

## THE SASANIAN PALACES AND THEIR INFLUENCE IN EARLY ISLAM

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THE RUINS OF PALATIAL BUILDINGS IN IRAN AND IRAQ have been linked with the Sasanian dynasty since the nineteenth century, but the concept of a Sasanian palace architecture goes back only six decades to Oscar Reuther's study in the *Survey of Persian Art*.<sup>1</sup> Despite excavations and surveys undertaken since then, Reuther's work remains extraordinarily influential. Indeed, most of our impressions about the "Sasanian palace" still derive from this study and particularly from the attractive drawings with which he illustrated it.

Reuther's seminal work has many shortcomings, which were due for the most part to the nature of the materials available to him. His firsthand experience of the monuments he presented was limited to Ctesiphon where he excavated in the late 1920s. For everything else he had to defer to the accounts of others; Flandin and Coste, for example, and the Dieulafoys, de Morgan, and Gertrude Bell. These, in turn, had based their Sasanian attributions on traditions embodied in the works of Arab and Persian authors writing centuries after the fall of the empire. Few buildings at that time had been adequately recorded and even fewer excavated. Add to this the fact that these monuments have yielded virtually no epigraphic material and it is easy to understand the problems which Reuther faced in compiling his study.

It seems to me that now, some sixty years later, a realistic conception of Sasanian palace architecture continues to elude us, and that this is due largely to an oddly uncritical acceptance of the published drawings which in the end are our most important source of information. The older plans, for example, are so familiar through frequent reproduction on an ever smaller scale that they have become almost iconic. They most often begin, as in the case of Damghan,<sup>2</sup> as line drawings which clearly indicate the limits of excavation and preservation, but in time they are reduced to their essentials. In the *Survey* the walls of the palace are partially blackened for clarity.<sup>3</sup> Further along in the rescension the broken edges become less distinct. F. Kimball's reconstruction,<sup>4</sup> which appears in the following chapter, shows a clean edge at the left, adding to the

impression that we have before us a complete unit. The graphics have prepared the ground for statements about the building's symmetrical plan and theories about its function.

This transmogrification of an original survey is particularly striking at Kish where Watelin uncovered in a relatively small area what he described as eight "Sasanian palaces."<sup>5</sup> Palaces I and II are well known for their rich stucco decoration and their elaborate ground plans which suggest a ceremonial function. Even when the plans are hatched rather than blackened, we have become accustomed to seeing in each a more or less complete building. Moorey, who has recently made a fresh study of the Kish excavations, suggested that Palaces I and II may actually have been part of a single complex if not a single building,<sup>6</sup> and the published plans are here arranged in a pastiche as if they were (fig. 1). A variance of some ten degrees indicated by their north arrows does not pose a significant problem; plans which show ancient buildings oriented dead north are always suspect, especially in roughshod surveys, which this one seems to have been. The published site plan, which is apparently definitive—although it has no scale—seems to indicate a uniform orientation but in a different direction. They fit well, in any case, in their general scale and in the thickness of their outer walls which vary from room to room. What lay in between and to the north may have fallen victim to the plow, a common fate for mud-brick buildings, but we are not given the topographic information to judge.

The case of Bishapur is especially interesting in this respect. The original publication, which remains the basic work, contains a well-known plan (fig. 2) showing the great cruciform hall flanked by a rectangular court in the south and a group of three rooms in the north.<sup>7</sup> The plan first appeared already blackened and, like all drawings in this style, has tended to divert attention from archaeological problems like the separation of building phases. There is no indication, first of all, that the partly sunken structure, which was made of dressed stone blocks rather than the usual mortared rubble, and which is actually

oriented differently from the rest of the building,<sup>8</sup> almost certainly existed before the palace was built. Nor is there any indication that the massive walls defining what Ghirshman called the “triple iwan” were, as Keall recently pointed out,<sup>9</sup> later additions, even though they partially covered the famous floor mosaics.

Ghirshman also published an aerial photograph of the city (fig. 3) showing its grid plan, the river, and the citadel at the mouth of the gorge.<sup>10</sup> One can see that the entire northeast corner of the city was occupied by an enormous enclosure of some 27,000 square meters, whose southern limit and southwest corner are plainly visible. To the east is a depression which represents a great rectangular court measuring approximately 30 x 50 meters. In the centers of three sides are the remains of structures that were probably iwans. From the fourth side a broad corridor (which has since been cleared by Ali Akbar Sarfaraz) led to the excavated western portion of the palace which seems to have comprised less than seven percent of the whole.

Such scrutiny of a well-known photograph puts the palace of Shapur into a somewhat clearer perspective and has interesting implications for the thorny problem of functional interpretation not only of Bishapur but of the Sasanian palaces in general.

