THE QUBBAT AL-KHADRĀ' AND THE ICONOGRAPHY OF HEIGHT IN EARLY ISLAMIC ARCHITECTURE

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It has long been known that several important palaces constructed by Muslim rulers in the seventh and eighth centuries had a feature medieval sources refer to as a *qubbat al-khadrā*, which is usually understood in the secondary literature to mean "a green dome." Although K. A. C. Creswell briefly discussed this feature in his magisterial works on early Islamic architecture, its importance was first noted, although not pursued, by Oleg Grabar over thirty years ago. 1 A reexamination of the early Islamic *qubbat al-khadrā* shows that it was a critical link between the palace traditions of the pre-Islamic Mediterranean lands and those of later Islamic times.

The earliest example of the qubbat al-khadra was built in Damascus during the caliphate of 'Uthman (644-56) by Mu'awiya, later the first Umayyad caliph. Adjacent to the first congregational mosque in the city, Mucawiya erected a residence which was referred to as the qubbat alkhadra. It was built of baked brick and had a door which led into the magsūra of the mosque. It was still standing at the end of the ninth century when the geographer and historian Ya^cqubi saw it. According to Ilmawi, a sixteenth-century source quoted by Creswell, a Greek ambassador to Mu'awiya had said upon seeing it, "The upper part would do for birds and the lower for rats." Although Creswell followed 'Ilmawi's late and probably unreliable account in his assessment of the building, Herzfeld correctly interpreted Ya^cqubi's account to mean that it must have been substantial, a "famous and splendid building."²

Ya^cqubi is also the source for another example, for he noted that the Umayyad governor of Iraq, al-Hajjaj, built a palace in the western city of Wasit, the Umayyad capital of Iraq. The palace was crowned by a qubbat al-khaḍrā^a, known synech-dochically as the khaḍrā^a of Wasit. According to Ibn Rusta, an early-tenth-century source, this structure was so high that it was visible from thirty miles away. A third qubbat al-khaḍrā^a was built over the audience hall at Rusafa, al-Walid's capital in northern Syria and the royal city of the Umayyads during the long reign of Hisham (724-43). Grabar toyed with the idea that these domed

structures at Damascus, Wasit, and Rusafa belonged to an Umayyad tradition of building royal symbols, but dismissed it because the impact of Mu^cawiya's palace could have been little more than symbolic.⁴

That this architectural form was not exclusively an Umayyad type is shown by the example at Hashimiyya, one of the early Abbasid administrative capitals in the region of Kufa, which probably had one as well. According to the ninth-century historian al-Tabari, the caliph al-Mansur (r. 754-75) had been in his khadra when the Rawandiyya rebels approached him and attempted to fly out the window, a context suggesting that the structure was elevated.⁵ Perhaps the most famous qubbat al-khadra was the example in the Round City of Baghdad, ordered by al-Mansur when he founded the city in 762. At the back of the central palace, there was a reception hall $(iw\bar{a}n)$ measuring 30 x 20 cubits leading to a domed audience chamber twenty cubits square. The sources do not state how one ascended to the similar domed audience hall that surmounted it, but the springing of this upper dome is known to have begun twenty cubits above the second floor. This upper dome was known as the *qubbat al-khaḍrā*; the top of it stood eighty cubits (forty meters) high and was crowned by a weathervane in the shape of a horseman. Contemporaries considered the horseman "the crown $(t\bar{a}j)$ of Baghdad, a guidepost (calam) for the region and one of the memorable things (ma'thara) that one associates with the Abbasids."6 It was also a convenient metaphor for the caliph's power and authority. "If the sultan saw that figure with its lance pointing to a given direction, he knew that some rebels would make their appearance from there: and before long word would reach him that a rebel had appeared in that direction."7 Like a weathervane, the horseman was supposed to predict storms before they blew in. Consequently the collapse of the qubbat al-khadra and the horseman on it during a storm in 941 was indeed an omen: within four years the Buwayhids had entered Baghdad and established themselves as "protectors" of the Abbasid caliphs.

