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KUH-E ḴvĀJA

KUH-E ḴvĀJA, a well preserved archeological site of chiefly Sasanian date that takes its name from an isolated basalt extrusion situated in the delta of the Helmand River, in the Iranian province of Sistān (ancient Drangiana), 35 km southwest of Zābol (Plate I). The name means “Mountain of the Lord” and is first attested in the variant form of *Kuh-e Ḵvodā*, in a Zoroastrian text of early Islamic date (Boyce and Grenet, p. 151, n. 139).

GEOGRAPHY AND STRUCTURE

The solitary mountain, in the form of a truncated cone and over 2 km in length, rises abruptly from the flat plain of the Helmand basin at an altitude of 600 m (Stein, II, p. 909; Gullini, 1964, p. 89; Afshar, p. 86; Sajjādi, p. 201; Mousavi, p. 81). Watered by the terminal streams of the Helmand, the area is home to a sheet of water of constantly varying size known as the Hāmun Lake (Av. Kąsaoya, MPers. *Kayānsih*; see HĀMUN, DARYĀČA-YE). Significantly, the lake forms the largest single expanse of fresh water on the Iranian Plateau, even if it is nowhere more than 12 m deep (Fisher, pp. 76-81).

The walled settlement lies on the southeastern side of Kuh-e Ḵvāja on a low-lying rock promontory, at a point where the main mass of the mountain serves to diminish the worst effects of the northwesterly 120-day wind. Known today as Qalʿa-ye Kāferān (Fort of the Infidels) or, occasionally, as Qalʿa-ye Sām (Fort of Sām, who is a hero in the *Šāh-nāma*), the site is bounded by a slender, angular fortified wall that encloses an area with maximum dimensions of 153 m from north to south and 177 m from east to west. (For reasons of

convenience this account follows the lead of earlier commentators in treating the site's long southeast-northwest axis as a north-south line; see Figure 1, where the circular north symbol reflects this convention.) In the broad, lower portion of the settlement, a veritable labyrinth of cells, chambers, and courts are the remains of a once densely populated town. This area could only be entered through the main gate near the east end of the south wall, and was locally known, at least in the early years of the 20th century, as Ḡāḡā Šahr (Stein, II, p. 909). Although these ill-defined remains had never been closely examined, G. P. Tate (b. 1856) noted that the main gate was originally flanked by a pair of towers. At the time of his visit, many of the natural lines of drainage on the rocky slopes outside the enclosure wall were still connected through carefully constructed stone and mortar cisterns (Tate, pp. 265-66).

The sacred precinct is located on the monumental upper part of the site and has inevitably attracted most attention (Plate II). During ceremonies this discrete northern unit could only be entered from the south on a narrow path that still winds its way through the ruins of Ḡāḡā Šahr. From this direction the access was through an entry court, leading to an entry terrace and a single impressive portal, the south gate, which consisted of a vestibule and an inner domed chamber.

The sacred precinct exhibits a well-ordered axial plan, on which buildings are arranged on a split-level elevation that ascends from south to north, following the natural configuration of the mountain (Figure 1). The lower of the two levels is distinguished by the south gate and the entry terrace, but dominated by a spacious central court. In its original state, the court's mudbrick north facade was marked by series of engaged columns of classical inspiration (Herzfeld, 1941, p. 98; cf. Kleiss, 1990, 1993) and flanked by the celebrated painted gallery, the tall windows of which opened southwards onto it (Kawami, 1987b, p. 18). Then the whole court was reconstructed, and the painted gallery was blocked off. Two lateral, non-axial *ayvān*s, each of which led to an elongated back room with a north-south axis, were introduced, and tall arcades were erected on each side of the court. A staircase marked the midpoint of the north side, so that everyone climbing the steps, would soon behold the entrance to the all-important fire sanctuary on the far side of the inner terrace.

The sanctuary consisted of a square domed chamber, in which the dome's ring was originally supported by squinches springing from the four corner piers. The side walls of this *čahārṭāq* (lit. four arches; see Huff, 1990) construction

were left open, while an immediately adjoining ambulatory corridor assured the closed character of the sanctuary. At its center E. Herzfeld (1879-1948) uncovered an overturned fire holder (*ātašdān*; see Boyce, 1999b) of stone, which had once rested on a square, plastered plinth. Its three-step shape closely corresponds to the shape of earlier fire holders, and it is possible that the holder was inherited from the earlier phase of the site's occupation. Moreover, the form—three outsteps at the top and three more towards the base (Herzfeld 1941, fig. 397 and pl. 99)—suggests that the fire holder was already of considerable antiquity at the beginning of the Sasanian period. The western end of the inner terrace led to a small domed chamber, which presumably served as a secondary fire chamber. The northwestern and northern sectors of the sacred precinct's outer wall were strengthened and thickened from a point a little to the south of the small domed chamber to a point directly east of the North Gate.

CONSTRUCTION TECHNIQUES

Many of the mudbrick masons who worked at Kuh-e Ḵᵛāja appear to have been masters of their craft. Not only do a number of the extant walls still stand to a height of 15 m or more, but they are also witness to an intriguing variety of building procedures. In particular, certain walls combine standard layers of mudbrick and mortar with a band of stone near the foundation and with layers of reed, cow dung, or a mixture of the two, towards the top (Ghanimati, 2000, pp. 144-45). Such stone bands probably served to strengthen the lowest stretches of the wall system, while the introduction of light materials at a higher elevation duly lightened the overall weight of construction. Since the use of stone bands is not attested in other Sasanian mudbrick construction, and since the skills of prisoners of war from the Roman empire are thought to be discernible at various sites within Sasanian Iran (Frye, 1983a, p. 296; 1983b, pp. 126-38; Bosworth, p. 2; Garsoïan, p. 581; Matthews, pp. 133-40), Kuh-e Ḵᵛāja's banded walls—and even its multiple external cisterns (Tate, p. 266; Shahbazi)—may offer proof of the presence of a labor force far from being strictly local. Striking is that the otherwise unparalleled stone bands recall the fact that Roman and Byzantine concrete walls were often faced with small limestone blocks that were leveled or reinforced at varying intervals by bands of thin baked bricks in mortar beds of equal thickness (Krautheimer, p. 49; Rice, II, pp. 53-57, pls. 9 D, 18).

Domes served to roof all principal chambers associated with the sacred precinct, such as the south gate's main room, the significant rooms that

opened off the back of the two *ayvān*s, the cella of the fire sanctuary, as well as the domed units associated with the inner terrace. All of these domes appear to have been constructed with the aid of cone-shaped squinches (Pers. *sekonj*, *filpuš*, or *gušvāra*; cf. Godard, 1990, p. 16; Huff, 1990; 1987, sec. 2), which originated in Sasanian times and ultimately gave birth to the more complex *moqarnas* of the Islamic period (Ghanimati, 2001, pp. 86-87).