This interpretation has tended to follow two often interconnected lines. The first has been to take the sum total of all the nefarious activities that would have taken place in such palaces and make them fit the fragmentary remains. Here we are like the three blind men who describe the elephant variously as a snake, a tree, or a whale, depending on which part of the beast we happen to touch. The second is to see these buildings not as palaces at all but as fire temples. Almost all of the monuments now thought to have been Sasanian palaces have at one time or another been seen as temples, and some still are.<sup>11</sup>

Once it is recognized that what we have come to think of as a more or less complete building is but a small portion of one, some difficulties disappear. We know from the Pahlavi inscription on the Kaba Zardasht at Naqsh-i Rostam, for example, that the king and queen and members of the royal court made religious sacrifices on a daily basis, so we can assume that the palaces and perhaps smaller princely residences like those uncovered at Ctesiphon contained chapels of some sort. Most recently M. Azarnoush has argued that the palace of Shapur—by which he

means the parts exposed by Ghirshman—was not a palace at all but a temple for the worship of Anahita.<sup>12</sup> My arguments with him stem from the architectural analogies he made with his fragmentary building at Hajjiabad to the south, which I do not find convincing. But his conclusion is entirely reasonable, especially since the cruciform hall at Bishapur with its associated rooms and courts lies immediately adjacent to the sunken building at the edge of the great complex, which was, as A. A. Safaraz proposed, most likely an Anahita temple.<sup>13</sup>

H. von Gall's theory that the Bishapur mosaics with their strong Dionysiac flavor alluded to the Bacchic pomp borrowed by Shapur from western rulers to celebrate his own military victories over the Romans<sup>14</sup> would not contradict a cultic interpretation because Sasanian state religion had from the very beginning a strongly militaristic character. If the excavated portion of the building was indeed of a sacred nature, the secular activities and specifically the audience could have been located elsewhere in this vast complex, most likely in one of the iwans that opened on the great court. In the same vein, it seems entirely possible that if Sasanian Palaces I and II at Kish did originally belong to the same building, one locale could have served as an audience hall, the other as a chapel.

Perhaps the best example of how architectural drawings can cloud rather than clarify almost any issue is the so-called Imaret-i Khusraw, the palace of Khusraw II at Qasr-i Shirin. That this building can have played such an important role in the architectural history of the region is astonishing because Reuther's wonderful drawing (fig. 4)<sup>15</sup> on which virtually all discussion has been based is a total fabrication. The building, which rose from a great platform, was in a ruined state long before de Morgan came through on his *mission scientifique* in the 1890s. But he managed to extract a plan which showed basically a series of *bayts* around an open court, and an elaborate gate complex preceded by colonnades that were doubled at the front.<sup>16</sup>

A few years later Gertrude Bell visited the site and produced another plan which looked vaguely like that of her predecessors except that, instead of rows of paired columns, she has a simple iwan hall of narrow proportions.<sup>17</sup> Now Reuther, who gives no indication of having seen the place, recognized the inconsistencies of the two surveys and tried his hand, explaining that he has taken the liberty to make his own variation on a theme based on the columned buildings at Damghan

and Kish which were just then coming to light, and the palace acquired a dome.

There is no doubt that a very large building once stood on this platform, and it may well have been the palace of Khusraw mentioned by the medieval geographers. But before using this drawing to discuss the nature of Sasanian gate complexes, the typical Sasanian arrangement of domed hall fronted by an iwan, or the basilical hall in Sasanian architecture, we should dwell for a moment on its pedigree. Bell informs us that in producing her survey she was sometimes obliged to make analogies with the better-preserved palace at Ukhaidir in Iraq to fill in the missing parts,<sup>18</sup> of which there were many. I suspect this is why Khusraw's building has such a strong Abassid flavor. Put less delicately, it seems to me a fine example of how Sasanian architecture can be influenced by early Islam.

The assumption that architectural design in any period is somehow influenced by that of the preceding one is not only reasonable but an underlying principle of architectural history. Due largely to the dearth of reliable archaeological data at the Sasanian end it has not been possible to define systematically the nature and extent of this relationship between the palaces of the Khusraws and those of their Muslim successors. Studies have tended to focus on isolated features such as the four-iwan plan and the familiar combination of iwan and domed hall.

Two classes of evidence have fostered the widespread notion that there was a continuity in palace design in a more comprehensive sense, but they are largely circumstantial and of limited significance. The first is an extensive body of symbols and imagery originally associated with Sasanian kingship which survived in all media into the Umayyad period and later. Grabar, in his doctoral thesis of 1955 and in a number of later publications,<sup>19</sup> has dealt in great detail with Umayyad ceremonial as it is described in the Arab sources, relating it to the material remains as these have become available. He has shown how the Umayyad rulers were able to create for themselves an ambiance of princely splendor that was drawn in large measure from the defunct Persian court. He did not, however, press the issue of continuity of its architectural setting, noting that the desert castles of Syria, Jordan, and Palestine—virtually all that remains of Umayyad princely architecture—derived from local Roman and Byzantine traditions.