Over each of the four gates to al-Mansur's

Round City other elevated domed chambers marked the extent of the caliph's personal domain and authority. These audience rooms stood over the inner gates of the city and were reached by staircases or ramps. Each was crowned by a dome fifty cubits high and a moving figure similar to the one over the central palace. The caliph used these satellite audience halls when he wished to look at whoever might be approaching or whatever lay beyond the city walls.8

The Arabic expression qubbat al-khadra has been consistently translated into English as "green dome," for indeed qubba is the Arabic word for "dome" or "cupola" and khadra is the feminine form of the adjective "green." Since glazed tiles were not yet used to cover domes, such scholars as Creswell were led to propose that the "green dome" would have been a structure of wood covered with sheets of copper, which, when oxidized, would have acquired the requisite green patina. This logical interpretation has been universally accepted and elaborated. The example of the Dome of the Rock, the earliest (691–92) and perhaps greatest of Islamic monuments, supports this interpretation, for it is contemporary with the structures under consideration and its wooden dome was covered with lead sheets. Evidence against this interpretation, however, is provided by the rules of Arabic grammar, which insist that the expression al-qubbat al-khadra be used to render "green dome," where both the noun and the adjective are preceded by the definite article al-. The words in the expression qubbat al-khadrā are in construct (Arab. idāfa), and must therefore be construed as "the dome of al-khadrā." Although the most familiar meaning of the Arabic root kh-d-r (from which khadra? derives) is "green," it is often also found as a synonym for "nature" and "life" and can also refer to herbs. The adjective akhdar, formed from the same root, is associated with darkness and sometimes denotes black, dark blue, and gray, as well as darkness.9 The noun al-khadra can also consequently refer to the sky, and akhdar is the normal adjective for the heavens. Al-khadra "is an epithet in which the quality of a substantive predominates,"10 so the construct form qubbat al-khadra must therefore be translated as "the Dome of Heaven." The expression qubbat al-khadra thus referred initially not to a colored dome but to a celestial one. In later times, the original meaning of this expression was lost, whether from disuse or conflation with actual green (or blue) domes. 11

This explanation of the qubbat al-khadra as a celestial dome allows several extant examples of heavenly ceilings in early Islamic architecture to be integrated with the early Islamic structures known only through texts. At Ousayr Amra, the small bath complex in the Jordanian desert, decoration transforms a domed bathing chamber into an architectural expression of royal splendor.12 The decoration of the building has been attributed to the patronage of the profligate prince al-Walid II (r. 743-44) in the decades before his accession. The main hall of the building is a three-aisled basilica; its royal content in both form and decoration has long been appreciated, as have the Roman origins of the astronomical ceiling in the domed room of the bathing suite.18 There, a map of the heavens has been projected onto the undersurface of a cupola. Saxl recognized that the projection is not that of the heavens as they appear to an observer who looks up at the sky, but as they would have been reproduced on the outer surface of a celestial globe or in a book illustration. This celestial dome has the distinction of being the only extant example of a type known from antique texts, but it was rather prosaic in execution. The painter copied his model with little understanding, and the building's patron (or interior decorator) displayed a bizarre sense of humor or over-eager imagination when using celestial imagery over the medieval equivalent of a hot tub. Such an interpretation accords well with the character of al-Walid as delineated by Robert Hamilton.14

The other extant example of a qubbat al-khaḍrā? in early Islamic architecture is found at Khirbat al-Mafjar, the ruins of an Umayyad palace near Jericho. Like Qusayr 'Amra, the building has also been attributed to the patronage of al-Walid II before his accession.15 In the small domed and vaulted room at the rear of the bath hall, fragments of painted stucco reliefs have been reconstructed as showing four winged horses in roundels on the pendentives, which support a circle of birds. This circle in turn supports the drum, containing eight grilled windows which admitted a gentle light, and the dome, from the apex of which peer six heads of handsome young men and women emerging from lush acanthus leaves. This apical composition replaces the oculus, which in the symbolic cupola paintings of late classical and later times indicates the "great beyond" or the domain of the all-highest divinity.16 The symbolic depiction of the heavens on the ceiling at Khirbat al-Mafjar, which combines winged horses of Sasanian art with heavenly birds and the houris of a verdant Quranic Paradise, represents a long architectural tradition in the Near Eastern and Mediterranean worlds.¹⁷ The ceiling also nicely complements the splendid mosaic pavement in the apse of the same room, which depicts a rug on which two gazelles are shown grazing peacefully on the left side of a quince tree, while a ferocious lion devours the crumpled body of a third gazelle on the right. The image was probably intended as a representation of earthly power.¹⁸ This small room, usually known as the $d\bar{n}w\bar{n}$ and recently identified by Hamilton as the bahw, was probably used for private audiences and assignations.¹⁹

