

G. R. D. KING

CRESWELL'S APPRECIATION OF ARABIAN ARCHITECTURE

Of all the areas with which K. A. C. Creswell dealt in his four volumes, *Early Muslim Architecture* and *The Muslim Architecture of Egypt*, few were so rapidly dismissed as the Arabian Peninsula. When he compiled the first edition of *Early Muslim Architecture*, published in 1932, his views on Arabia were already questionable, even given the scanty information available at the time. By 1969, when he published the second edition, his understanding of Arabia and of its architectural history was demonstrably wrong. Despite a growing body of knowledge about pre-Islamic Arabian architecture in the 1960's, Creswell nevertheless summarized his assessment of Arabia in an immoderate subheading, "Architecture non-existent in Arabia at this time,"¹ by which he meant the time of the Prophet Muhammad.

Creswell was far too extreme on this issue. Even now, much archaeological research remains to be done before we can assess the quality of Arabian building in the centuries immediately preceding Islam. Creswell was in no position to make such a definitive statement, however, and was premature in reaching such a judgment. It is all the more regrettable because his work has become the core for the study of early Islamic architecture, and his view about the genesis of Islamic art and architecture has developed into a canon of basic knowledge on the subject. According to his interpretation, there was no element of continuity between pre-Islamic Arabia and early Islamic architecture because Arabian architecture was so insignificant. He drew a picture of mud-built structures as the alternative to tents, and an Arabian Peninsula so untutored in architecture that any significant building was the work of Abyssinians or Persians. He saw the roots of Islamic architecture in Syria, Egypt, and the Sasanian empire, but certainly not in Arabia.

The overwhelmingly influential position of Creswell's work and opinions has affected subsequent writing to a profound extent. Nevertheless his conclusions on Arabian architecture will eventually be in need of amendment in the light of archaeological discoveries in Arabia. It is true that, in the late pre-Islamic period,

Arabian architecture did not rival that of Greater Syria, Egypt, or Iraq, but nevertheless the issue merits more consideration than Creswell gave it, as archaeological evidence indicates. A review of recent discoveries reveals materials that would have been considered in Creswell's corpus of early Islamic architecture had Arabia been more accessible when he wrote. It certainly will have to be incorporated into any future assessment of Arabia's contribution to the development and the nature of early Islamic art and architecture.

In fairness to Creswell, we must bear in mind just how limited the information on Arabian Islamic antiquities was when he was writing the first edition of *Early Muslim Architecture* in the 1920's and the 1930's. Creswell never visited any part of Arabia in those years so far as this writer is aware, and during his lifetime most of Arabia was very difficult or impossible to enter for archaeological research purposes. A survey of Islamic sites or monuments was out of the question in Saudi Arabia and in most of Yemen, and these were the areas which would have mattered most for Creswell. Indeed, even today the greatly rebuilt cities of Mecca and Medina remain out of bounds to non-Muslims. The only areas of the peninsula in which travel was possible with comparative ease in the 1920's and 1930's were the coastal districts under British influence along the Arabian Sea and in the Gulf. Yet in these districts, there was little in the way of monumental architecture relevant to the early Islamic period with which Creswell was concerned.

In other instances of difficult access outside Arabia, Creswell would rely on a Muslim scholar's observations, as he did in the case of the Jami^c al-Zaytuna in Tunis. Likewise, if a monument was accessible only in the reports of archaeologists, he would lean heavily on their published works: this was the case in his reports on the palace at Kufa, the jami^c at Wasit, and Samarra. However, in Arabia he was not really able to do this. It is true that he could have quoted extensively from the nineteenth-century accounts of the Haramayn mosques at Mecca and Medina by Badia Y Leblieh (ʿAli Bey), Burckhardt, or Burton, or the later accounts in Arabic

by Ibrahim Rifa'at or Muhammad al-Batanuni. Yet the mosques as described by these visitors were in essence Ottoman rebuildings of the sixteenth century. Little, if anything, was earlier than the eighth or ninth century, and most was a good deal later. Given Creswell's chronological self-limitation in *Early Muslim Architecture* to the period 622–935, most of the extant structures in the Haramayn were irrelevant to his topic.

Even if this had not been the case, nothing that was reported of the mosques in the early Islamic period could have shaken Creswell's belief that the Arabian Peninsula had been dependent for its monumental architecture on countries beyond Arabia. Indeed, if anything, the greater part of the architectural history of the Haramayn proved him right, since both mosques had been rebuilt repeatedly by outsiders from Syria, Egypt, and elsewhere. Apart from the holy cities of Mecca and Medina, the literature on other parts of Arabia had very little to say about Islamic architecture. Travelers to Arabia had tended to neglect the subject, largely because they had lacked the opportunity and the leisure to investigate early Islamic buildings.