Second, a considerable number of Pahlavi works describing Sasanian court ceremonial survived into the later Middle Ages and were used by Muslim chroniclers. *The Kitāb al-taj* of Jahiz (d. 869), for example, seems to have incorporated much material from the *Gahnāma*, a *notitia dignitatum* of the Sasanians which listed according to rank all the dignitaries of the Persian monarchy.<sup>20</sup> As vital as such sources are for an understanding of internal politics in the royal court, they provide virtually no direct information about an architectural background.

The archaeological evidence for continuity of form and function is no less equivocal. The problem is best illustrated by considering briefly the setting for the audience. Very few Umayyad palaces, first of all, preserve locales that can be identified with reasonable certainty as throne rooms. Two of these are Mshatta and Khirbat al-Mafjar. At Mshatta<sup>21</sup> the throne complex lay at the back of the walled enclosure directly opposite the entrance gate, and consisted of a triconch preceded by a long hall open at the front that was divided into a broad central nave flanked by side aisles. At Khirbat al-Mafjar<sup>22</sup> the audience most likely took place, as Ettinghausen once demonstrated,<sup>23</sup> in a complex that included a pillared hall with a broad central aisle that led from a gate structure to an apsidal room at the back. The ensemble was richly decorated with mosaic and stucco that incorporated an elaborate program of images taken from Sasanian royal sources. Most striking are the stucco figure of a prince in Persian dress added to the gatehouse façade at a later time, and the stone chain and headdress which hung from the semidome, presumably above the throne.

Two points can be made here, the first being that neither the triconch nor the pillared hall is known in Sasanian palace architecture and indeed would seem to be quite uncharacteristic. The second is that while the Umayyad audience could apparently take place in any number of architectural settings, the Sasanian audience was connected primarily, if not exclusively, with the iwan hall, with or without a domed chamber in back. This is certainly the impression one gets from the Muslim sources which deal specifically with the Arch of Chosroes. But the Sasanian monuments themselves insofar as we know them give the same impression.

The so-called Taq-i Girra, which probably dates to the Middle Sasanian period, seems to reproduce the form of an iwan hall, and cuttings in the floor and at the back suggest that it held a statue,

most likely a royal one.<sup>24</sup> The rock-cut iwans at Taq-i Bustan, richly decorated in relief with royal imagery, may actually have been provided with a throne.<sup>25</sup> In Qala-i Dukhtar, the royal audience certainly took place in the great iwan hall at the center of the building. Huff, noting the window opening high at the back, and a fragmentary stone basin discovered in the middle terrace, compared the arrangement with seventeenth-century pavilions in Isfahan which accommodated the Safavid audience and had windows in the upper story from which courtiers could view the official activity taking place below.<sup>26</sup>

In a detailed analysis of Mshatta, Hillenbrand plays down the importance of the forms of the individual halls as indicators of Sasanian influence, stressing instead their arrangement with an open court along a single axis: "Functionally, there is very little to choose between the Partho-Sasanian formula of an iwan preceding a domed chamber and the classically inspired formula of a basilical hall preceding a triconch audience chamber."<sup>27</sup> He continues his general argument for Sasanian influence in late Umayyad palace architecture by pointing to the vaulting in this official area at Mshatta, suggesting first that its pitched brick construction was inspired by Sasanian architecture—most likely the palace at Ctesiphon, where the brick rings also incline towards the rear wall—and second, that the very use of brick vaulting in the audience complex of a stone building may have been intended as a reference to the Taq-i Kisra where brick was also used "for the area most closely associated with the sovereign."<sup>28</sup> The fact remains, however, that while the great vault of Ctesiphon is indeed built of brick, the rest of the building is also, and tunnel vaults of pitched brick laid vertically or in inclined rings are common enough in Byzantine architecture.<sup>29</sup> Thus, while it is true that Mshatta has a strong Iranian flavor, the nature and extent of Sasanian influence is difficult to define. It seems to have consisted of little more than an axial disposition of the halls and court at the official center of the palace and the deployment of Sasanian royal symbols in the carved ornament.

An intriguing example of Umayyad palace architecture of some relevance here is the complex at the northern edge of the Amman citadel, which seems to have been built and decorated in the Sasanian mode.<sup>30</sup> Constructed in the local cut-stone technique, its nucleus consisted of a domed chamber fronted by an iwan hall that opened on an inner court. Its unmistakably Persian aspect

derives from a vocabulary of decorative motifs clearly originating in Sasanian stucco. The articulation of the court wall of the *qaṣr*, a kind of entrance building, with tiers of niches framing the iwan arches, makes, on a miniature scale, an emphatic allusion to the Taq-i Kisra at Ctesiphon, the great palace of the Sasanian kings.<sup>31</sup>

There have been attempts to establish a second type of Sasanian audience complex based on what are in fact strong similarities between the building at Damghan at the core of the Umayyad *dār al-imāra* at Kufa.<sup>32</sup> But the two major buildings normally pressed into service to form a class—Sarvistan and Qasr-i Shirin—are of dubious value. Since Sarvistan can no longer be attributed to the Sasanians,<sup>33</sup> and since the Imaret-i Khusraw is a fantasy based partly on Damghan itself, the arrangement at Damghan must remain an anomaly, one whose precise function is unclear.