These two examples of the qubbat al-khadra do not, however, show the elevation characteristic of those Domes of Heaven known from literary sources, but this apparent anomaly may only be the result of the accidental survival of two examples built by an unconventional prince prone to witty gestures in his private architecture. Unlike the Domes of Heaven at Qusayr 'Amra and Khirbat al-Mafjar, those at Damascus, Rusafa, Wasit, Hashimiyya, and Baghdad were not only visible from a great distance but their reception rooms were elevated above the ground floor. This attribute of height links these early Islamic palaces with those of pre-Islamic southern Arabia, such as Ghumdan, the famed pre-Islamic palace at Sanca? in the Yemen. Ghumdan is said to have had twenty stories, each ten cubits (five meters) high, and was allegedly destroyed when Muslim armies conquered the city and established the first mosque opposite it and using its stones.20 This tradition of tall palaces has been preserved into the twentieth century in the multistoried houses of Yemeni cities. Many examples in San'a have more than five stories; the largest commonly have seven, eight, or even nine, and the main entertaining room is invariably located on the top floor.21

The tradition of palaces with elevated reception rooms in southern Arabia is quite distinct, however, from the palatine tradition in the Mediterranean world, where the elevation of the audience hall does not seem to have been very important. One need only think of such examples as the Palatine in Rome, Diocletian's palace at Split, and the Great Palace of the Byzantine emperors, where the necessary impression of grandeur was conveyed by the great extent of the structure, rather than by height.²² The southern Arabian—

early Islamic tradition is also quite distinct from the Sasanian tradition in Iran and Mesopotamia.²³ At the Sasanian capital of Ctesiphon, for example, there was a colossal vaulted iwan in which the emperor sat under a suspended and ponderous jeweled crown; parting curtains revealed him seated on a magnificent carpet spread on the ground.²⁴ Although many Sasanian techniques and decorative motifs were adopted in early Islamic architecture, their palaces seem to have had little impact on the development of the *qubbat al-khadrā*.

There was a notable change, however, in the spatial organization of Islamic palaces in the ninth century (and probably as early as its beginning), when horizontal extension began to be the characteristic feature of such enormous palaces at Samarra as the Dar al-Khilafa (or Jawsaq al-Khaqani) and the Balkuwara, which cover immense tracts and are hidden behind blank walls.25 This change in the spatial organization of the palace is revealed in the account of the reception of the Byzantine ambassador by the Abbasid caliph al-Muqtadir in his palace in Baghdad in 917. The caliph impressed the ambassador by keeping him moving through a succession of palaces, courtyards, corridors, and rooms. After cooling his heels for two months in the palace of Sacid, the ambassador was conducted to the Dar al-Khilafa palace. He passed by 160,000 cavalry and infantry before reaching a vaulted underground passage, through which he walked. He was then conducted about the palace in which 7,000 eunuchs, 700 chamberlains, and 4,000 black pages were stationed "along the rooftops and in the upper chambers." Later, he was conducted from the Bab al-Amma to the Khan al-Khayl palace, and from there through corridors and passageways which connected to the zoological garden. The entourage was then brought to a first court where there were four elephants and to a second with one hundred lions. They were then taken to the New Kiosk, a building situated amidst two gardens, from which they were conducted to the Tree Room and then to a palace called Qasr al-Firdaws. Next they were taken to a passageway 300 cubits long. After touring twenty-three palaces, they were conducted to the Court of the Ninety. Because it was such a long tour, the author of the account adds, the ambassador's retinue sat down and rested at seven particular places, and were given water when they desired it.²⁶ Literary and archaeological evidence suggests

that the celestial dome favored in early Islamic palaces for the reception room was replaced by the vaulted iwan, and upper chambers and such high places as rooftops, which had once been places of prestige, became service areas for eunuchs and pages. The splendor of the ruler was conveyed by the distance the courtier had to traverse and the retinue in front of which he had to pass. A special treat was the subterranean passage, through which the ambassador was conducted. Such passages seem to have become de rigueur in Islamic palace design of the tenth and eleventh centuries.²⁷