Barrel vaults (Pers. *ṭāq-āhang*) were usually employed to cover corridors and galleries. To obviate the need for wooden centering, the builders customarily resorted to pitched brick vaults composed of sun-dried bricks set in gypsum mortar (*malāt-e gač*). In contrast, arches and arcades were constructed with the aid of reed-reinforced long, molded mudbrick struts. Such prefabricated mudbrick elements were first used by the Medes in the 7th century BCE, and today they are still used in parts of Iran (Roaf and Stronach, pp. 129-41; Hansman and Stronach, pp. 11-22; Huff, 1990, pp. 150-60). Almost all brick surfaces were given a generous coat of gypsum plaster as a standard protective measure.

ORNAMENTATION

The sacred precinct once had a wealth of luxurious decoration which illustrated, more than anything else, its importance (Kawami, 1987a, pp. 18, 25; Schlumberger, 1970, pp. 53-59). The decoration included stucco moldings, stucco colonnettes, stucco panels with geometric design, figurative reliefs made of mud and plaster, and of course wall paintings. The high quality stucco ornamentation at Kuh-e Ḵᵛāja has been extensively studied (Stein, II, pp. 909-21, esp. p. 916, n. 4; Faccenna, p. 84, fig. 11; Herzfeld, 1941, pp. 293-94, pls. xcix, xcvi bottom; Schlumberger, 1970, pp. 53-59; Kröger, pp. 35, 74, 133, 185, 226-27, 247, 257, 267, pls. 103-4; for a reference to sketch xiii by Herzfeld, see Kawami, 1987b, pp. 17-18, 24).

A. Stein (1862-1943) and Herzfeld, the site’s first excavators, discovered the reliefs. They found them on the north wall of the central courtyard, at each side of the central staircase, as well as on the south facade of the fire sanctuary. Generally, these reliefs were made of mud, coated with gypsum plaster, and presumably painted. Tamarisk pegs (*qowwa*) of about 15 cm were used to attach the reliefs to the walls.

On the north wall of the central courtyard, Herzfeld discovered a pair of sculptured male figures above the arch of the middle doorway. He speculated

that together they had originally held a wreath. These life-size figures were molded in a very high relief. Only fragments of the drapery of the westernmost figure had survived (Herzfeld, 1941, p. 292, pl. xcvi bottom; Kröger, pp. 210-11, pl. 104; Kawami, 1987b, p. 18). But the opposing image was better preserved, and had retained some portions of the left shoulder, arm, torso, and leg, as well as a mass of curly hair and a few ribbons. This frieze was still recognizable in 1961 (Gullini, 1964, p. 389, fig. 219). T. Kawami identified this particular figure as that of a Sasanian king, while J. Kröger identified various decorative elements as early Sasanian (Kröger, 1982, pp. 35, 74, 133, 185, 226-27, 247, 267). Stein (II, p. 913) noted that directly to the east of these figures a section of the wall had originally been painted, and he described traces of rippling ribbons and a ring or circle.

The imposing south facade of the fire sanctuary bore the remnants of a stucco relief that portrayed a contest between a horseman and a lion. An adjoining wall further to the west had an equally worn mud-stucco relief consisting of an equestrian scene executed in low relief. The scene shows three figures on horseback, all facing right, who according to Stein are taking part in a procession. Although the equestrian figures are now almost completely destroyed, the horses' bodies and heads have survived and are still visible (Ghanimati, 2001, pls. SD-5-7). Stein suggested a Sasanian date for this relief as well (Stein, II, pp. 909-912; cf. Ghirshman, pl. xxxv, 1-3; Kawami, 1987b, p. 19).

The paintings of Kuh-e Ḵᵛāja have given rise to a wide range of interpretations as well as to many different datings. Both Stein and Herzfeld discovered paintings within and near the south and the north gates, as well as in the painted gallery. In 1981, D. Faccenna reported the discovery of a painting in the sacred precinct. Since 1995, two more pieces have been recovered by an Iranian team in the immediate vicinity of the north gate.

South gate. Stein (II, pp. 915-21) uncovered a large number of paintings in a passage near the south gate's western facade. Most were on walls that had been sealed off by later additions. One painting showed a nearly life-sized, robed figure in a standing pose. Stein (pp. 917-18) identified the figure as a Bodhisattva, because the faintly preserved colors, together with the figure's overall contours and style of dress, seem to evoke Central Asian Buddhist parallels. A second painting was located on an adjacent wall of a later date. The composition showed two registers of standing figures in belted tunics and trousers with out-turned feet, while their heads turned slightly to the viewer's right. Fabrics and ornaments varied from figure to figure. In the lower

register, a partly obliterated seated figure faced several standing ones. Stein also observed a three-headed creature and an ox-headed mace (*gorz*) held by a seated figure, and identified the seated figure as the hero Rostam with his weapon.

In 1974 Faccenna (p. 83) discovered a fragmentary painting of a cityscape in the south gate's inner domed chamber. This fragment was detached from its original setting and, after restoration in Italy, presented to the Archeological Museum in Tehran (Muza-ye Iran-e bāstān). The painting depicts two rows of people in procession, showing two overlapping male heads in profile facing left and, compressed into the same amount of space below, four male heads facing right. They are bareheaded males with large eyes, sharp and large nose-profiles, and a compact mass of hair. The heads are placed against a light background in a setting of light-colored walls, battlements, and two towers. Between the two towers, two heads are shown facing left (Faccenna, pp. 85-97; cf. Kawami, 1987b, pp. 26-52). One is bearded, and the other, partly hidden behind the first, is wearing a low, red hemispherical helmet with a jutting visor and a side-flap, from which a white cheek-piece reaches down under the chin. This side-flap and similar devices are generally identified as mouth piece or mask (*padām*). Royal attendants, as well as others, used to wear a *padām* on special occasions, but nowadays *padām*s are primarily associated with Zoroastrian priests who wear them to avoid the pollution of pure ritual objects (see Choksy, 2015).

Painted gallery. Paintings in the gallery were found on the vaulted ceiling and the side walls. The barrel vault bore a pattern of painted coffers in three rows. The pattern ascended from the cornice at the springing of the vault to its apex, so that the painted squares created a three-dimensional representation of a coffered ceiling. In addition, alternating squares were filled with floral rosettes of varying designs and styles. Some rosettes had a solid circular form, much like a dense sunflower or lotus, while others had long curling leaves that unfurled into the corners of the square, a few of which folded back on themselves. The remainder of squares held single human figures that varied in character and compositional style and were defined by a relatively heavy dark outline. Some figures are shown with musical instruments in postures of repose, and some are dancers or acrobats. Another is a little winged Eros riding a horse or feline (Herzfeld, 1941, pp. 294-95). Herzfeld assigned a Hellenistic origin to all paintings that he discovered on the ceiling of the painted gallery, while Kawami (1987b, p. 28) suggests a date in the 1st century

CE or later.

The south wall of the painted gallery. An elaborate painted frieze also ran along the length of the south or window wall of the painted gallery, just above the cornice. The frieze's first element at the top consisted of a row of painted, red and white dentils, framed by a red band at the top and bottom. Kawami (1987b, p. 30) speculates that its purpose was to set off a series of painted, more than life-sized figures, which were arranged in groups of two, sometimes three, between the eight windows of the south wall. The windows were distributed at regular intervals, and the figures' arrangement proceeded westward from the gallery's eastern end.