There is ample evidence that the Abbasid caliphs followed the Umayyads in incorporating Sasanian practices into their ceremonial,<sup>34</sup> but their palaces, insofar as we know them from Samarra and isolated monuments like Ukhaider, had fewer affinities with Sasanian architecture than might be expected. They are characterized by their sprawling plans that contained a great number of units, and consisted most typically of courts in series connected by gate structures around which were grouped numerous *bayts* of fairly uniform format.<sup>35</sup>

The Abbasid gate complexes were architecturally significant and had ceremonial importance.<sup>36</sup> But whether these or the Umayyad palace gateways before them owed anything to the Sasanians is a moot question, as little Sasanian gate architecture survives. The unit is known only in the very early Qala-i Dukhtar where the layout and built-in features suggest a reception area rather than a place of appearances.<sup>37</sup>

Sasanian influence becomes a real factor only with the cruciform grouping of rooms which were clearly the focus of these complexes. There are two variants. The first, found in all the major palaces of Samarra, consisted of four axial iwans fronting a domed room.<sup>38</sup> In the second, represented at Samarra only by the "resthouse" behind the mihrab of the Abu Dulaf Mosque, four iwans open on a central court.<sup>39</sup> The first type is known also from the *dār al-imāra* of Abu Muslim at Merv and probably formed the nucleus of the great palace of al-Mansur at Baghdad.<sup>40</sup>

To re-create the ceremonial of an earlier dynasty one needs a reason for doing so and some

genuine text to serve as a guide. Something of the physical ambiance can be reproduced by copying a courtly style of stucco decoration or metalwork from examples that in the early Islamic period must have survived in ample quantities. Continuity in ceremonial practice also implies a parallel re-creation of architectural features to provide a proper framework.

It is very likely that the audience ensembles of both Abbasid and late Umayyad palaces derived from Sasanian models. Whatever symbolic value such appropriations might have had for the early Muslims, these ensembles were eminently suited to an audience ceremony that began with a revelation in which the ruler was stationary.

It might be useful at this point to consider the question of what early Muslim builders and their princely patrons could have known about the palace architecture of the Sasanian kings. In Western tradition, concepts of architectural planning and details of construction are often transmitted by a process involving the close observation of existing monuments and their description in architectural treatises. This process is exemplified by Vitruvius, that Roman architect of the first century B.C. who traveled about examining earlier monuments of architecture in order to establish principles for practicing architects and builders of his own day.

This antiquarian, indeed forensic, approach to architecture is nowhere in evidence in the early Islamic period. We do have references in geographical and historical works to dozens of palaces, princely residences, hunting lodges, and garden pavilions. Their authors refer to wonders of construction and decoration such as columns in the shape of women and blocks of stone so finely worked that the joins were invisible. Their main purpose, aside from marking a conspicuous feature of a locale, was to impress the reader with certain qualities of the original occupant. But they contain no information that would enable a builder to understand these remarkable monuments in architectural terms.

Even imagining a prince with archaeological inclinations, it is difficult to say, given the paucity of available data about the post-Sasanian histories of the Sasanian palaces, what information remained to be gathered. Some were already in ruins when Yazdigird fled the capital for the Iranian plateau. Dastagird and Qasr-i Shirin, for example, had been totally demolished by Heracilius in the sixth century.

Excavations at Firuzabad and Bishapur have

shown that the palaces there were occupied into the early Islamic period, but we do not know how the buildings were used or how far their physical integrity was appreciated and respected.<sup>41</sup> At Takht-i Sulayman we have in the Ilkhanid period a rare case of builders incorporating Sasanian walls which then determined the plan of the new palace.<sup>42</sup>

As a result of recent survey work at Samarra, the remains of a large Sasanian palace have been identified immediately adjacent to the Qasr al-Jafari of al-Mutawakkil.<sup>43</sup> The Sasanian building was renovated when the Abbasid palace was constructed in 859–62, at which time a substantial water tank with supply channels and drains was built into it. Certain features, notably a series of courtyards and public rooms, have been tentatively located in the unexcavated debris, and there was apparently a hunting enclosure nearby which was used into the Abbasid period. Further work there may provide some insight into the caliph's attitude towards the buildings of a Sasanian predecessor.

