the extrados: courtesy of Mario Li Castri)
Fig. 38. Third tier: barrel vault. Above, left) Layout of the constructive elements. Above, right) The intrados. Below) The extrados. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photo of the intrados: Maria Antonietta Badalamenti and Domenico Carbone; photo of the extrados: courtesy of Mario Li Castri)
Fig. 39. Third tier: axonometric view, with barrel vaults on rectangular areas highlighted in red and "bonnet" vaults highlighted in bright green. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 40. Third tier: demonstration of hypothesis concerning the construction of the back and front panels in the "bonnet" vault. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photo of the intrados: Maria Antonietta Badalamenti and Domenico Carbone; photo of the extrados: courtesy of Mario Li Castri)
Fig. 41. Third tier: axonometric and planimetric view of the 3D model. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 42. Fourth tier. Above) Flat arches (highlighted in bright green) and panels acting as centerings for the niches (highlighted in yellow). Below) Niches (highlighted in yellow) and pairs of EL-1 panels (highlighted in red). (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 43. Fourth tier. Above) Drawing of the directrix on the back panel of the conical vault (between the two pairs of EL-2 panels highlighted in red). Below) The conical vault. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 44. Fourth tier: geometric properties of Archimedes’s saltcellar. Left) Two concentric circles and two smaller circles tangent to both of them. Middle) Area delimited by halves of the circles. Right) Area of the circle whose diameter is equal to the sum of the radii of the concentric circles. The areas highlighted in dark red are equal.

Fig. 45. Fourth tier: constructive elements of the conical vault. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photo of the intrados: Maria Antonietta Badalamenti and Domenico Carbone; photo of the extrados: courtesy of Mario Li Castri)

Fig. 46. Fourth tier. Left, above) Flat and cylindrical niches. Left, below) The extrados of the cylindrical niche is highlighted in yellow. Right) Constructive layout of the cylindrical niche. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti; photo of the intrados: Maria Antonietta Badalamenti and Domenico Carbone; photo of the extrados: courtesy of Mario Li Castri)
Fig. 47. Fourth tier: axonometric and planimetric view of the 3D model. Conical vaults (highlighted in blue); cylindrical niches (highlighted in yellow); flat niches (highlighted in bright green); pairs of El-1 panels (highlighted in red). (Images: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 48. Fifth tier: conical vaults. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 49. Fifth tier: the pendentives (highlighted in yellow) that make the transition between the squares and the octagons (“Oc”) (highlighted in dark red). (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 50. Fifth tier: the conical vaults, pendentives, and covering of the octagon (“Oc”) are highlighted. (Photo: Maria Antonietta Badalamenti and Domenico Carbone)

Fig. 51. Fifth tier. Left) Geometric drawing of polygonal arches superimposed on laser-scanning data. Right) The arch is highlighted in green in the axonometric view of the 3D model. (Images: Fabrizio Agnello and Maria Antonietta Badalamenti)
Fig. 52. Fifth tier: constructive layout of polygonal arches (left) and “bonnet” vaults (right). (Images: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 53. Fifth tier: the intrados (above) and extrados (below) of the polygonal arch. In the image of the intrados, the bosses are clearly visible. (Photo of the intrados: Maria Antonietta Badalamenti and Domenico Carbone; photo of the extrados: courtesy of Mario Li Castri)
Fig. 54. Fifth tier: placement of the polygonal arches (highlighted in bright green) and bosses (highlighted in blue). (Images: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 55. Fifth tier: extrados of the caps of the eight-pointed stars (left) and of the octagons (right). (Photo: courtesy of Mario Li Castri)
Fig. 56. Fifth tier: axonometric and planimetric view of the 3D model. The octagons ("Oc") and a quarter of a square ("Sq") are highlighted in red. (Images: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 57. Axonometric view of the 3D model of the eastern end of the ceiling. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
The painted ceiling of the nave of the Cappella Palatina in Palermo

[Closing remarks: figures 58–61]

Fig. 58. The northeastern corner of the ceiling. (Photo: Maria Antonietta Badalamenti and Domenico Carbone)

Fig. 59. The extrados of the ceiling. (Photo: courtesy of Mario Li Castri)
Fig. 60. Axonometric view of the 3D model and the grid. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)

Fig. 61. Planimetric view of the northeastern corner of the ceiling: comparison of drawing and laser-scanning data. (Image: Fabrizio Agnello and Maria Antonietta Badalamenti)
The first essay dedicated to the paintings of the ceiling was Alexis Pavlovskij, “Décoration des plafonds de la Chapelle Palatine,” Byzantinische Zeitschrift, 2, 3 (Munich, 1893): 361–412. Ugo Monneret de Villard, Le pitture musulmane al soffitto della Cappella Palatina in Palermo (Rome, 1950), is the first comprehensive investigation of the paintings of the wooden ceilings covering the nave and the aisles. His work was continued by Ernst Grube, whose detailed analysis of the paintings was initially published in Ernst J. Grube, “La pittura in Italia: L’altomedioevo,” ed. Xavier Barral i Altet and Carlo Bertelli (Milan, 1994), 416–31.