The first painting shows a pair of beardless figures. On the left, a male with short curly brown hair is shown in a three-quarter view. He holds an upright trident in his left hand and wears a long yellow tunic decorated with a red band with yellow and green roundels about the neck (Kawami, 1987b, pp. 30-52). A mantle is wrapped around his waist and falls over his left shoulder in a triangular fold. Standing to the right of the trident bearer, a female figure holds a long rod with a rounded head against her left shoulder, which Kawami (1987, p. 31), following Herzfeld, identified as a mace. Apparently, she wore a yellow sleeveless gown, gathered above her right breast by a roundel or brooch with a mounted stone in the center. The mace-bearer has her right hand raised, and her left elbow virtually leaned against the upper arch of the window, while the head of the beardless trident-bearer protruded slightly into the painted cornice at the top of the wall. Their identity remains to be established. Herzfeld saw the figures as deities, but Kawami (1987b, pp. 32-52) has strongly opposed this interpretation (Herzfeld, 1941, p. 296; for the interpretation as a Saošyant, a Zoroastrian world savior [see ASTVAṮ.ƎRƎTA], with a mace, see Ghanimati, 2001, pp. 171-74).

The wall between the second and third windows was decorated with three standing figures, probably men (Kawami, 1987b, pp. 32-33). Like the gallery's other figures, they are only visible from the waist upwards, showing broad, sloping shoulders and thick necks with small heads. They stand in three-quarter view, grouped very closely while turned to the viewer's left. The two on the left wear tunics and mantles over the left shoulder, like the mace carrier, and have dark hair and rounded beards. But the third figure is beardless, and wears a round headgear with a thin rim and a wing-like feature at each side. His tunic is white, and he carries a reddish-brown and yellow shield. These figures are also not identified.

The painting between the third and fourth windows was already destroyed by the time of Herzfeld's excavation. But Stein had described a painted mural with seated, youthful figures in a classical style. The composition consists of two life-size, beardless men who are shown in profile, facing each other. Both hold long lances and are nude to the waist with white drapery around their hips, which Stein (II, p. 920) had interpreted as loincloth. The left figure is bent forward, grasping his leveled lance with both hands, while aiming at the right figure, who leans back as if anticipating the thrust. The latter's upright weapon is held in his left hand. Kawami observed above this mural the remnant of a painted cornice, showing dentils, beribboned laurels, and dark red bands. She concluded that the panel belonged among those described by Herzfeld, thus suggesting that this fragment was placed somewhere near the gallery's center. She noted that Stein's panel portrayed a combat that the row of standing figures between the other windows were supposed to witness. Kawami (1987b, pp. 36-38; cf. Matthews, pp. 63-66) speculated that most probably the contestants rode elephants (see ELEPHANT ii. Sasanian Army), adding that only two Sasanian kings—Šāpur I (241-272-73) and Ḵosrow II (591-628)—had elephants in their armies, although Šāpur II (309-379) also employed elephants in his army (Frye, 1983b, p. 136).

The space between windows five and six in the gallery's western half bore no paintings. Kawami (1987b, p. 38) noted that Herzfeld had recorded two heads between the sixth and seventh windows in his notebook, but his notes about the space between the seventh and eighth windows are illegible. Although the painting between the eighth window and the gallery's western end was severely damaged, Herzfeld sketched a beardless man, framed by a yellow nimbus, and identified him as a moon god (Kawami, 1987b, pp. 37-39).

Window recesses. The walls and vaults of the window recesses were also painted, because two windows had retained some traces. In his sketch book Herzfeld mentioned painted coffers and pictures in the second window from the gallery's east end. He also made an annotated sketch of a row of five standing men on the wall of the second window recess in the gallery's eastern half. Unfortunately, not all details were clearly preserved (Herzfeld, 1941, pp. 294-303; cf. Kawami, 1987b, pp. 32-52). All five are shown frontally, with their heads in profile facing towards the viewer's right. Each figure has the right hand flexed to chest level, while the left arm is bent and held to the side and across the waist. Their hair is cut short, and they wear sleeved tunics. The men are depicted in procession, and the figure at its head, on the right, is only half-

size, raising the question whether he is a boy. The small figure carries a vertical object in his raised right hand. The man behind him holds in his right hand an almost white, tulip-like flower with two green leaves and a reddish, ball-like object in his left. Kawami (1987b, p. 39) interpreted the circular object as the hilt of a sword. The third man carries in his right hand an oval ring, and above his head are two small flowers, one with four and the other with five petals. At their back a leafy branch in pale yellow takes the shape of a stylized laurel. This figure is distinguished by his belt and his inverted sword, whose hilt his left hand grasps. Behind the ring-bearer stands a man whose upper clothing was decorated with yellow circles.

Back wall. The gallery's north wall was windowless and preserved remnants of the same painted cornice found on the south wall. But only one section of the wall painting itself had survived in the gallery's eastern half, directly opposite the trident-bearer (Stein, II, p. 921; Herzfeld, 1941, pp. 295-303, pl. CIV top). It showed three standing figures, one overlapping couple, and a barely visible single figure on the left. The couple wear long-sleeved, V-necked tunics and look to the viewer's right. The man's sword hangs from a thin belt worn low over the hips. The left arm of the other figure, presumably a woman, hangs down at her side, while her right arm is obscured by the male figure. Light and dark vertical bands framed this composition, which Herzfeld considered a royal couple. Kawami (1987b, pp. 42-44) dated this painting to the late 3rd or early 4th century CE.

North gate. This building was a two-story vaulted structure with a tower. The tower's upper room retained traces of wall paintings, of which two fragments—each showing a single head—are now in the Metropolitan Museum of Art, New York. These are the only surviving pieces of all the paintings that Herzfeld had recorded (Stein, II, pp. 912-13, pl. 53). Herzfeld interpreted the larger head with short black, curly hair as a beardless man in profile, facing left, and identified the smaller beardless head in profile, facing right, first as a woman and later as a flute player (Herzfeld, 1941, caption to pl. ciii top left). Kawami (1987b, pp. 45-50), however, judged the first description uncertain and the second incorrect. She argued that the second head wears the aforementioned *padām*—a thin band tied across the mouth and fastened at the top of the head. She admitted, though, that the *padām* is no proof of a religious ceremony, because a servant or attendant may have worn it in a secular context. P. O. Harper (p. 117, n. 86) was the first to suggest this possibility. But neither scholar has mentioned that a servant may have worn a

padām because his master was a Zoroastrian priest, requiring the observance of purity laws. To the smaller painting Kawami (1987b, pp. 48-50) assigns a date in the late Sasanian era.

One of the aforementioned two new paintings that the Iranian team has recovered is a panel from a small chamber in the north gate's vicinity. This painting shows the classical Iranian theme of a contest between a man and a beast.

In addition to the paintings discussed above, the eastern tower of the inner terrace seems also to have retained traces of painting. Herzfeld noticed those during his 1925 visit, though already by 1929 they had completely vanished.