This change in the spatial organization of the Islamic palace is contemporary with a change in the spatial relationships seen in Islamic cities between the palace and the congregational mosque. These had normally been adjacent structures in the first two centuries of Islam, but throughout the ninth century the palace was built at an increasing distance from the mosque. This is evidence not only of the decreasing involvement of the caliph in matters of religion, but also of the growth of the mosque as an independent institution. The changed horizontal relationship between the palace and the mosque is also observable in the vertical dimension. In early Islamic times the palace had been visible from a great distance, while the mosque normally had few if any features to mark its presence from afar. In the ninth century, just as palaces became hidden behind blank walls, mosques began to acquire architectural features that made their presence known from a distance.

The first of these features, introduced in the early ninth century, was, of course, the tower.28 Towers and tall structures, including the *qubbat* al-khadra, generally disappeared from palaces when they became associated with mosques. An exception is the building known as the Qubbat al-Himar (Dome of the Donkey), built by Caliph al-Muktafi (r. 902-8) within the grounds of the Taj palace at Baghdad, after he returned there from Samarra. It seems to have been a tower, semicircular in plan, ascended by a spiral ramp with a gradient gradual enough to allow a donkey to carry the caliph to its summit, whence he could enjoy the view of the surrounding countryside.29 The second new feature introduced into the mosque was the monumental portal, which had also been a feature of secular architecture. The first appearance of this feature in religious architecture appears to be in the early ninthcentury renovations of the Masjid al-Haram at Mecca. Elaborate portals quickly became a common feature of mosque architecture, for example in the ninth century at Cordoba or in the tenth century at Mahdia and Isfahan. The third feature, the monumental dome with a clearly visible profile, was not normally a part of the mosque until the eleventh century, apart from the idiosyncratic examples at Damascus and Jerusalem. This delay may have been the result of the multivalent associations of the dome, which had previously been used for palaces and was increasingly used for tombs. The massing the massing the massing that the massing t

The dome in the palace, however, was abandoned neither as a formal unit nor as a metaphor; it was just no longer visible from the outside. The cruciform suites of rooms at the centers of the Jawsaq al-Khaqani and Balkuwara palaces were probably domed, although they are not mentioned in texts and were probably too low to have been visible from the exterior of the buildings. 32 The representation of the Dome of Heaven also continued to be important, at least in the interior of the palace. It was certainly the intention of the makers of the extraordinary wooden ceiling of the Hall of the Ambassadors at the Alhambra, whose starry sky depicts the seven heavens, and this same concept was also invoked in the splendid fourteenth-century muqarnas ceilings at the Palace of the Lions there.⁵³

The high dome, however, continued to be a recurrent feature of palaces in Islamic literature, but the limits of space prevent more than a sampling of examples. The tenth-century poet Ibn Hani' al-Andalusi described the residence of the Banu Hamdun in Algeria, for example, in such phrases as "O Palace whose high domes overlook the Zab!" or palace "covered with a very high white dome, so high that even the winds cannot touch it and [have to] blow underneath it."34 The eleventh-century Jewish poet of Granada, Ibn Gabirol, wrote of a palace which had a dome: "At dusk it looks like the sky whose stars form constellations."35 The verses of the Andalusian poet Ibn Zamrak that are inscribed on the walls of the Hall of the Two Sisters at the Alhambra speak of a "cupola which by its height becomes lost from sight."56

This literary image remained potent for centuries in Islamic palace design, albeit with a change of name. The fifteenth-century Cinili Kiosk at the Topkapi Palace in Istanbul, for example, has long been recognized as the only surviving example of

the so-called Hasht Bihisht (Eight Paradise) plan of Persian palaces of the fifteenth century. The Persian foundation inscription for the building specifically compares its "emerald dome" (qubbatizumurruān), which was decorated with stars, to the Dome of Heaven, and compares the pavilion itself to the heavenly mansion (qaṣr-i falak) reaching to the constellations. The present dome is hardly visible from the exterior and it is not green. The reference to an "emerald dome" makes sense, however, when it is understood to be the longstanding equivalent of the Arabic qubbat alkhaḍrā, the "Dome of Heaven."