The limitations imposed on Creswell in terms of available literature are clear enough from his *Bibliography of the Arts and Crafts of Islam* to 1960 and the *Supplement* to 1972. In the *Bibliography*, under the heading "Arabia," Creswell listed a total of 77 works relevant to Arabian architecture. Of these, 50 were on the holy mosques of Mecca and Medina. The remaining works were mainly on sites and towns scattered around the rest of the vast peninsula, and most of them dealt with the southern and eastern coasts and hinterland under British influence. When Creswell brought his *Supplement* to the *Bibliography* up to 1972, the situation remained much the same. Of 10 works listed under "Arabia," 6 were on aspects of Mecca's and Medina's mosques, and only 3 dealt with other topics. Given these scanty sources, it is hardly surprising that Creswell's awareness of Islamic architecture in Arabia as a whole was extremely limited. Furthermore, having no first-hand field experience of Arabia, he could not put into the context of the country as it existed the information in the texts of the early Islamic period. This point deserves stressing, for early in this century much of Arabia differed little from what would have existed then. Fifty years ago, contemporary Arabia would have been very informative for the culture of much earlier times.

Although the architecture of Islamic Arabia remained hardly known as late as the early 1970's, the buildings of pre-Islamic Arabia were better recorded. If

Creswell does not deserve criticism for his neglect of the largely unrecorded Islamic monuments of Arabia, his failure to consider the literature on pre-Islamic buildings in the peninsula is quite extraordinary. This indifference to pre-Islamic buildings in Arabia allowed him to deny the existence of any significant pre-Islamic building tradition at the time of the Prophet. As I have already observed, his remarks were premature for the little-known centuries immediately before Islam, but the amount of fine building of an earlier date should have prompted him to exercise caution in his assessment.

Enough published material existed before 1932, when *Early Muslim Architecture* first appeared, to demonstrate the quality of the finest pre-Islamic architecture in the northwest and the south of Arabia. The Nabataean rock-cut tombs at Mada'in Salih had been published between 1909 and 1914 by Jaussen and Savignac,² and the more accessible of the tombs at Petra were well known. It is true that the Nabataean tombs predated Islam by six or seven centuries, and they were not buildings so much as massive architectonic rock carvings. However, they bore witness to a level of skill in stone carving on a grand scale that was not the work of bedouin and hardly deserved to be ignored. It may be suspected that Creswell was unsure how to integrate the Nabataeans and their northwest Arabian monuments: in the end, he contented himself with a historical note and made no serious effort to relate them to such as was known of Arabia's overall architectural history.³ Even today such a synthesis has not been achieved, and much has still to be learned of the relationship between Nabataean culture and that of later times in northern Arabia.

In the southwest of Arabia, the Ma'rib dam in eastern Yemen had been known since the later years of the nineteenth century, and by the 1930's lengthy articles on Ma'rib's antiquities by Adolf Grohmann had appeared.⁴ As a result, in a footnote in 1969, Creswell felt forced to admit a reservation to his denial of the existence of a significant Arabian architectural tradition before Islam, in the light of Ma'rib's antiquities.⁵ He was prompted to do this by Ernst Herzfeld, but he did not see fit to revise his basic premise regarding Arabia's significance. Yet by the time the second edition of *Early Muslim Architecture* appeared in 1969, there was no shortage of evidence that pre-Islamic south Arabia had given rise to a wealth of fine architecture, and Herzfeld's caveat to Creswell of the 1930's regarding the importance of Ma'rib had proven to be very accurate and prescient.

By 1969, the accumulation of published material on pre-Islamic south Arabia — apart from Maʿrib — was becoming impressive. Philby had reached Najran in Saudi Arabia and Shabwa in the Hadramawt in 1936, and G. Caton Thompson had excavated the monumental Moon Temple at Hurayda, also in Hadramawt in 1937–38; this latter proved to be a stone building of excellent construction.⁶ Her work appeared in print in 1944, and by 1952 Philby had published the result of his expedition, along with photographs of the pre-Islamic town of Ukhdud at Najran. These showed that major buildings had existed there with fine masonry. Also in 1952 Ahmad Fakhry had published plates of his 1947 expedition to Yemen, showing the character of the buildings and the stone decoration of pre-Islamic origin at Sirwah, Maʿrib and in the Jawf district.⁷ Far more detailed results emerged from the excavation at Hajar b. Humayd, the ancient south Arabian Timnaʿ, and at Maʿrib in 1950–52.⁸ The cumulative impression of all this research by the end of the 1950's was that pre-Islamic south Arabia had produced a sophisticated tradition of building up to about the second century A.D. It is therefore curious that Creswell should have published his definitive denial of the existence of a significant pre-Islamic Arabian architecture in 1969, when his view was already heavily outweighed by the evidence in favor of a contrary opinion.