HISTORY OF RESEARCH

Many European travelers visited Sistān during the last two hundred years, yet only a handful mentioned Kuh-e Ḵᵛāja in their accounts (Ghanimati, 2001, pp. 113-15). B. Lovett (b. 1839) explored the site in March 1872 and provided its first general description (Lovett, pp. 145-50). But Tate's account of 1910 (pp. 265-68) was the first to direct attention to many of Kuh-e Ḵᵛāja's most characteristic details. The first thorough archeological examination of the mudbrick buildings on Kuh-e Ḵᵛāja was conducted by Stein in December 1915. He mapped the mountain as a whole and argued that the ruins had coterminously served diverse functions: (1) shrine; (2) perimeter walls and towers of an adjacent town; and (3) outlying forts on the mountain rim. In addition, Stein transferred twelve painted panels to the National Museum in Delhi, where, regrettably, only two panels are still extant (Faccenna, p. 87, n. 6). He identified the mountain, in print, as Mount Ušiδam (cf. Av. Ušidarəna, MPers. Ušdāštār) of *Yašt* 19.2 (see ZAMYĀD YAŠT) and yet speculated, despite the Zoroastrian associations, whether the sacred precinct had served as a Buddhist monastery. In his correspondence, he assumed that the site was Parthian but later dated the site to both the Parthian and the Sasanian periods (Stein, II, pp. 909-25; cf. Mirsky, pp. 390-91; Kawami, 1987b, p. 15, n. 12).

The next archeologist to inspect the ruins was Herzfeld (1931-32; 1941, pp. 291-97), who visited the site in February 1925 and in the winter of 1929. Herzfeld (1941, pp. 292-301) concerned himself only with the sacred precinct, which he interpreted as a palace with a fire-temple, probably because his excavations, as already mentioned, had unearthed the overturned fire holder. Unfortunately, the fire holder's whereabouts are no longer known (Mousavi, p.

84). In deference to Herzfeld's characterization, the sacred precinct is often called a palace-temple, and the validity of this label has seldom been challenged (e.g., Erdmann, p. 22; Ghanimati, 2000, pp. 141-44). Like Stein, Herzfeld removed a significant number of wall paintings. Most were sent to Berlin, where they are believed to have been destroyed during World War II, though two images (Herzfeld, 1941, pl. ciii, top; see above) were eventually acquired by the Metropolitan Museum of Art, New York. Important is that Herzfeld also recorded the presence of stucco reliefs.

Herzfeld (1941, pp. 291-92) followed Stein in identifying Kuh-e Ḵᵛāja as Mount Ušiδam and suggested further that it was the Eastern Christians' Mons Victorialis, where in a legend about the birth of Christ the magi kept vigil. He also believed that the sacred precinct was the seat of the Indo-Parthian ruler Gondophares (20-46 CE), speculating whether Gondophares and the Rostam of epic tradition were the same person (Bailey, pp. 1154-55; Duchesne-Guillemin, pp. 167-68; Bivar, p. 197; Boyce and Grenet, pp. 451-55, esp. n. 447; Bernard, pp. 518-19). He initially assumed an early construction phase in the Sasanian, and a later one in the early Islamic, period. But subsequently Herzfeld (1941, pp. 291-97) argued for a Parthian building phase in the 1st century CE and a subsequent Sasanian one indicated by 3rd century alterations.

In 1961, the site was reexamined by G. Gullini (1964, pp. 65, 105, 224, 263, 283, 354, figs. 53-56), who sank a series of trenches on the central court's south side. He claimed six distinctive levels ranging from Achaemenid to Islamic times, but his analysis was immediately challenged by G. Tucci (pp. 143-47). Shortly thereafter, K. Schippmann (pp. 55-70) concluded that only Gullini's Sasanian dating was likely to be safe (Boucharlat, pp. 129-30; Besenval, pp. 137-38).

In response to Herzfeld's earlier claim that the art and architecture of Kuh-e Ḵᵛāja could be regarded as half Greek and half Eastern, D. Schlumberger (1970, p. 55) suggested that Kuh-e Ḵᵛāja's buildings and artwork belonged to a new eastern culture, which fused a Greco-Iranian syncretic style drawing on the heritage of Hellenism, the Achaemenids, and nomadic Iran (Schlumberger, 1970, p. 55). Schlumberger (1970, pp. 5-18, 53-60; 1983, pp. 1052-54) also dated Kuh-e Ḵᵛāja at the beginning of the Sasanian era.

In the winter of 1974-75, a restoration team, led by Faccenna, accidentally discovered a further fragment of wall painting in the south gate's inner chamber. In his report, Faccenna (pp. 84, 92-93) suggested a perhaps doubtful late Parthian date for the structure, and made the more arresting proposal of a

direct link between the painting's content and the ceremonies in the south gate. In his comprehensive survey of Sasanian stucco decoration, Kröger (pp. 35, 74, 133, 185, 226-7, 247, 257, 267) argued that for all Kuh-e Ḵ ͮāja stuccos an early Sasanian date is most likely.

Kawami (1987b) also highlighted the major Sasanian component in the sacred precinct's art and architecture. She partly based her findings on Herzfeld's field records that are today kept in the Freer Gallery of Art, Washington, D.C. Kawami ascribed the paintings in the south gate and the painted gallery to the Sasanian period rather than to the Parthian period. Style, proportions, dress, and coiffure of the stucco figures are all distinctly Sasanian in character, and one of them is probably a Sasanian king. The equestrian reliefs on the fire sanctuary's entrance facade also reflect Sasanian taste. Even though specific elements in the sacred precinct's architecture are indebted to classical architecture, Kawami (1987a, p. 154; 1987b, pp. 18-19, 22-23) argued that classical influences were not restricted to the Parthian period and persisted well into Sasanian times (cf. Schlumberger, 1983, pp. 1052-54). But neither her suggestion of an early Islamic date for the second construction phase in the sacred precinct (Kawami, 1987b, pp. 19, 24, 47; cf. Faccenna, p. 93, n. 18) nor her recent proposal—echoing Stein's early speculation—of the site's first function as Buddhist shrine (Kawami, 2005, pp. 181-215) seems persuasive.

Since1995, a team of the Iranian Cultural Heritage and Tourism Organization (ICHTO) has conducted several seasons of work at Kuh-e Ḵ ͮāja. As already mentioned, they uncovered two paintings in the north gate's immediate vicinity, but also traces of a stone staircase in the gallery's east side. M. Mousavi (p. 84) speculated whether the staircase predated the gallery and suggested for the sacred precinct two construction phases, in the late Parthian and the Sasanian period, respectively.

The author's studies of Kuh-e Ḵ ͮāja (Ghanimati, 2000 and 2001) have recently drawn special attention to the unresolved issues of chronology and function. In particular, she considers C14 samples, taken from two chronologically distinct contexts within the sacred precinct and tested in the Lawrence Berkeley National Laboratory in 1998 (Ghanimati, 2000, p. 145). A sample of organic construction materials from the gallery's ceiling yielded a date of 80-240 CE (plus/minus 50 years). A sample of the tamarisk pegs, which were used for the stucco reliefs on the fire sanctuary's entrance facade, provided a date of 540-650 CE (plus/minus 50 years).