This example from a fifteenth-century Ottoman palace points out the essential role of literature and particularly of poetry in the preservation

of the image of the qubbat al-khadra over the centuries. The history of the qubbat al-khadra is not that of a visual form which was repeatedly copied, but of a visual form known primarily through its verbal representation, which was repeatedly re-created from the text. This process should not be a surprise in a culture which tended to value the word far more than it did the image; indeed there were few means available to create the necessary images or maintain their integrity. Rulers in the Islamic world were far more likely to preserve the literature of their predecessors than their palaces, so the physical presence of the qubbat al-khadra as the Dome of Heaven was far less important than its perpetuation in the literatures of the Islamic world.

Notes

- 1. K. A. C. Creswell, Early Muslim Architecture, 2nd ed. in 2 parts (Oxford: Oxford University Press, 1969; hereafter EMA), pt. 1; Oleg Grabar, "Al-Mushatta, Baghdād, and Wāsit," The World of Islam: Studies in Honor of P. K. Hitti (London: Macmillan, 1959), 99-108; O. Grabar, "The Islamic Dome, Some Considerations," Journal of the Society of Architectural Historians 22(1963): 191-98.
- 2. EMA 1:40-41.
- 3. Ya'qubi [Ya'kūbī], Les Pays, trans. G. Wiet (Cairo: Institut français d'archéologie orientale, 1937), 165, and Grabar, "Al-Mushatta," 105.
- 4. Grabar, "Al-Mushatta," 106 (quoting Ibn 'Asakir).
- Abū Ja'far Muḥammad ibn Jarīr al-Tabarī, Tārīkh al-rusul wa'l-mulūk, ed. Muḥammad Abū Faḍl Ibrāhīm (Cairo: Dār al-Ma'ārif, 1387/1967), 8:83.
- Jacob Lassner, The Topography of Baghdad in the Early Middle Ages (Detroit: Wayne State University Press, 1970), 52-53, 135, 239.
- 7. Lassner, Topography, 52-53.
- 8. Lassner, Topography, 54.
- 9. Edwin William Lane, An Arabic-English Lexicon (London: Williams and Norgate, 1863-93), 756 s.v. kh-d-r.
- 10. Lane, Lexicon, 756b.
- 11. What twentieth-century Americans understand to be the meanings of "green" and "blue" do not have exact equivalents in medieval Arabic. See the Encyclopaedia of Islam, 2nd ed. (Leiden: E. J. Brill, 1954-; hereafter EI2), s.v. "Lawn," by A. Morabia, 5:700 and 706. Cf. also the article by Nasser Rabbat in this volume.
- 12. Creswell (EMA 1:390–415) identified this room as a calidarium, but was puzzled because it was not, as was normal, a dead end in a series of increasingly hot rooms. Instead, a vaulted passage leading from this room was built as though "it were intended to be left open, and then closed by a thin wall of bad masonry" (p. 395).
- 13. Oleg Grabar, *The Formation of Islamic Art* (New Haven: Yale University Press, 1973), 153 ff. For the ceiling, see in particular, Fritz Saxl, "The Zodiac of Qusayr 'Amra," *EMA* 1:242-51.