In Creswell's defense, it is true that the hiatus between the high points of pre-Islamic architecture and the coming of Islam had yet to be investigated; however, in a country so little studied in his day, any conclusive statement was unwise. The issue has only begun to be elucidated by recent fieldwork, especially at al-Faw, Najran, Shabwa, and Maʿrib, and a great deal of research remains to be done before we can explain what happened in Arabian building between the early centuries A.D. and the seventh century A.D.⁹

It was Creswell's understanding of Arabia and its architecture in the time of the Prophet which led him to deny its importance to the Islamic building tradition. His concept of pre-Islamic and early Islamic building in the peninsula stemmed very much from his conviction that most Arabs at the rise of Islam were nomadic bedouin. He declared, with an uncharacteristic display of pseudo-accuracy, that "the nomad Arabs formed nine-tenths of the population of Arabia."¹⁰ The exactitude of the statement is misleading, not because the majority were not bedouin — they probably were — but because Creswell had no way of estimating their numbers or

their proportion within the total population. In the pre-oil period in Arabia, bedouin were certainly numerous but there were also settled people in the towns and villages of the Hijaz, Yemen, and Oman. Furthermore, many districts in central Arabia had a settled population. The extent to which this situation reflects that in much earlier times must still be studied, as we are far from being able to estimate the population of Arabia in ancient times or the proportion of nomads and settled people in different periods.

Elsewhere, Creswell pressed the same issue of nomads with the statement that "the armies of the Conquest were composed of coarse Bedawīn, chiefly from the heart of eastern Arabia."¹¹ This view helped to justify his belief that the early Islamic *quṣūr* in the Jordanian and the Syrian deserts testified to the bedouin way of life of several Umayyad caliphs and princes. This underlying assumption in his approach to the early Islamic period in Arabia — that the peninsula's population was mainly nomadic in character and aspiration — encouraged his opinion that the Arabs contributed nothing to early Islamic architecture. As tent-dwelling nomads they could hardly have done so. Yet the composition of the Islamic army that went to Syria in 634 casts doubt on Creswell's assumption. The army included contingents from the towns of Mecca, Medina, Taʿif, and also a substantial number from Yemen.¹² Much of Yemen was probably settled then, as it is now. It is true that the army included Hijazi bedouin, but they were a part of the force of both settled people and nomads. Furthermore, it appears that eastern Arabian tribes did not stay on in Syria after the invasion. Instead, the Muslim force that continued to reside in Syria was based on the western Arabian army already mentioned, with its many townsmen and villagers, while the indigenous Arabs of Syria included settled people and nomads, just as they do today. This point is emphasized because Creswell's conception of an overwhelmingly bedouin army of tent dwellers from eastern Arabia is demonstrably wrong. Given the settled origins of many of the Arabs that composed the army in Syria, it would be better to wait until we know more of western Arabian towns in the seventh century and earlier through archaeology before we assume that these people could contribute nothing to early Islamic architecture and art.

Where Creswell was correct was in recognizing the eastern Arabian bedouin complexion of the army that invaded the Sasanian empire. These bedouin settled at Basra and Kufa, the great *amṣār* camps in Iraq which grew into major Islamic cities. The bedouin themselves

originated among the Najdi tribes of ʿAbd al-Qays and Tamin, among others. Yet even here there was an unbedouin element in the very act of settling nomads into *amṣār* camps: it is the antithesis of bedouin life, and reflects instead the urban concepts of the Islamic state leadership in Medina. The early Muslim leaders were of settled origin from Mecca and Medina. This fact is typified by the first caliphs who, like the Prophet Muhammad, had originated in Mecca and had resided in Medina. Although these western Arabian towns were not comparable in size to the great cities of Egypt and Syria, nevertheless they provided the basis for the urban character of early Islam and the conceptions of the Islamic leadership when the *amṣār* were founded.

Since Creswell had never visited Arabia, he relied heavily on others, in particular Gertrude Bell, who was familiar with the Syrian and north Arabian deserts, for his view of the peninsula. He quoted her authoritative opinion that the "Mohammedan invaders were essentially nomadic; their dwelling was the black tent, their grave the desert sands. The inhabitants of the rare oases of Western and Central Arabia were content, as they are today, with a rude architecture of sun-dried brick and palm-trunks."¹³ It is a view of Arabia and its people that was correct until quite recently for much of the north of the peninsula with which Gertrude Bell was well acquainted. When she visited this part of Arabia in the early years of this century, the inhabitants of the northern settlement lived in buildings and tents just as she described. However, her description was not appropriate for the towns and villages of the Hijaz and the Yemen highlands or the Tihama coast by the Red Sea, nor for the Arabian Gulf ports. Had Gertrude Bell said something about the very different sedentary life of Jidda, Taʿif, ʿAsir, Yemen, or the Gulf, Creswell in his turn might have been less inclined to see all of Arabia in antiquity in terms of the bedouin north. It is also dangerous to assume that areas which are, or have recently been, entirely bedouin in character were always so. Much of this paper was compiled in the desert at an early Islamic archaeological site, al-Rabadha, in western Najd, a region which today is entirely bedouin with a few small *hujra* settlements nearby. In the memory of local people, the area has always been bedouin in population and never settled before the *hujras* were established in this century. Nevertheless, the archaeological evidence indicates that al-Rabadha was a town from at least Umayyad and Abbasid times. This contrast between past and present can be found at other places on

the desert margins of the Near East.