CHRONOLOGY

These radiocarbon dates, in connection with the already mentioned chronological evidence, indicate that an early Sasanian phase of monumental construction was supplemented by an important phase of remodeling within the last century of Sasanian rule. Moreover, in the spring of 1998, part of the entry terrace floor suddenly collapsed, and a still older mudbrick structure was revealed. Just on the basis of this evidence Kuh-e Ḵᵛāja underwent at least three separate stages of construction: (1) a relatively modest, late Parthian building activity; (2) the all-important first phase of Sasanian construction; and (3) an almost equally significant, late Sasanian phase, during which the stucco reliefs were added to the facade of the fire sanctuary, and other substantial changes affected in particular the immediate vicinity of the central court. It is noteworthy that Kuh-e Ḵᵛāja's vaulted mudbrick architecture is consistent—for all its sometimes innovative qualities—with both construction techniques and design elements of the Sasanian period, thus supporting the chronological testimony of paintings, stucco elements, and C14 results

It seems possible (Ghanimati, 2000, pp. 144-45), if certain overarching historical perspectives are given due weight, that the first Sasanian building plan was initiated by Ardašir I (d. 241/42) and completed by Šāpur I (r. 241/42-270/72). For it appears probable that the architectural development and formation of the sacred precinct was a gradual process that occurred under the patronage of several pious kings. This speculation is based on two recent coin finds in the gallery's vicinity, though these finds have not yet been officially published. The more legible coin seems, according to the available photographs, a silver drachm (see Album et al., p. 17; see also SASANIAN COINAGE). The obverse depicts the bust of the king facing right, and his crown identifies him as Šāpur II (r. 309-79; cf. Frye, 1983a, p. 135, fig. 1; Göbl). But the legends are illegible. On the reverse, two attendants flank the fire holder, whose base is not fully preserved (Plate III). Even though no information on mint or year is available, the coin may have been minted in Sistān (Mochiri, II, pp. 135-37). Finally, the architectural details of the site's remodeled areas are consistent with the building style of the late Sasanian period (Schippmann, p. 67; Duchesne-Guillemin, p. 67; Kröger, p. 257; Kawami, 1987b, pp. 38, 40; Boucharlat and Lecomte, pp. 51-57, 64-72).

FUNCTION

A number of previously mentioned possibilities can be ruled out as the overall

function of Kuh-e Ḵᵛāja. If the identification of Mount Ušiδam with Kuh-e Ḵᵛāja is correct, the location of a Buddhist monastery on a holy Zoroastrian site seems unlikely (Bulliet, pp. 140-45; Boyce and Grenet, pp. 149-51; Duchesne-Guillemin, pp. 165-69; Emmerick; Ghanimati, 2000, pp. 140-41; 2001, pp. 131-33, 150-55; Gnoli, 1980, pp. 183-84). In addition, the plan of the sacred precinct does not show the range of appointments— such as audience hall, the royal ladies' sleeping quarter, baths, kitchens and guard rooms—appropriate for the residence of an important royal ruler and his entourage. Together with the author's chronological considerations, this circumstance militates against Herzfeld's contention that Gondophares had his seat at Kuh-e Ḵᵛāja, and invalidates his interpretation of the sacred precinct as a palace-temple.

The true function of Kuh-e Ḵᵛāja's buildings seems to be related to the site's holiness. Even though no written records document the buildings' uses, the surviving archeological remains seem to illuminate the situation. The sacred precinct's most sanctified part shelters the square domed cella where the fire holder was discovered (Huff, 1990; Boyce, 1975; 1989c; 1989a; cf. Erdmann, pp. 22-37; Gropp, pp. 150-70; Monneret de Villard, 1935-36, pp. 176-84; Wikander, pp. 58, 101). A roofed ambulatory surrounded the cella allowed for ritual circumambulation and other ceremonies (Herzfeld, 1941, p. 302; Bernard, p. 510; Stronach, pp. 618-27). The remaining appointments of the sacred precinct include a domed chamber immediately adjacent to a reinforced portion of the outer wall, which appears as a second unit perhaps associated with the fire's safekeeping, as well as open courts, covered galleries, and passageways. Though this plan does not exactly correspond with that of any other extant Iranian temple, Zoroastrian temples show a range of architectural plans, probably because each temple had to reconcile a specific set of local requirements with the demands of Zoroastrian ritual (Marshall, pp. 85-90; Monneret de Villard, 1938-39; Schlumberger, 1970, pp. 53-59; Gropp, pp. 150-70; Schippmann, pp. 177, 185, 266, 492, 494, n. 120; Duchesne-Guillemin, pp. 64-69, 159-70; Boyce, 1975b, pp. 461-65; Boyce and Grenet, pp. 287-89; Bernard, pp. 507, 518; Ghanimati, 2001, pp. 147-52, 191-99). The author (2000, p. 142-44) has suggested that the sacred precinct was designed to meet the requirements of a Zoroastrian school for priests (*hērbedestān*).

The whole built environment at Kuh-e Ḵᵛāja suggests a place of pilgrimage (Boyce, 1982, pp. 278-79; 1992, pp. 4, 182-85; Boyce and Grenet, pp. 147-51). Worshippers had to pass through the tightly packed residential area of the lower town before entering the well-ordered religious precinct on a higher

level. They could assemble in the central court before moving past the fire sanctuary and through the monumental north gate towards the summit (Boyce, 1975a, pp. 166-77; Boyce, 1968, pp. 52-53; Ghanimati, 2001, pp. 183-93). This interpretation is further supported by the documented practice of animal sacrifices at open air sanctuaries until modern times (Boyce, 1982, pp. 180-81; Boyce and Grenet, pp. 75, 202, 301). Priests officiated over these rituals, which also involved a ceremonial procession.

SIGNIFICANCE

Perhaps the most impressive feature of Kuh-e Ḵᵛāja is its enduring sanctity. Nothing is known about the mountain and Hāmun Lake in pre-Zoroastrian times (Gnoli, 1980, p. 71, n. 80), but their significance in Zoroastrian lore is well documented (Boyce, 1975a, pp. 145, 274, 282; Gnoli, 1980, pp. 68, 129; cf. Ghanimati, 2001, pp. 167-95). As mentioned above, scholars have identified Kuh-e Ḵᵛāja as Mount Ušiδam (Gnoli, 1980, pp. 68-70, 129-38), which can be found in several places in the Avesta. The area of Hāmun Lake is named in other Zoroastrian texts, such as the *Vendidād*, as one of the lands created by Ahura Mazdā (Boyce, 1975a, p. 274-75; Gnoli, 1980, pp. 59, 63, 129-38). The waters of the Hāmun Lake were believed to guard the divinely preserved seed of Zoroaster from which the Saošyant would be born (Duchesne-Guillemin, p. 150; Boyce, 1975a, p. 282). There is a reference to the apocalyptic legend of Saošyant in *Yašt* 19.89. The Saošyant is often called victorious (Av. *vərəθragan-*), and his coming is accompanied by the resurrection of the dead and the last judgment (Duchesne-Guillemin, pp. 229-35; Boyce and Grenet, pp. 451-56).