- 14. Robert Hamilton, Walid and His Friends: An Umay-yad Tragedy (Oxford: Oxford University Press, 1988).
- 15. Hamilton, Walid and His Friends.
- 16. Richard Ettinghausen, From Byzantium to Sasanian Iran and the Islamic World: Three Modes of Artistic Influence (Leiden: E. J. Brill, 1972), 46.
- 17. Karl Lehmann, "The Dome of Heaven," Art Bulletin 27 (1945).
- 18. Richard Ettinghausen, Arab Painting (Geneva: Albert Skira, 1962), 37.
- 19. Hamilton, Walid and His Friends, 38.
- 20. El2, s.v. "Ghumdān."
- 21. R. B. Serjeant and Ronald Lewcock, eds, Sant a: An Arabian Islamic City (London: World of Islam Festival Trust, 1983), ch. 22, "The Houses of Santa"."
- 22. On the role of elevation for visibility in Roman architecture, see William L. MacDonald, *The Architecture of the Roman Empire: An Introductory Study*, 2 vols. (New Haven: Yale University Press, 1965–86), 1:47–74 and 2:133–42.
- 23. See the discussion by Lionel Bier in this volume.
- 24. Ettinghausen, From Sasanian Iran, 28.
- 25. In addition to K. A. C. Creswell, Early Muslim Architecture, vol. 2 (Oxford, 1940), see the contribution of Alastair Northedge to this volume. One important transitional feature at the Dar al-Khilafa is the broad staircase ascending from the Tigris to the Bab al-Amma, a principal and ceremonial gate. It is perhaps the only example of a processional stairway in Islamic architecture before the introduction of European styles of stairs in Ottoman and Qajar architecture in the nineteenth century.
- 26. Lassner, Topography, 88-91.
- 27. The Fatimid caliphs of Cairo had such a passage between their two palaces. See al-Maqrīzī, al-Mawā'iz wa'l-i'tibār bi-dhikr al-khitat wa'l-āthār (Cairo, 1853), 1:457. For another subterranean passage from the citadel at Aleppo, see the contribution of Yasser Tabbaa in this volume.
- 28. For a full discussion, see Jonathan M. Bloom, *Minaret: Symbol of Islam* (Oxford: Oxford University Press, 1989).

- 29. EMA 2:264; EI2, s.v. "Baghdad" 1:898a.
- 30. For Mecca, a convenient source is Muhammad Shafit, "A Description of the Two Sanctuaries of Islam by Ibn 'Abd Rabbihi," in A Volume of Oriental Studies Presented to Edward G. Browne, ed. T. W. Arnold and R. A. Nicholson (Cambridge, 1922), 416–38; for Cordoba, see Klaus Brisch, "Zum Bāb al-Wuzurā" (Puerta de San Esteban) der Hauptmoschee von Córdoba," Studies in Islamic Art and Architecture in Honour of Professor K. A. C. Creswell (Cairo: American University in Cairo Press, 1965), 30–48; for Mahdia, see Jonathan M. Bloom, "The Origins of Fatimid Art," Muqarnas 3 (1985): 20–38; for the Jurjir portal at Isfahan, see Sheila S. Blair, The Monumental Inscriptions from Early Islamic Iran and Transoxiana (Leiden: E. J. Brill, 1991), 52–53.
- 31. That the dome and the portal had been features of palatine architecture is striking indeed; that the tower also had specifically palatine origins makes a coincidence improbable. The present context does not allow sufficient space to follow this line of reasoning further, but it raises important questions about the relationship between the palace and the mosque in early Abbasid times. Sauvaget believed, probably erroneously, that the Umayyad mosque developed out of the royal audience hall; it now seems likely that many of the most distinctive features of the mosque had palatine origins in the Abbasid period. See Jean Sauvaget, La mosquée omeyyade de Médine (Paris, 1947).
- 32. The Haruni palace at Samarra had a *qubbat almintaga* according to al-Tabarī, 9:126.

- 33. See Oleg Grabar, *The Alhambra* (Cambridge, Mass.: Harvard University Press, 1978).
- 34. See Marius Canard, "Une famille de partisans, puis adversaires, de Fatimides en Afrique du nord," Mélanges d'histoire et d'archéologie de l'Occident musulman, vol. 2 (Algiers, 1958), 43.
- 35. Grabar, Alhambra, 148.
- 36. Grabar, Alhambra, 145.
- 37. The prestige of the pavilion can be measured by the vast number of Persian and Turkish poems composed in its praise, which show that the heavenly associations of the Tiled Kiosk, built as a variant of the Hasht Bihisht pavilion type, were recognized by contemporaries. Typical of them is Veliyüddin Ahmed Pasha's long poem, which says that the lofty pavilion reproduced the structure of the heavens on earth with its arches and numerous domes. Its gilt tiles resembled the sun and the moon, the cypresses painted on its walls were like the Tuba tree in paradise, and the projecting alcove (sahnisin) where the sultan sat on his throne provided a vision of the gardens of paradise; it had a pool (havz) and a waterwheel (dolāb). See Gülru Necipoğlu, Architecture, Ceremonial and Power: The Topkapi Palace in the Fifteenth and Sixteenth Centuries (New York: Architectural History Foundation and Cambridge: The MIT Press, 1991), 216-17.