The author wishes to thank all the individuals and institutions that have contributed to this work: architect Mario Li Castri, for having encouraged and supported this inquiry; the restoration company Martino Solito Restauratore and the Soprintendenza ai BB.CC.AA. of Palermo, for granting me access to the provisional structures of the restoration yard; the Dipartimento di Rappresentazione of the University of Palermo; and architect Paolo Mori and engineer Gianni Giordano, for their kind and patient support of the surveying operations.

NOTES

1. This study of the ceiling of the Cappella Palatina started as a thesis project titled “Laser Scanning Survey in Cultural Heritage Documentation,” defended by the author at the Faculty of Architecture in the University of Palermo in March 2008. I would also like to thank two of my students, Domenico Carbone and Maria Antonietta Badalamenti, for their assistance.

2. Much work has been done on the Cappella Palatina and a complete and detailed bibliography can be found in Ernst Grube and Jeremy Johns, The Painted Ceilings of the Cappella Palatina (London, 2005), an up-to-date study on historical and artistic issues concerning the Cappella Palatina and the paintings of the ceiling. I will mention here only those works most relevant to our analysis. La Cappella di San Pietro nella Reggia di Palermo, dipinta e cromolitografata da Andrea Terzi (Palermo, 1889: repr. Palermo, 1987) consists of essays by Michele Amari, Saverio Cavallari, Luigi Boglino, and Isidoro Carini, the most prominent scholars of their time of the humanistic and historic culture of Sicily; Andrea Terzi surveyed the Cappella and drew the plates that illustrate the book. A more recent work is William Tronzo, The Cultures of His Kingdom: Roger II and the Cappella Palatina in Palermo (Princeton, N.J., 1997).

3. The author wishes to thank all the individuals and institutions that have contributed to this work: architect Mario Li Castri, for having encouraged and supported this inquiry; the restoration company Martino Solito Restauratore and the Soprintendenza ai BB.CC.AA. of Palermo, for granting me access to the provisional structures of the restoration yard; the Dipartimento di Rappresentazione of the University of Palermo; and architect Paolo Mori and engineer Gianni Giordano, for their kind and patient support of the surveying operations.


5. The laser scanner, a Minolta Vivid 9i, was kindly supplied by the laboratory Conoscenza, Gestione e Fruizione di Beni Culturali con Tecnologie Informatiche Avanzate of the University of Palermo. The laboratory is under the direction of Prof. Benedetto Villa.


7. Robert Guiscard and his brother, Count Roger, came to Italy in 1047. They fought against the Byzantines in southern Italy and the Muslims in Sicily. By 1072, they had conquered only Palermo and a few other towns. That same year Robert left Sicily, keeping for himself the town of Palermo and leaving his brother the task of completing the conquest of Sicily. In 1085, Robert Guiscard died in Cefalonia and Roger helped his nephew, Ruggero Borsa, to keep Puglia under his control; as a reward, Ruggero Borsa granted Roger half of the town of Palermo. By 1091, Roger had full control of Sicily: he conquered Siracusa and, after supporting Ruggero Borsa in his quest to reconquer the town of Cosenza (Calabria), was awarded the other half of Palermo. When Roger died in Calabria in 1101, his son, Roger II (d. 1154), was six years old. Roger II’s mother ruled as regent until he came of age in 1112. Upon the death of Pope Honorius II in 1130, a dispute broke out when Anacletus II (d. 1138) contested the election of Innocent II. Roger II sided with Anacletus II, who crowned him king of Sicily in December 1130. He had to fight for many years against the supporters of Innocent II, who became pope in 1138, though the latter ultimately named him “king of Sicily, Puglia, and Capua” on July 22, 1139. Roger II was the first Norman king who lived in Sicily; he took a serious interest in the government of the island.

8. Tronzo, Cultures of His Kingdom, 54–56, cites the investigations of Kitzinger, I mosaici del periodo normanno in Sicilia, according to which the standard layout of the Byzantine mosaics was altered to offer the king a view of those he liked most.

9. Vladimir Zorić has argued that in 1132 the parochial status was granted to an earlier chapel located in the present crypt under the Cappella Palatina. See Vladimir Zorić, “Arx praeclara quam Palatium Regale appellant: Le sue origini e la prima Cappella della corte normanna,” in La città di Palermo nel Medioevo, ed. Franco D’Angelo and Vladimir Zorić (Palermo, 2002).