One suspects that a part of the problem for Creswell was the image presented by Arabia when he compiled *Early Muslim Architecture* in the 1920's and early 1930's. At that time, when Creswell's views were forming, the greater part of the Arabian Peninsula was characterized by chronic tribal and dynastic warfare which had been in progress for many years. In the mid-1920's, the recent unification of Najd and the Hijaz seemed to be disintegrating into anarchy once more. Faced with this chaos, it is hardly surprising that Creswell could not envisage a more settled and architecturally significant Arabia in pre-Islamic and early Islamic times.

Creswell's views on Arabian architecture were also based on a number of specific points, all of which seemed to him to prove that it was insignificant, inasmuch as it had existed at all. He particularly stressed the degree to which the Arabs seem to have been dependent on foreigners for any but the simplest buildings, citing examples of Ethiopian and Persian participation in constructions at Mecca and Taʿif. He also referred to the simplicity of Arabian mud buildings, giving the example of the houses of the Prophet's wives in Medina and, finally, the fact that Taʿif alone among the Hijazi cities in the seventh century had the sophistication of a wall around it. Upon these specific points he built his conviction that Arabian architecture had no importance as an influence on subsequent Islamic architecture and its development. However, his views on each of these issues can be questioned and deserve to be examined more thoroughly.

Creswell referred to the reconstruction of the Kaʿba in ca. 608 as an example of Ethiopian influence on Arabian construction methods, and he suggested that the architect employed was of Ethiopian origin. He found support in E. Littmann's interpretation of Baqum, the name of the Kaʿba's builder in ca. 608 as being that of an Ethiopian, Habakkuk.¹⁴ Creswell also concluded that the building method used for the Kaʿba was uniquely Ethiopian and originated in fourth-century Axum. It involved the use of alternating courses of stone and wood which Creswell regarded as an Ethiopian technique, as that country was always richer in wood than Arabia. Without rejecting Creswell's view outright regarding the role of Ethiopian influence, a review of western Arabian building traditions leaves room for caution.

The whole issue of timber, its use, and its antiquity in building in Arabia deserves further investigation, for it is by no means as unusual as Creswell suggested. It is

true that at major towns like Mecca and Jidda, trees are almost entirely absent,¹⁵ but in the highlands of the southwest they are plentiful. *Al-ʿarʿar* (juniper), *al-ʿutm* (olive wood), *al-ṭalḥ* (acacia) and *al-sidr* (ziziphus or Christ's thorn) are all mentioned in Bilad Ghamid, south of Taʿif, and are said to be used in building.¹⁶ In ʿAsir, further south *al-ʿarʿar*, *al-ṭalḥ*, and *al-ʿathal* (tamarisk) all grow and are used in building,¹⁷ while in Yemen, apricot wood is used,¹⁸ as are *ʿilb* and *ṭanab*.¹⁹ In the Hijaz and Najd, palm trunks are readily available. Medina and Khaybar both have particularly large palm groves, but there are many smaller oases with palms as well, while *al-ʿathal* is ubiquitous throughout the country.

There is also evidence of imported wood in Arabia in ancient times. At Qaryat al-Faw on the western edge of the Empty Quarter, a sandalwood coffin has been excavated, and it has been dated to before the fourth century A.D.²⁰ The church built at Sanʿa in the sixth century by Abraha, al-Qalis, or al-Qullays, included teak which was imported to Yemen.²¹ The mosque of the Haram at Mecca and the mosque of the Prophet in Medina were both rebuilt in the seventh and eighth century using teak.²² Al-Maqdisi also shows that teak was being used in parts of the otherwise stone-built houses of Mecca in the tenth century,²³ and in later times teak was still being used in great quantities for windows, screens, and doors in Jidda, Mecca, Taʿif, and Medina. Teak has been imported by sea in recent times, and it must be assumed that this import of the wood by traders sailing from the East Indies is of considerable age. Certainly the evidence available suggests that both imported and local Arabian woods were more available and even abundant than Creswell believed. The use of wood in the reconstruction of the Kaʿba in ca. 608 thus does not necessarily prove an Ethiopian connection in itself.