Scholars have suggested that the Zoroastrian priests of Sistān played an important role in the development of Zoroastrian eschatology and Avesta transmission, and presumably respected scholar-priests lived in this area (Boyce, 1975a, p. 274-75; 1982, pp. 128-31; 1992, pp. 4-10, n. 35; Boyce and Grenet, pp. 121-24; Gnoli, 1977; 1980, pp. 59-65, 129-38; cf. also *Pahlavi Texts* II, pp. 25-26; Gershevitch, pp. 1-29). Thus, it seems plausible that the isolated rock of Kuh-e Ḵᵛāja, emerging from Lake Hāmun, was endowed with exceptional religious significance (Gnoli, 1980, p. 135; Boyce, 1975a, pp. 277-85; 1984, p. 39; 1992, pp. 4-10, n. 35). M. Boyce and F. Grenet (pp. 150-51, cf. Boyce, *1982*, pp. 278-79; 1992, pp. 4-10, 182) have argued that throughout the Achaemenid, Parthian and Sasanian periods each year Zoroastrians conducted a pilgrimage to Kuh-e Ḵᵛāja, once the eschatological myth of Saošyant and Lake Hāmun was accepted. Presumably, pilgrims worshipped and prayed on the bare mountain top, while watching over the holy lake. (For the site's associations with other

myths and divinities, such as the god Žun, see Marquart and de Groot; Bosworth, pp. 34, 91; Scarcia, pp. 755-64; Boyce, 1975a, pp. 145, 274, 282; Frye, 1975, pp. 45-77; Gnoli, 1980, pp. 70, 129, 149; Sajjādi, p. 243; Yarshater; Utas, pp. 259-67).

The fame of Kuh-e ḵᵛāja seems to have reached lands beyond Iran, if one accepts the above-mentioned identification of the mountain as Mons Victorialis, mentioned in a 4th-century commentary on the Gospel of Matthew, though the commentary is incomplete and of disputed authorship (Boyce and Grenet, p. 448). This identification is disputed, because the site has no caves, trees, or springs of water. Nevertheless, it seems probable because Kuh-e Ḵᵛāja is in Persia and belonged to the most renowned places of Zoroastrian pilgrimage (Duchesne-Guillemin, pp. 17, 167-68, 229; Boyce and Grenet, pp. 451-52, esp. n. 447). It would appear at all events logical to assume that Zoroastrian priests kept watch on Kuh-e Ḵᵛāja for the coming of the Saošyant (Boyce, 1975a, pp. 234, 282-93).

Today, Kuh-e Ḵᵛāja draws large numbers of Muslim pilgrims, especially at Nowruz. Indeed, the region's inhabitants still cherish stories of saints and heroes associated with Kuh-e Kᵛāja over the centuries. The summit is marked by a solitary stone block, ca. 1 m in height, that stands but a short distance from the reputed tomb of the Ḵᵛāja (Plate IV). The stone is considered part of the Islamic tomb, and pilgrims leave offerings at its base. The practice seems to recall animal sacrifices that ancient Iranians, as well as ancient Arabs, regularly offered. Historical records show that animal sacrifices were practiced throughout the Achaemenid, Parthian and Sasanian periods. These rituals remained important in Zoroastrianism, as well as in Islam, and their observance has continued until modern times (Duchesne-Guillemin, pp. 76-78; Boyce, 1975a, pp. 147-77, 168-77, 214-20; Gnoli, 1980, pp. 150, n. 163, 152, 181, 228; see SACRIFICE i. In Zoroastrianism).

BIBLIOGRAPHY

I. Afshar, *Negāhi be Sistān o Balučestān*, Tehran, 1984.

Stephen Album, Michael L. Bates, and Willem Floor, “Coins and Coinage,” in

EIr. VI, 1993, pp. 14-41; available at https://www.iranicaonline.org/articles/coins-and-coinage-.

M. Azarnoush, *The Sasanian Manor House at Hajiabad, Iran*, Florence, 1994.

G. Azarpay, *Sogdian Painting: The Pictorial Epic in Oriental Art,* Berkeley, 1981.

Idem, "The Development of the Arts in Transoxiana," in *Camb. Hist. Iran* III(2), 1983, pp. 1130-48.

Idem, "Art in Iran vi. Pre-Islamic Eastern Iran and Central Asia," in *EIr*. II, 1987, pp. 595-603; available at https://www.iranicaonline.org/articles/art-in-iran-vi-pre-islamic-eastern-iran-and-central-asia.

H. W. B[ailey], Review of *Archaeological History of Iran* by E. Herzfeld, *BSOS* 8, 1937, pp. 1154-55.

P. Bernard, "L'Aornos Bactrien et L'Aornos Indien: Philostrate et Taxila – Géographie, mythe et réalité," *Topoi orient-occident* 6, 1996, pp. 475-519.

R. Besenval, *Technologie de la voûte dans l'orient ancien*, 2 vols., Paris, 1984.

A. D. H. Bivar, "The History of Eastern Iran," in *Camb. Hist. Iran* III(1), 1983, pp. 181-231.

Idem, "Cosmopolitan Deities & Hellenistic Traces at Kuh-e Khwaja in Sistan," in *Religious Theme and Texts of Pre-Islamic Iran and Central Asia: Studies in Honour of Professor Gherardo Gnoli on the Occasion of his 65th Birthday on 6th December 2002*, ed. Carlo G. Cereti, Mauro Maggi, and Elio Provasi, Wiesbaden, 2003, pp. 1-5.

C. E. Bosworth, *Sistan under the Arabs: From the Islamic Conquest to the Rise of the Saffarids (30-250/651-864),* Rome 1968.

R. Boucharlat, "Monuments religieux de la perse achéménide: Etat des questions," in *Temples et sanctuaries: Séminaire de recherché 1981-1983,* ed. G. Roux, Paris, 1984, pp. 119-35.

R. Boucharlat and O. Lecomte, *Fouilles de Tureng Tepe: Les périodes sassanides et islamiques*, Paris, 1987.

M. Boyce, "On the Sacred Fires of the Zoroastrians," *BSOAS* 31, 1968, pp. 52-68.

Idem, *A History of Zoroastrianism*, vol. I, Leiden, 1975a.

Idem, "On the Zoroastrian Temple Cult of Fire," *JAOS* 95, 1975b, pp. 454-565.

Idem, *A Persian Stronghold of Zoroastrianism*, Oxford, 1977.

Idem, *A History of Zoroastrianism*, vol. II, Leiden, 1982.

Idem, *Textual Sources for the Study of Zoroastrianism*, Chicago, 1984.

Idem, "Ātaš," in *EIr.* III, 1989a, pp. 1-5; available at https://www.iranicaonline.org/articles/atas-fire.

Idem, "Ātašdān," in *EIr.* III, 1989b, pp. 7-9; available at https://www.iranicaonline.org/articles/atasdan-fire-holder.

Idem, "Ātaškada," in *EIr.* III, 1989c, pp. 9-10; available at https://www.iranicaonline.org/articles/ataskada-new-persian-house-of-fire-mid.

Idem, *Zoroastrianism: Its Antiquity and Constant Vigour*, Costa Mesa, Calif., 1992.

Mary Boyce and Frantz Grenet, *A History of Zoroastrianism*, vol. III, Leiden, 1991.