15. What follows is the full description of the Cappella Palatina by Philagatos Kerameos, as cited in Grube and Johns, _Painted Ceilings of the Cappella Palatina_, 13: “O city, I rejoice with you, and with you, sacred Church of the palaces, that all ages have flocked to you today; that all who are respected for their rank, and so many priests, have honored this festival with their presence. The first cause of all these events is God, from whom arise and originate all the blessings of mankind, but the second is a pious ruler; a benevolent guardian when he regards his subjects, who reserves his anger for his enemies. Now, he, having provided us with many, great benefits, and having surpassed all his contemporaries and predecessors in piety and magnanimity, just as the blazing sun outshines the splendor of the stars, has given another proof of that truly great and kingly spirit, in this delightful church of the Apostles, which he has built as if a foundation and a protection for his palaces; large, most lovely, and distinguished by a fresh beauty; brilliant with lights, shining with gold, glittering with mosaics, and bright with paintings. He who has seen it many times, marvels when he sees it again, and is as astonished as if he were seeing it for the first time, his gaze wandering everywhere.

2. As to the ceiling, one can never see enough of it; it is wonderful to look at and to hear about. It is decorated with delicate carvings, variously formed like little coffers; all flashing with gold, it imitates the heavens when, through the clear air, the host of stars shines everywhere. Most beautiful columns support the arches, raising the ceiling to an extraordinary height. The most holy floor of the church actually resembles a spring meadow because of the many-coloured marbles of mosaics, as if it were adorned with flowers; except that flowers wither and change, while this meadow is never-fading and ever-lasting, and within itself maintains eternal spring. Every wall is entirely covered with many-coloured marbles; the upper parts are occupied with gold mosaics, wherever they are not crowded with the host of holy images. As to the place of the inexpressible holy mysteries, a screen of marbles surrounds the presbytery on all sides. Within this, one can linger and stay with safety, gladdening the eye with the spectacle. This is also a barrier, lest anyone rash and unconsecrated should attempt to cross into the innermost sanctuaries.

3. The sacred altar, which flashes with the sparkling of silver and gold, amazes the beholder; but whatever else is there shall be honoured by our silence. The whole church, just like a cave, softly joins in the singing of the sacred hymns with its own voice, because the echo causes the sound to return upon itself. A great many curtains are hung, the fabric of which is threads of silk, woven with gold and various dyes, that the Phoenicians have embroidered with wonderful skill and elaborate artistry. A mass of lamps vie with each other, so to speak, to illuminate the church with their never-sleeping flames, making the night as bright as the day. Who has words for the number and the beauty of the gold and silver vessels destined for the holy rite? But time presses me to direct my discourse to the explanation of the Divine Gospels. Since we have dealt with the particulars on the encenia, let us listen to the holy sayings.”

16. For some insightful observations on the date of the sermon by Philagatos Kerameos, see Johns, “Date of the Ceiling,” 1–9, and Andaloro, “La Cappella Palatina di Palermo e l’orizzonte mediterraneo,” 244.

17. The matter of the absence of a coherent iconographical project was first proposed by Monneret de Villard, _Le pitture musulmane al soffitto della Cappella Palatina in Palermo_, 40: “Paintings in the [ceiling of the] Cappella Palatina show no organic iconographic project.” Grube, after describing the subjects of the paintings, asserts that “while this particular way of looking at the Cappella Palatina paintings does not seem to yield the impression of a systematic sequence, or a ‘program’, there are, of course, other ways to look at these images, namely, as individual units or groups of units.” He then reports an assertion made by Umberto Scerrato that “according to the anti-naturalistic Muslim trend the cycle of paintings is not structured by a narrative program, but is divided and disconnected in many single figures related only by an abstract symbolic reference.” Ernst Grube, “The Painted Ceilings of the Cappella Palatina in Palermo and Their Relation to the Artistic Traditions of the Muslim World and the Middle Ages,” in Grube and Johns, _Painted Ceilings of the Cappella Palatina_, 22–23.


19. See n. 15 above.


21. “Must the ceiling necessarily be seen as an ‘import’ from Fātimid Egypt? Or might there not be indications that other, perhaps indigenous, traditions provided both inspiration
and artists who could have created it? And lastly, are the paintings arranged in a manner that would indicate a ‘program’? And can such a program be understood only in terms of ‘Islamic’ art, or did the general medieval, Romanesque tradition of the contemporary West have an equal part in its creation?” Grube, “The Painted Ceilings of the Cappella Palatina in Palermo and Their Relation to the Artistic Traditions of the Muslim World and the Middle Ages,” 16.

22. See n. 2 above.
24. Ibid.
25. Ibid., 20.
26. The alphanumeric code and the schematic drawings of the ceiling first appeared in Grube, “La pittura islamica nella Sicilia normanna del XII secolo.”

29. The term “right-angled isosceles triangle” indicates right-angled triangles whose sides have the same length.
30. The term “polygonal” is used here to indicate a line made of arcs of circles and segments of straight lines.