The technique of alternating stone coursing with wood courses in the Kaʿba rebuilding of ca. 608 appears to have been identical with the technique of construction favored in western Arabian towns in later times. In Taʿif, Mecca, Medina, and in several parts of the Yemen highlands, houses are found with wooden courses embedded in stone.²⁴ The method is fundamental to the local house-building tradition of the past few centuries, and it may be far older. At Jidda and elsewhere on the Red Sea coast, the technique is found with coral blocks replacing stone. Where coral is used on the Red Sea, wood courses are essential and ensure that a wall does not disintegrate. However, the use of alternating ma-

sonry and wood courses in western Arabia has still to be established archaeologically before the apparent primacy in this technique of fourth-century Ethiopia can be challenged conclusively. At present, the use of wood in mud and stone architecture in al-Jawf in Yemen in early times seems to undermine Creswell's argument.²⁵ So too does the use of wood courses in the masonry of Qasr bint Firʿawn from the late first century B.C. and from the palace tomb from the first or second century A.D., both at Petra.²⁵ If such building techniques were known to Yemen and to the Nabataeans, could they have reappeared in Mecca and in other Hijaz towns in later centuries? If so, the need for a putative Ethiopian influence on the Kaʿba of ca. 608 evaporates.

Creswell took the construction by Persians of a building termed an *uṭum* at Taʿif as further evidence of the absence of Arabian building skills, for he understood this to signify that *uṭum* were of Persian origin.²⁷ This too is open to doubt. According to the lexicographer Ibn Manzur,²⁸ the *uṭum* was a stone tower (*ḥiṣn*) known in Medina and Taʿif before Islam. Creswell cites the *Kitāb al-Aghānī* of al-Isfahani which recounts how the Sasanian emperor Anushirwan (531–78) sent Persians to build an *uṭum* in Taʿif for Ghaylan b. Salama al-Thaqafi.²⁹ This was the first *uṭum* in Taʿif. Creswell concluded that the *uṭum* was a recent introduction to Taʿif and to Arabia, and he seems to have regarded it as Persian in origin since the Persians built the *uṭum* in Taʿif. However, T. Kowalski, followed by Henri Lammens (the latter, Creswell's guide in many other respects), offered a very different and more plausible interpretation.³⁰ They suggested that the *uṭum* originated in Yemen where such towers are common and then spread north to Taʿif, Yathrib (i.e., Medina), Khaybar, Fadak, and Taymaʿ. It was also proposed that their presence at Taʿif and Yathrib arose from the civil strife that plagued these towns before Islam.

Anyone familiar with the defensive towers and tower houses of the highlands of southwestern Arabia will instantly recognize the *uṭum*. Stone and mud towers in various styles abound throughout the mountains between Taʿif and the Yemen. Thus in some districts of ʿAsir, defensive tower houses appear everywhere, while further south in Bani Malik and Fayfaʿ, stone towers are also common, used for defense and for residence. In the east, at Najran, rather different types of mud-built tower houses exist. These examples of the Arabian tower building are all in Saudi Arabia, but most have parallels in Yemen. Although the point remains to be proven ar-

chaeologically, it may well be suspected that the origins of these towers go back to pre-Islamic times in southwest Arabia, and as Kowalski and Lammens proposed, they should be treated as indigenous to the southwest. The fact that Persians built the first *uṭum* in Taʿif does not make the *uṭum* a foreign type of structure in itself, and had Creswell been familiar with southwestern Arabia, he probably would have perceived the parallels for the *uṭum* in the Arabian towers of later times.

A third example of Arabia's negligible architectural tradition, according to Creswell, was provided by the simple mud houses of the time of the Prophet.³¹ He declared: "Only a small proportion of the population [of Arabia] was settled, and these lived in dwellings which were scarcely more than hovels. Those who dwelt in mud-brick houses were called *ahl al-madar*, and the Bedawīn, from their tents of camels' hair cloth, *ahl al-wabar*." The descriptions of the accommodations for the Prophet's wives at Medina do indeed show that these particular buildings were of mud brick and palm branches and were of great simplicity.

The use of mud brick in Medina should be seen in the context of the region. The town lies on the extreme eastern side of the Hijaz highlands where the mountains give way to the vast plain that extends into central Arabia. Mud brick has long been the traditional building material of central Arabia. This can be shown consistently at al-Rabadha, two hundred kilometers east of Medina, a site where Umayyad and Abbasid settlement is represented. Similarly, hamlets and villages further east were still being built in mud brick a generation ago, and al-Hanakiyya to the north of al-Rabadha has mud-brick houses no more than twenty or thirty years old. It seems that Medina in the time of the Prophet also had mud-brick buildings, as did the settlements of the central Arabian plain to the east. Alongside this, however, it also had a stone building tradition, indicated by the pre-Islamic *uṭum al-Dahiyān* and other stone structures of early Islamic date.³² In later times, stone was apparently used in the Holy City instead of mud, until the onset of the modern period and concrete.

The use of mud brick in Medina and neighboring parts of central Arabia at the time of the Prophet is by no means indicative of the building material in the rest of Arabia in the same period. As we have seen, mud was not the only material in use in Medina itself. In the highlands of the Hijaz, ʿAsir, and Yemen, stone was probably used in many places, with mud building restricted to certain districts. Mecca, in all likelihood, was

built of stone. The stone dams at Taʿif and Khaybar also bear witness to the sheer scale of masonry construction found in western Arabia in the pre-Islamic and early Islamic periods.³³ On the Red Sea coast of Arabia, there is evidence that coral buildings existed in pre-Islamic and early Islamic times.³⁴ This scattered and incomplete record suggests that buildings in seventh-century Arabia were quite diverse in their construction materials, contrary to Creswell's view. Mud brick was certainly not the only material used in Arabia at the time, any more than it has been the sole material of more recent times.