R. Bulliet, "Naw Bahar and the Survival of Iranian Buddhism," *Iran* 14, 1976, pp. 140-45.

Jamsheed K. Choksy, "ZOROASTRIANISM ii. Historical Review: from the Arab Conquest to Modern Times," Encyclopædia Iranica, online edition, 2015; available at https://www.iranicaonline.org/articles/zoroastrianism-02-arab-conquest-to-modern.

J. Duchesne-Guillemin, *Religion of Ancient Iran,* Bombay, 1973; orig., *La religion de l'Iran ancien*, Paris, 1962.

R. E. Emmerick, "Buddhism among Iranian Peoples," in *Camb. Hist. Iran* III(2), 1983, pp. 949-64.

Idem, "Buddhism i. In Pre-Islamic Times," in *EIr.* IV, 1990, pp. 492-96; available at https://www.iranicaonline.org/articles/buddhism-i.

K. Erdmann, *Das iranische Feuerheiligtum*, Leipzig, 1941; repr., Osnabrück, 1969.

R. Ettinghausen, *From Byzantium to Sasanian Iran and the Islamic World: Three Modes of Artistic Influence*, Leiden, 1972.

D. Faccenna, "A New Fragment of Wall Painting from Ghaga Sahr (Kuh-i Hvaga – Sistan, Iran)," *East and West* 31, 1981, pp. 83-97.

W. B. Fisher, "Physical Geography," in *Camb. Hist. Iran* I, 1968, pp. 3-110.

R. Frye, *The Golden Age of Persia: The Arabs in the East,* London, 1975.

Idem, *The History of Ancient Iran,* Munich, 1983a.

Idem, "The Political History of Iran under the Sasanians," in *Camb. Hist. Iran* III(1), 1983b, pp. 116-80.

H. Gaube, *Iranian Cities*, New York, 1979.

N. Garsoïan, "Byzantium and the Sasanians," in *Camb. Hist. Iran* III(1), 1983, pp. 568-92.

I. Gershevitch, "Approaches to Zoroaster's Gathas," *Iran* 33, 1995, pp. 1-29.

S. Ghanimati, "New Perspectives on the Chronological and Functional Horizons of Kuh-e Khwaja in Sistan," *Iran* 38, 2000, pp. 137-50.

Idem, "Kuh-e Khwāja: A Major Zoroastrian Temple Complex In Sistān," Ph.D. diss., University of California, Berkeley, 2001.

R. Ghirshman, *Iran: From the Earliest Times to the Islamic Conquest*, Harmondsworth, Middlesex,1954, pp. 318-41; tr. of *L'Iran: Des origines à l'Islam*, Paris, 1951.

G. Gnoli, "More on the Sistanic Hypothesis," *East and West* 27, 1977, pp. 309-320.

Idem, *Zoroaster's Time and Homeland: A Study on the Origins of Mazdeism and Related Problems,* Naples, 1980.

A. Godard, “L’origine de la madrasa, de la mosquée et du caravansérail à quatre iwans,” *Ars Islamica* 15/16, 1951, pp. 1-9.

Idem, *Ṭāqhā-ye Irāni*, tr. K. Afšar, Tehran, 1990.

R. Göbl, “Sasanian Coins,” in *Camb. Hist. Iran* III(1), 1983, pp. 322-39.

G. Gropp, “Funktion des Feuertempels der Zoroastrier,” *AMI* NF 2, 1969, pp. 147-75.

G. Gullini, *Architettura iranica dagli Achemenidi ai Sasanidi: Il “palazzo” di Kuh-i Kwagia (Seistan)*, Turin, 1964.

Idem, *Architettura Iranica dagli achemenidi ai sasanidi: Il palazzo di Kuh-i Kwagia, Seistan*, Rome 1966, pp. 143-47.

J. Hansman and D. Stronach, “Excavations at Shahr-i Qumis, 1971,” *JRAS*, 1974, pp. 8-22.

P. O. Harper, *The Royal Hunter: Art of the Sasanian Empire,* New York, 1978.

Herodotus, *Histories*, tr. A. D. Godley, 4 vols., Cambridge, Mass., 1920-25; repeatedly reprinted.

E. Herzfeld, “Sakastān: Geschichtliche Untersuchungen zu den Ausgrabungen am Kūh-i Khwādja,” *AMI* 4, nos. 1-2, 1931-32, pp. 1-116 with 3 maps.

Idem, *Iran in the Ancient East*, New York, 1941.

R. Hillenbrand, “Architecture,” in *The Arts of Persia*, ed. R. W. Ferrier, New Haven, Conn., 1989, pp. 81-109.

D. Huff, “Architecture iii. Sasanian,” in *EIr.* II, 1987, pp. 329-34; available at https://www.iranicaonline.org/articles/architecture-iii.

Idem, “Čahārṭāq i. In Pre-Islamic Iran,” in *EIr.* IV, 1990, pp. 634-38; available at https://www.iranicaonline.org/articles/cahartaq.

Idem, “Fertigteile im Iranischen Gewölbebau,” *AMI*, N.F. 23, 1990, pp. 145-60.

H. Humbach and J. H. Elfenbein, *Ērbedestān: An Avesta-Pahlavi Text,* Munich, 1990.

M. b. Ḥasan Ibn Isfandiyār [Ebn Esfandiār], *The Letter of Tansar*, tr. M. Boyce, Rome, 1968, pp. 17, 21, 67.

T. S. Kawami, *Monumental Art of the Parthian Period in Iran*, Leiden, 1987a, Appendix II: Kuh-e Xwaja, pp. 153-55.

Idem, "Kuh-e Khwaja, Iran, and its Wall Paintings: The Records of Ernst Herzfeld," *Metropolitan Museum Journal* 22, 1987b, pp. 13-52.

Idem, "Ernst Herzfeld, Kuh-e Khwaja, and the Study of Parthian Art," in *Ernst Herzfeld and the Development of Near Eastern Studies, 1900-1950*, ed. A. C. Gunter and S. R. Hauser, Leiden, 2005, pp. 181-214.

E. J. Keall, "Qalʿeh-i Yazdigird," *Iran* 14, 1976, pp. 161-64.

Idem, "Qalʿeh-i Yazdigird. The Question of its Date," *Iran* 15, 1977, pp. 1-9 with 12 pls.

W. Kleiss, "Capitals," in *EIr.* IV, 1990, pp. 774-80; available at https://www.iranicaonline.org/articles/capitals.

Idem, "Castles," in *EIr.* V, 1992, pp. 65-70; available at https://www.iranicaonline.org/articles/castles.

Idem, "Columns," in *EIr.* VI, 1993a, pp. 50-54; available at https://www.iranicaonline.org/articles/columns-architectural.

Idem, "Construction Materials and Techniques in Persian Architecture," in *EIr.* VI, 1993b, pp. 217-19; available at https://www.iranicaonline.org/articles/construction-materials-and-techniques-in-persian-architecture.