The rulers of certain Iranian dynasties of the early Islamic period must have had a special interest in Sasanian palace architecture. The Muslim Buyids, for example, traced their lineage back to the Sasanian kings, and a few of them are known to have displayed an active interest in the ancient monarchy.<sup>44</sup> Adud al-Dawla, who rebuilt the Sasanian capital of Gur, renaming it Firuzabad, appears as a Sasanian ruler on coins minted in Fars that bear the Persian title *shahanshah*. He proudly recorded at Persepolis a visit he made to the site in the company of a mobad from Kazarun who read to him an inscription in Pahlavi. The founder of the line from which the Buyids emerged is said to have dreamed of conquering Iraq, rebuilding the palace at Ctesiphon, and reestablishing an Iranian state based on the ancient Zoroastrian religion. Unfortunately, we have little Buyid architecture of any kind, and none of the palaces that were described by contemporary authors have survived.<sup>45</sup>

Finally, I would like to return to the great palace in Ctesiphon which was probably erected by Khusraw II in the sixth century. When the Arab commander entered the Sasanian capitol in 637, he led the Friday prayers in the throne hall and, from that moment, the building assumed great symbolic significance to the Muslims. This is perhaps most dramatically expressed in the often cited passage in al-Khatib al-Baghdadi's introduction to his history of Baghdad which

describes al-Mansur's demolition of the Iwan-i Kisra and the reuse of its bricks for his own palace.<sup>46</sup> He relates how al-Mansur proceeded despite a council of non-Arab advisers who argued that the palace was a monument to the Arab victory over the Persian kings, but how the caliph desisted only when the undertaking proved too vast. Al-Tabari offers a variant in which an adviser now recommended pushing on at all costs lest the caliph's inability to destroy the palace damage his prestige in the eyes of his Persian subjects.<sup>47</sup>

Whether or not such anecdotes reflect historical reality, they are interesting because they illustrate what seems to be the real significance the monuments of the Persian kings had for their Muslim successors. When we consider these accounts alongside the quasi-historical traditions and romances which later grew up around this and other Sasanian monuments like Taq-i Bustan and Takht-i Sulayman in Iran,<sup>48</sup> it becomes clear

that the influence of the Sasanian palaces on early Islam was largely in the realm of poetry and metaphor.

There is no doubt that early Muslim rulers looked to their Sasanian predecessors for means by which to express a concept of kingship in architectural as well as ceremonial terms. But the resulting adaptations were usually so subtle and complete that they defy attempts to isolate the various components. There is no evidence that early Muslim princes sought to imitate the Sasanian palace in a comprehensive sense and it is doubtful that there was readily available sufficient archaeological information to do so. When Sasanian influence is evident at all, it is invariably seen in the official portions, more specifically in the throne-room ensemble which must have embodied for writers and builders alike the essence of Sasanian imperium.