A fourth point raised by Creswell is that no town in the Hijaz except Taʿif had a town wall in the Prophet's time. He took this as evidence of Arabia's lack of architectural skills. However, I suspect that this fact is better explained by Arabia's social structure than by its architectural capacities. It is true that Medina and Jidda had walls around them in early Islamic times, but in terms of Arabian settlements these towns were unusual in that their walls were built under strong centralizing governments. In later times, the same was true when walls were built to enclose Hufuf, Dirʿiyya, Riyadh, Haʿil, and Sanʿa' among others, where powerful rulers had the means to encompass each town within a unifying wall.

Elsewhere in Arabia, different urban patterns existed, and many old villages and towns can be found without a wall. For example, in the fragmented society of the Najran oasis, there was insufficient unity and cohesion to build a wall around the settlements. Instead, each family residence was a fortified tower house, separated by at least a bow shot from its neighbors for security. A similar situation can still be seen in the southwestern highlands, where old fortified tower houses are widespread, reflecting the insecurity of the past. Some old settlements in central Arabia consist of a series of self-contained, walled, or even fortified compounds spread over a distance, but not encompassed by a single wall. In these settlements, loyalties and security were based on individual clans and tribes, while a neighbor not related by kinship may have been an enemy. In this society, defensible residences and quarters within a town were essential. Society in Yathrib (i.e., Medina) seems to have been of this character when the Prophet moved there from Mecca. No single group had the ability to impose its authority on the entire town in the pre-Islamic period to build a wall against external enemies. Where walls were built around Arabian towns in later times,

they tended to result from the authority imposed by an Umayyad, Abbasid, Ottoman, or Saudi government. It thus seems that Creswell chose an inappropriate measure of Arabia's architectural skill by stressing the absence of town walls everywhere in the Hijaz but Ta'if. Their absence was a reflection of the lack of political cohesion in pre-Islamic Arabia, rather than a lack of building ability.³⁵

Creswell's views on Arabian architecture in the time of the Prophet are open to question on a number of grounds, as we have seen. The situation needs to be clarified further by archaeological investigations into the state of Arabian architecture in the centuries immediately preceding Islam. Even today, the period remains very hazy, although some light has been shed on it by the recent excavations at Qaryat al-Faw.³⁶ Al-Faw was an extensive town on the western edge of the Empty Quarter desert, on trade routes from Yemen to the north. Its walled suq and palaces in mud brick were as monumental as buildings of early Islamic times in the Near East, and its masonry temple was as finely built and ornamented as buildings in pre-Islamic southern Arabia. Its variety of mural paintings, sculpture, and inscriptions reveals a level of sophistication and a cosmopolitan culture in central Arabia which was entirely unexpected before the excavations of the past decade or so. This site alone tends to undermine Creswell's premise that Arabia lacked architecture in the centuries preceding Islam. The present chronology of al-Faw (the last centuries B.C. and the early centuries A.D.) serves to bridge to some extent the hiatus between the high centuries of south Arabian culture and the rise of Islam.

Nowhere has so much evidence emerged for this particular period in Arabia as at al-Faw, but there are some other confirmatory indications of good-quality buildings and decoration in Arabia in the centuries before Islam. In Yemen there is evidence of paintings and architecture at Shabwa, perhaps of the same general period as al-Faw. At San'a', the jami' includes fine reused building material of pre-Islamic date and deriving from local building traditions.³⁷ Another major building at San'a' (albeit foreign inspired) was Abraha's church of al-Qalis or al-Qullays, dating from the sixth century and which appears to have been a Syrian type of church.³⁸ To the east of Medina, the excavations at al-Rabadha have revealed structures of Umayyad and of earlier date: here, the oldest walls are of mud brick so hard and well made that it resembles baked brick. This

scattered evidence tends to support the conclusion that the excavations at al-Faw indicate: there was a higher level of skill in architecture and in art in Arabia in the centuries preceding Islam than Creswell supposed.