R. Krautheimer, *Early Christian and Byzantine Architecture*, Harmondsworth, Middlesex, 1965.

J. Kröger, *Sasanidischer Stuckdekor: ein Beitrag zum Reliefdekor aus Stuck in sasanidischer und frühislamischer Zeit nach den Ausgrabungen von 1928/9 und 1931/2 in der sasanidischen Metropole Ktesiphon (Iraq) und unter besonderer Berücksichtigung der Stuckfunde vom Taht-i Sulaiman (Iran), aus Nizamabad (Iran) sowie zahlreicher anderer Fundorte*, Mainz, 1982.

B. A. Litvinskii, "Ajina Tepe," in *EIr.* I, 1985, pp. 703-5; available at

https://www.iranicaonline.org/articles/ajina-tepe-the-present-day-name-of-the-mound-covering-the-ruins-of-an-early-medieval-buddhist-monastery-sarigharama.

B. Lovett, “Narrative of a Visit to the Kuh-i-Khwajah in Sistan,” *Journal of the Royal Geographical Society of London* 44, 1874, pp. 145-152.

J. Marquart and J. J. M. de Groot, “Das Reich Zābol und der Gott Ûun vom 6.-9. Jahrhundert,” in *Festschrift Eduard Sachau: Zum siebzigsten Geburtstage gewidmet von Freunden und Schülern*, ed. G. Weil, Berlin, 1915, pp. 248-92.

J. Marshall, *A Guide to Taxila*, 4th ed., Cambridge, 1960; 1st ed., Calcutta, 1918.

J. Matthews, *The Roman Empire of Ammianus*, Baltimore, Md., 1989.

J. Mirsky, *Sir Aurel Stein: Archaeological Explorer,* Chicago, 1977.

M. I. Mochiri, *Etudes de numismatique iranienne sous les sassanides et arab-sassanides*, 2 vols, Tehran, 1972-77; rev. ed., Leiden, 1983.

J. J. Modi, *The Religious Ceremonies and Customs of the Parsees*, 2nd ed., Bombay 1937; 1st ed., Bombay, 1922.

U. Monneret de Villard, “The Fire Temples,” *Bulletin of the American Institute for Persian Art and Archaeology* 4, 1935-36, pp. 175-84.

Idem, “The Iranian Temple of Taxila,” in A. U. Pope and P. Ackerman, eds., *A Survey of Persian Art from Prehistoric Times to the Present* I, London, 1938-39, pp. 445-48.

Moqaddasi, *Aḥsan al-taqāsim fi maʿrefat al-aqālim*, tr. into Persian by ʿA. N. Monzawi, 2 vols., Tehran, 1982, esp. II, pp. 442, 482, 488, and 724.

M. Mousavi, “Kuh-e Khadjeh: Un complexe religieux de l’est iranien,” *Dossiers d’archéologie* 1999, no. 243, pp. 81-84.

R. Naumann, “Takht-i Suleiman and Zindan-I Suleiman: Various Excavations in 1959” in *Survey of Persian Art,* XIV, pp. 3050-60.

Idem, “Takht-i Sulaiman,” *Iran* 13, 1975, pp. 188-90.

[*Pahlavi Texts*] J. M. Jamasp-Asana, ed., *The Pahlavi Texts Contained in the*

Codex MK, 2 vols., Bombay, 1897-1913.

M. Rahbar, "Découverte d'un monument d'époque sassanide à Bandian, Dargaz (Nord Khorassan): Fouilles 1994 et 1995," *Stud. Ir.* 27, 1998, pp. 213-50.

Idem, "Découverte de panneaux de stucs sassanides à Dargaz (Khorasan)," *Dossiers d'Archeologie*, 1999, no. 243, pp. 62-65.

D. T. Rice, *The Great Palace of The Byzantine Emperors*, 2 vols., Edinburgh, 1947, 1958.

M. Roaf and D. Stronach, "Tepe Nūsh-i Jān, 1970: Second Interim Report," *Iran* 11, 1973, pp. 129-40.

J. R. Russell, "On Mysticism and Esotericism among the Zoroastrians," *Ir. Stud.* 26, 1992, pp. 73-94.

M. Sajjādi, *Bāstānšenāsi va tāriḵ-e Balučestān*, Tehran, 1995.

G. Scarcia, "Kūh-e Khwāgè: Forme attuali del mahdismo iranico," *Oriente moderno* 53, no. 9, 1973, pp. 755-64.

D. Schlumberger, *L'Orient hellénisé: L'art grec et ses héritiers dans l'Asie non-méditerranéenne*, Paris, 1970.

Idem, "Parthian Art," in *Camb. Hist. Iran* III(2), 1983, pp. 1027-54.

K. Schippmann, *Die iranischen Feuerheiligtümer*, Berlin, 1971.

R. Schmitt, "Drangiana," in *EIr.* VII, 1996, pp. 535-37; available at https://www.iranicaonline.org/articles/drangiana.

A. Sh. Shahbazi, "Byzantine-Iranian Relations," in *EIr.* IV, 1990, pp. 588-99; available at http://www.iranicaonline.org/articles/byzantine-iranian-relations.

M. Shokoohy, "Two Fire Temples Converted to Mosques in Central Iran," in *Papers in Honor of Professor Mary Boyce*, ed. J. Duchesne-Guillemin and P. Lecoq, Leiden, 1985, pp. 545-71.

A. Stein, *Innermost Asia: Detailed Report of Explorations in Central Asia, Kan-Su, and Eastern Iran, Carried Out and Described under the Orders of H. M. Indian Government,* 4 vols., Oxford, 1928.

D. Stronach, “On the Evolution of the Early Iranian Fire Temple,” in *Papers in Honor of Professor Mary Boyce*, ed. J. Duchesne-Guillemin and P. Lecoq, Leiden, 1985, pp. 605-27.

A. Tajwidi, “Sahm-e meʿmāri-e irāni dar peydāyeš-e meʿmāri-e eslāmi dar qorun-e awāliya-ye hejri,” in *Meʿmāri-e Iran*, ed. A. Jawadi, 2 vols., Tehran, 1984, pp. 173-77.

Tāriḵ-e Sistān, ed. M. T. Bahār, Tehran, 1935.

G. P. Tate, *Seistan: A Memoir on the History, Topography, Ruins, and People of the Country*, 1st ed., Quetta, 1910.

M. Tosi, *Prehistoric Sistan*, Rome, 1983.

G. Tucci, Review of *Architettura Iranica dagli achemenidi ai sasanidi* by G. Gullini, *East and West* 16, 1966, pp. 143-47.

P. Varjavand, “Estemrār-e honar-e meʿmāri va šahrsāzi-e Iran-e piš az Eslam dar dowrān-e eslāmi,” in *Meʿmāri-e Iran*, 2 vols., ed. A. Jawadi, Tehran, 1984, pp. 163-71.

B. Utas, “The Pahlavi Treatise Avdēh u Sahīkēh ï Sakistān or ‘Wonders and Magnificence of Sistan’,” *Acta antiqua Academiae scientiarum hungaricae* 28, 1983, pp. 259-67.

S. Wikander, *Feuerpriester in Kleinasien und Iran*, Lund, 1946.

E. Yarshater, “Iranian National History,” in *Camb. Hist. Iran* III(1), 1983, pp. 359-477.