## Notes

1. In Arthur Upham Pope, ed., *A Survey of Persian Art* (London, 1938) 1:493–578.
2. Erich Schmidt, *Excavations at Tepe Hissar, Damghan* (Philadelphia, 1937), 327 ff. and fig. 170.
3. Pope, *Survey*, 1: fig. 166 (drawn by Oscar Reuther).
4. Pope, *Survey*, 1:fig. 167.
5. Reproduced in P. R. S. Moorey, *Kish Excavations 1922–33* (Oxford, 1978), fig. J.
6. Moorey, *Kish Excavations*, 122 ff.
7. Georges Salles and Roman Ghirshman, *Bichâpour*, vol. 2: *Les mosâïques sassanides* (Paris, 1956), passim. See plan II.
8. My own compass reading taken in 1976 showed a variance of about two degrees.
9. *Encyclopaedia Iranica*, s.v. “Bīšāpūr,” 4:3, 287–89.
10. Salles and Ghirshman, *Bichâpour*, 2:pl. I.
11. Klaus Schippmann, *Die iranischen Feuerheiligtümer* (Berlin, 1971), passim.
12. Massoud Azarnoush, “Fire Temple and Anahita Temple: A Discussion of Some Iranian Places of Worship,” *Mesopotamia* 22 (1987): 393 ff.
13. See Ali Akbar Sarfaraz, “Anahita, Ma abad-e Bozorg-e Bīšāpūr,” in *Proceedings of the IIIrd Annual Symposium on Archaeological Research in Iran, 2nd to 7th November, 1974* (Teheran, 1975), Persian section, 99.
14. Hubertus von Gall, “Die Mosaiken von Bishapur,” *Archäologische Mitteilungen aus Iran*, n.F. 4 (1971): 221 f.
15. Pope, *Survey*, 1:plan, fig. 153 with reconstruction, fig. 154.
16. J. de Morgan, *Mission scientifique en Perse*, vol. 4 (Paris, 1896): pls. 40, 42, and 46.
17. Gertrude Bell, *Palace and Mosque at Ukhaidir* (Oxford, 1914), 44–51 and pls. 53, 54.
18. Bell, *Palace and Mosque*, 44–51.
19. Oleg Grabar, “Ceremonial and Art at the Umayyad Court,” Ph.D. diss., Princeton, 1955; “Notes sur les cérémonies umayyades,” *Studies in Memory of Gaston Wiet*, ed. Myriam Rosen-Ayalon (Jerusalem, 1977), 51 ff.
20. See Arthur Christensen, *L'Iran sous les Sassanides* (Copenhagen, 1944), 62 f.
21. See K. A. C. Creswell, *Early Muslim Architecture*, 2 vols. (Oxford, 1932-40), 1:578 ff. and plan.
22. R. W. Hamilton, *Khirbat al-Mafjar: An Arabian Mansion in the Jordan Valley* (Oxford, 1959).
23. Richard Ettinghausen, *From Byzantium to Sasanian Iran and the Islamic World* (Leiden, 1972), ch. 3. But see R. W. Hamilton, “Khirbat al-Mafjar: The Bath Hall Reconsidered,” *Levant* 10 (1978): 126 ff., who sees this complex as Walid’s *majlis al-lahu* and denies that ornament was consciously used to assert legitimacy. See also his *Walid and His Friends* (Oxford, 1988).
24. Hubertus von Gall, “Entwicklung und Gestalt des Thrones im vorislamischen Iran,” *Archäologische Mitteilungen aus Iran*, n.F. 4 (1971): 221 f.
25. Von Gall, “Entwicklung und Gestalt,” 221.
26. Dietrich Huff, “QaPa-ye Dukhtar bei Firuzabad,” *Archäologische Mitteilungen aus Iran*, n.F. 4 (1971): 164 ff.
27. Robert Hillenbrand, “Islamic Art at the Crossroads: East versus West at Mshatta,” in *Essays on Islamic Art and Architecture in Honor of Katharina Otto-Dorn*, ed. Abbas Daneshvari (Malibu, Calif., 1981), 63–86, esp. 71 ff.
28. Hillenbrand, “Islamic Art at the Crossroads,” 72.
29. For pitched brick construction with vertical and inclined rings, see John Ward-Perkins, “Notes on the Structure and Building Methods of Early Byzantine Architecture,” in *The Great Palace of the Byzantine Emperors, Second Report*, ed. David Talbot Rice (Edinburgh, 1958), 580 and passim.
30. See Alastair Northedge, “Survey of the Terrace Area at Amman Citadel,” *Levant* 12 (1980): 150 ff.; “The Qasr of Amman,” *Art and Archaeology Research Papers* 15 (1979): 26 f. See also the brief discussion by J. W. Allan in *Muqarnas* 8 (1991): 13 f.
31. Northedge, “The Qasr of Amman,” 26.
32. For example, Oleg Grabar, “Al-Mushatta, Baghdad,

- and Wasit," in *The World of Islam*, ed. James Kritzeck and R. Bayly Winder (London, 1959), 104.
33. For a date of construction in the ninth century, see Lionel Bier, *Sarvistan: A Study in Early Iranian Architecture* (University Park, Penn., 1986), passim.
34. Dominique Sourdel, "Questions de cérémonial abbaside," *Revue des Etudes Islamiques* 38 (1960): 121 ff.
35. Ernst Herzfeld, *Geschichte der Stadt Samarra* (Hamburg, 1948), passim.
36. See Grabar, *Ceremonial and Art*, 125 ff.
37. Dietrich Huff, "Ausgrabungen auf Qal'a-ye Dukhtar bei Firuzabad 1976," *Archäologische Mitteilungen aus Iran*, n.F. 11 (1978): 117 ff. and fig. 1.
38. See Yasser Tabbaa's discussion of the four-iwan plan in this volume.
39. Most recently, Alastair Northedge, *Muqarnas* 8 (1991): 89 and fig. 10.
40. For a recent summary of attempts to reconstruct the plan of the palace at Baghdad, see J. W. Allan, "New Additions to the New Edition," *Muqarnas* 8 (1991): 17 ff.
41. For Qala-i Dukhtar, see Dietrich Huff, *Archäologische Mitteilungen aus Iran*, n.F. 9 (1976): 173; 11 (1978): 140. Occupation of the palace of Bishapur during the early Islamic period is attested mostly by decorative stucco and coins. See Salles and Ghirshman, *Bichâpour*, 2:149–99.
42. Rudolph Naumann, *Archäologische Anzeiger* (1965), 697 ff.
43. Alastair Northedge et al., "Survey and Excavation at Samarra, 1989," *Iraq* 52 (1990): 132 ff.
44. For Buyid interest in the Sasanians, see C. E. Bosworth, "The Heritage of Rulership in Early Islamic Iran and the Search for Dynastic Connections with the Past," *Iran* 11 (1973): 51 ff. and H. Busse, "Iran under the Buyids, in *Cambridge History of Iran* 4:273 ff. Also, Richard Frye, "The New Persian Renaissance in Western Iran," in *Arabic and Islamic Studies in Honour of Hamilton A. R. Gibb* (Leiden, 1965).
45. Muqaddasi, for example, reported that 'Adud al-Dawla built a palace with 360 rooms, each decorated in a different style, in the vicinity of Shiraz. See Donald Whitcomb, *Before the Roses and Nightingales: Excavations at Qasr-i abu Nasr, Old Shiraz* (New York, 1985), 140 ff., for the topographic problems.
46. Jacob Lassner, *The Topography of Baghdad in the Early Middle Ages* (Detroit, 1970), 128.
47. Lassner, *Topography of Baghdad*, 128.
48. See, for example, Gerd Gropp, "Neupersische Überlieferungen vom Heiligtum auf dem Taxt-e Soleiman," *Archäologische Mitteilungen aus Iran*, n.F. 10 (1972): 243 ff.; Priscilla Soucek, "Farhad and Taq-i Bustan: The Growth of a Legend," in *Studies in Art and Literature of the Near East: In Honor of Richard Ettinghausen*, ed. Peter Chelkowski (New York, 1974).