Had Creswell been able to give more consideration to Arabia, what would he have added to his corpus of early Islamic monuments? Most Islamic buildings in San'a', Mukha, Zabid, Ta'izz, Jidda, or Bahrain would have been excluded by Creswell's terminus date — the year 935 — to *Early Muslim Architecture*. Nevertheless there would have been a number of buildings that could have been added. The most prominent include the jami' of San'a',³⁹ the Jawatha mosque in al-Ahsa', the mosque of 'Umar b. al-Khattab in al-Jawf, perhaps the mosque of 'Ali b. Abi Talib in Khaybar,⁴⁰ and a dam of Mu'awiya b. Abi Sufyan near Ta'if.⁴¹ The very early mosque at Quba' may also retain enough of its early structure to have been included.⁴² The Darb Zubayda hajj route from Kufa to Mecca abounds in watertanks, mosques, and other buildings at present attributed to the Abbasid period.⁴³ These alone would have greatly increased the number of buildings in Creswell's corpus. In Mecca itself there is the aqueduct attributed to Harun al-Rashid's wife Zubayda, and which deserves inclusion.⁴⁴ Even this brief summary represents a marked increase in the corpus of early Islamic monuments in Arabia that was known to Creswell.

A final observation may be made. Creswell concentrated on standing monuments, often in isolation from their archaeological context. Yet Arabia is poor in such monuments, generally because of the fragility of the building materials used and the extremes of the climate. While the rest of the Islamic world has many standing buildings from all periods, Arabian Islamic sites tend to be accessible only by excavation. To this extent, Creswell's approach with its stress on monuments would not have been appropriate to much of the peninsula. The study of most Arabian Islamic sites in the future will tend to be a matter of excavation, using the techniques of the archaeologist and ideally of the paleoarchaeologist rather than those of the architectural historian. Such an archaeological approach is one which should be expanded throughout the Islamic world, since stress on monuments alone gives overly much weight to one aspect of a site's evidence. In some countries the wealth and number of intact buildings seem to prevail against such an approach, but in Arabia there will be little choice in the matter. With the exception of the standing

monuments of Yemen, few of the Islamic antiquities of Arabia can be studied except through excavation.