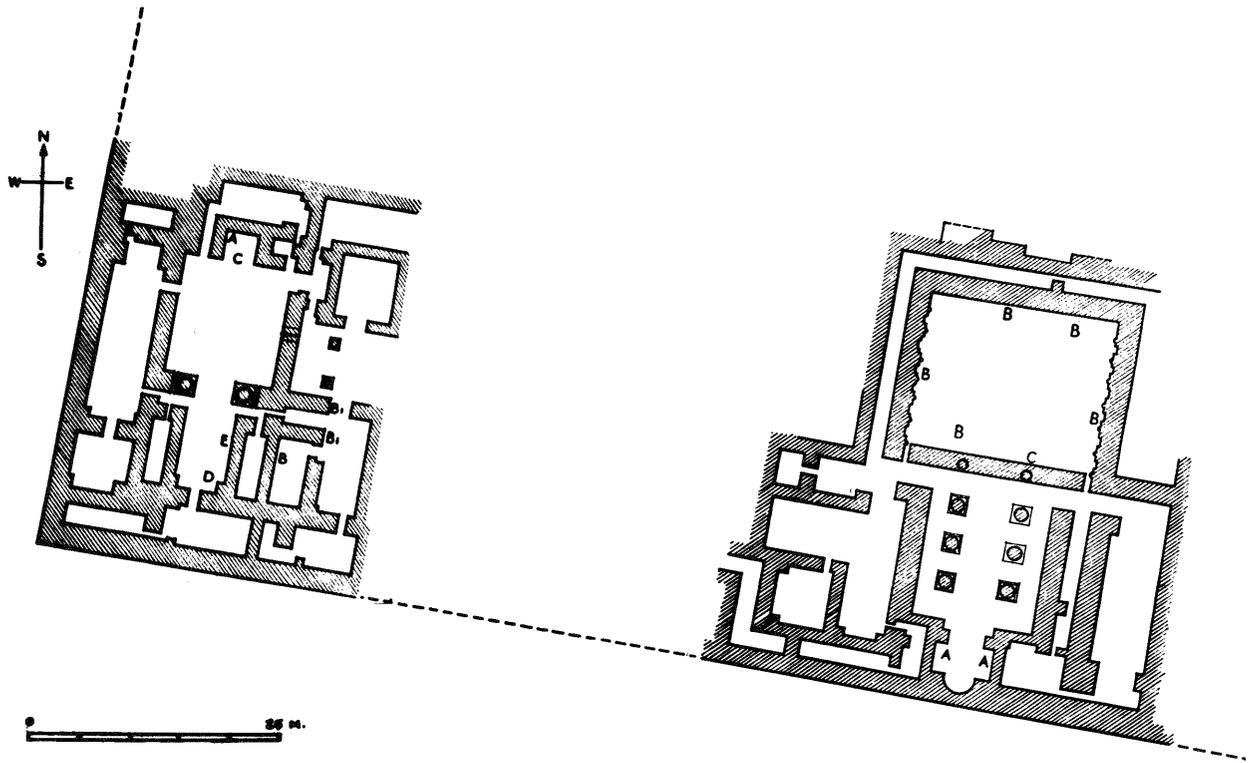


FIG. 1. Reuther's plans of Palaces I and II at Kish combined as a single building. From A. U. Pope, ed., *A Survey of Persian Art*.