School of Oriental and African Studies
University of London
London, England

NOTES

1. K. A. C. Creswell, *Early Muslim Architecture* (hereafter *EMA*), 2 vols. (Oxford, 1969), 1, 1: 10.
2. J. A. Jaussen and F. Savignac, *Mission archéologique en Arabie* (Paris, 1909-14), vols. 1-2.
3. Creswell, *EMA* 1, 2: 444, n. 13.
4. A. Grohmann, "Ma'rib," *Encyclopaedia of Islam*, 1st ed.
5. Creswell, *EMA* 1, 1: 10, n. 7.
6. H. St. J. Philby, *Sheba's Daughters* (London, 1939), opp. p. 84; idem, *Arabian Highlands* (Ithaca, N.Y., 1952), pp. 237-73; G. Canton Thompson, "The Tombs and Moon Temple of Hureidha (Hadhramaut)," *Reports of the Research Committee of the Society of Antiquaries of London* 13 (Oxford, 1944), pp. 19-62.
7. Ahmed Fakhry, *An Archaeological Journey to Yemen* (March-May, 1947), (Cairo, 1952), pts. 1 and 3.
8. F. P. Albright and R. LeBaron Bowen, *Archaeological Discoveries in South Arabia* (Baltimore, 1958).
9. For recent general surveys of the antiquities of South Arabia, see B. Doe, *Southern Arabia* (London, 1971), and idem, *Monuments of South Arabia* (Cambridge, 1983). See also *The Journal of Oman Studies: Proceedings of the Seminar for Arabian Studies*, and A. R. al-Ansary, *Qaryat al-Fau. A Portrait of Pre-Islamic Civilisation in Saudi Arabia* (London, 1981).
10. Creswell, *EMA* 1, 1: 64.
11. *Ibid.*, pt. 2, p. 402.
12. M. A. Shaban, *Islamic History: A New Interpretation* (Cambridge, 1971), vol. 1, pp. 40-42. On the circumstances of the settlement in Syria by Muslims, see also F. M. Donner, *The Early Islamic Conquests* (Princeton, 1981), pp. 248-50.
13. Creswell, *EMA* 1, 1: 11.
14. *Ibid.*, pp. 4-5.
15. Modern Jidda and Mecca are transformed with trees planted by the local authorities. According to J. L. Burckhardt, hardly a tree existed in either city in 1814. Even in Philby's day, matters had not changed. Recent fieldwork, however, indicates that vegetation may not have been as rare in the neighborhood as these earlier accounts suggest.
16. Communication, Dr. 'Abd al-Karim al-Ghamdi, Department of Archaeology and Museology, King Saud University, Riyadh (5 April, 1987).
17. Communication, Dr. Muhammad Al Zulfā, Department of History, King Saud University, Riyadh (4 May, 1987).
18. Ronald B. Lewcock and R. B. Serjeant in idem, eds., *San'a': An Arabian Islamic City* (London, 1983), p. 475.
19. Communication, Selma al-Radi, National Museum, San'a' (2 August, 1988).
20. In the museum of the Department of Archaeology and Museology, College of Arts, King Saud University, Riyadh.
21. R. Lewcock, G. R. Smith, R. B. Serjeant, and P. Costa, in *San'a'*, p. 45.
22. Creswell, *EMA* 1, 1: 40, 148; G. R. D. King, *The Historical Mosques of Saudi Arabia* (London, 1986), pp. 23, 30.
23. Al-Maqqisi, *Aḥṣan al-Taqaṣīm fī Ma'rifaṭ al-'Aqālim* (Leiden, 1967), p. 71.
24. Fernando Varanda, *The Art of Building in Yemen* (London, 1981), pp. 97; 104-5.
25. I am indebted to Selma al-Radi for drawing my attention in a communication of 2 August 1988 to the use of wood in the region of al-Jawf in Yemen. At the sites of al-Bayda and al-Sawda, architectural remains include mud and also stone buildings with large wooden beams forming courses in the walls. She dates these sites tentatively to the fifth-third centuries B.C. The sites are to be investigated by the French Archaeological Expedition to Yemen.
26. G. R. H. Wright, "Structure of the Qasr bint Far'un: A Preliminary Review," *Palestine Exploration Quarterly* 93 (Jan.-June 1961): 22-24. Dr. 'Asim Barghouthi kindly drew my attention to this point. In a communication of 27 July 1988, Ms. J. McKenzie described to me the palace tomb at Petra dated to ca. A.D. 90-120. It also involves the use of wooden beams as coursing in the masonry walls. The wood is integral to the rubble core and ashlar walls. See J. McKenzie and A. Phippen, "The Chronology of the Principal Monuments at Petra," *Levant* 19 (1917): 156, 164.
27. Creswell, *EMA* 1, 1: 11.
28. Ibn Manzūr, *Lisān al-'Arab* (Beirut, 1375/1956), 12: 19-20.
29. Abu'l Faraj al-Isfahānī, *Kitāb al-Aghānī* (Bulāq, 1284-88/1868), 3: 192; 12: 45, 49.
30. T. Kowalski, ed., *Der Dīwān des Kais ibn al-Ḥaṭīm* (Leipzig, 1914), pp. xv-xx; H. Lammens, *La cité arabe de Tā'if à la veille de l'Hégire* (Beirut, 1922), p. 184; Creswell, *EMA* 1, 1: 11.
31. Creswell, *EMA* 1, 1: 11.
32. 'Abd al-Quddūs al-Anṣārī, *Āthār al-Madīnat al-Munuwwara* (Medina, 1393/1973), pp. 51 ff., 72-77.
33. For recent accounts of these dams, see S. Kay, "Some Ancient Dams of the Hejaz," *Proceedings of the Seminar for Arabian Studies* 8 (1978): 68-80; M. Khan and A. al-Mughannam, "Ancient Dams in the Tā'if Area 1981 (1401)," *ATLAL* 6 (1402/1982): 125-35.
34. There are remains of coral buildings at Khurayba/Aynuna in Madyan; at al-Hawra' and at al-Jar on the coast of the Hijaz; and at sites in the southern Tihama and Farasan. Some are pre-Islamic sites; others flourished in the early centuries of the Islamic period.
35. Recent discussions by E. A. Knauf also draw attention to the distinctive character of Arab towns, with particular reference to Umm al-Jimal in the Hawran. See "Umm al-Jimāl: An Arab Town in Late Antiquity," *Revue Biblique* 91 (1984): 578-86; also Knauf's review of E. Niewöhner-Eberhard's *Ša'da. Bauten und Bewohner in einer traditionellen islamischen Stadt in Die Welt des Islams* 27 (1987): 158-59.
36. A. R. al-Ansary, *Qaryat al-Fau*.
37. Lewcock, Smith, Serjeant and Costa, in *San'a'*, pp. 323-50.
38. Serjeant and Lewcock in *San'a'*, pp. 44-48.
39. Lewcock, Smith, Serjeant, and Costa in *San'a'*, pp. 323-50.
40. G. R. D. King, *Historical Mosques of Saudi Arabia* (London, 1986), pp. 168-69, 117-20, 51-52.
41. G. C. Miles, "Early Islamic Inscriptions near Tā'if in the Hijāz," *Journal of Near Eastern Studies* 7 (Jan.-Oct. 1948): 237-41; Kay, "Ancient Dams of the Hejaz," pp. 70-71; Khan and al-Mughannam, "Ancient Dams in the Tā'if Area," pp. 129-31.

42. I. A. Al-ʿAyyāshī, *al-Madīna bayn al-maḍī wa'l-ḥāḍir* (Medina, 1392/1972), pp. 248–50; ʿAbd al-Quddūs al-Anṣārī, *Āthār al-Madīnat al-Munuwarra*, pp. 81–85.
43. S. A. al-Rashid, *Darb Zubayda. The Pilgrim Road from Kufa to Mecca* (Riyadh, 1980); idem, *al-Rabadhah: A Portrait of Early Islamic Civilisation in Saudi Arabia* (London, 1986). See also *ATLAL* 1–6 for reports on the Darb Zubayda stations.
44. Al-Maqdisī, *Aḥsan*, pp. 74, 76.