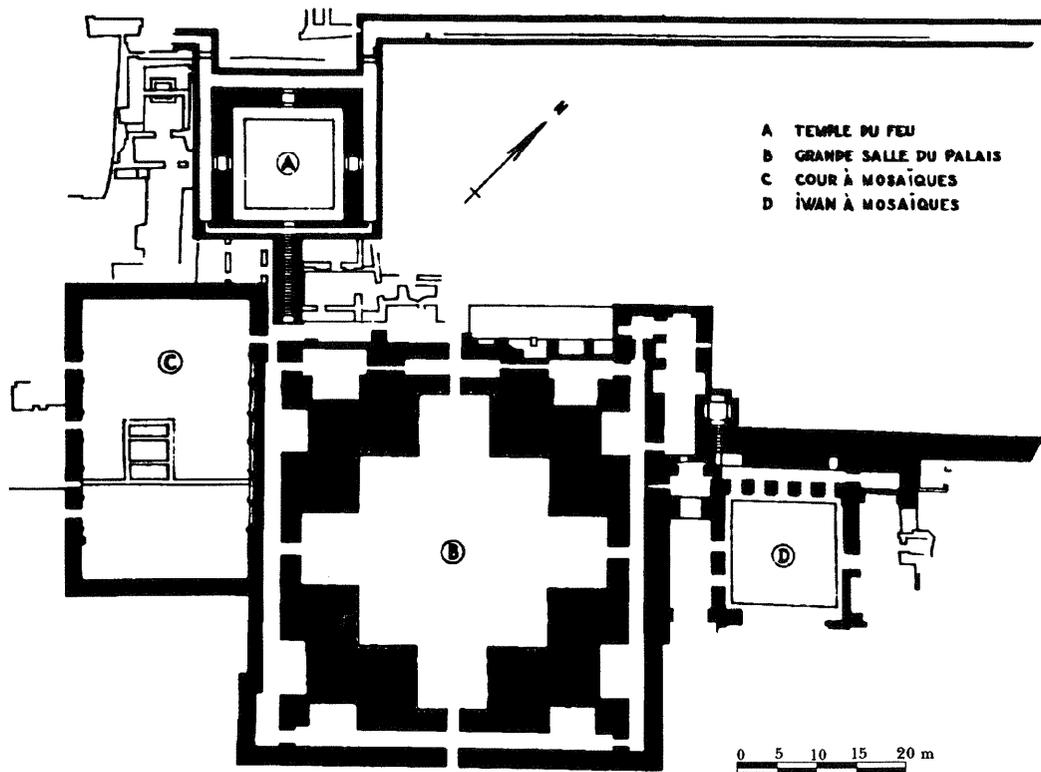


FIG. 2. Plan of the palace at Bishapur.  
After George Salles and Roman Ghirshman, *Bichâpour*, vol. 2, plan II.



FIG. 3. Aerial photograph of Bishapur showing (a) iwans or gateways and (b) Anahita temple.

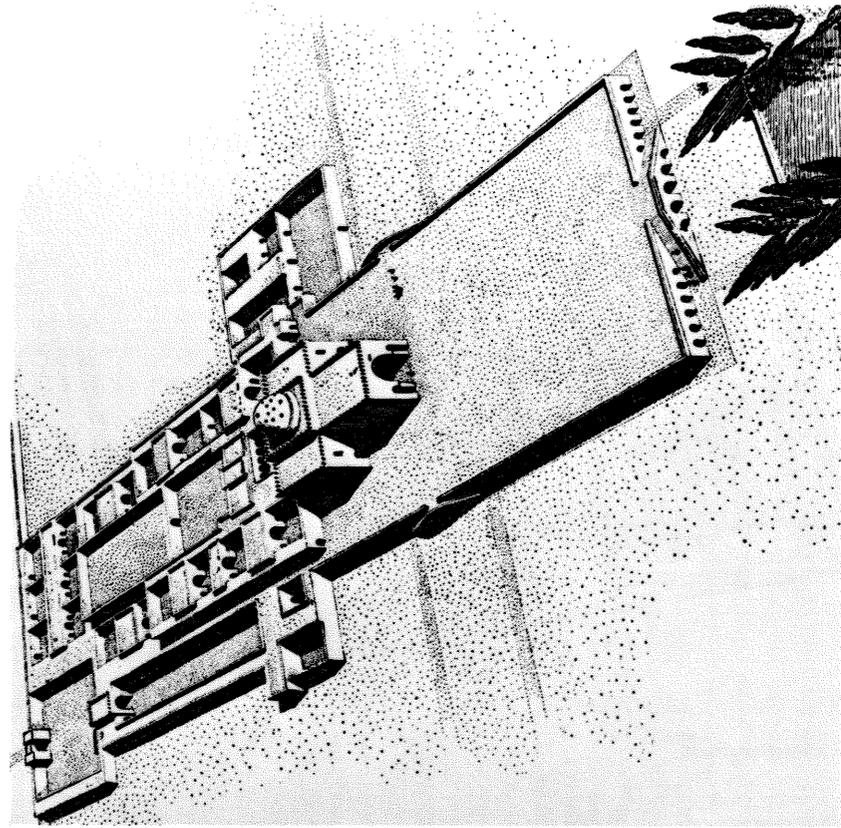


FIG. 4. Reconstruction of Imaret-i Khusraw, by Reuther. From A. U. Pope, ed., *A Survey of Persian Art*, vol. 1, fig. 154.