

# BAYḌĀ DOCUMENTATION PROJECT

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The objective of the project is to document all features in an area of Bayḏā that stretches from the highway in the east to (but not including) Siq al-Bārid in the west, and from Siq al-Imṭi in the north to the wadi in the south (Fig. 1). The strategy for documenting features consists of minimal clear-

ance, mainly of windblown sand and other late debris, in order to define major installations so that they can be mapped and described. Only in a few instances has excavation been undertaken.

In the autumn of 2004<sup>1</sup>, the focus was on a series of bedrock outcrops and an open area in what



1. View of the study area, IKONOS satellite image by Space Imaging.

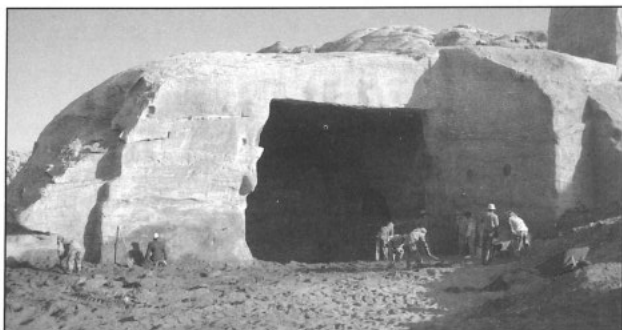
1. A report on the Fall 2003 and Spring 2004 seasons of the project will appear in the proceedings of the ninth confer-

ence on the Studies in the History and Archaeology of Jordan (Petra 2004). See also Bikai 2003, 2004a-c.

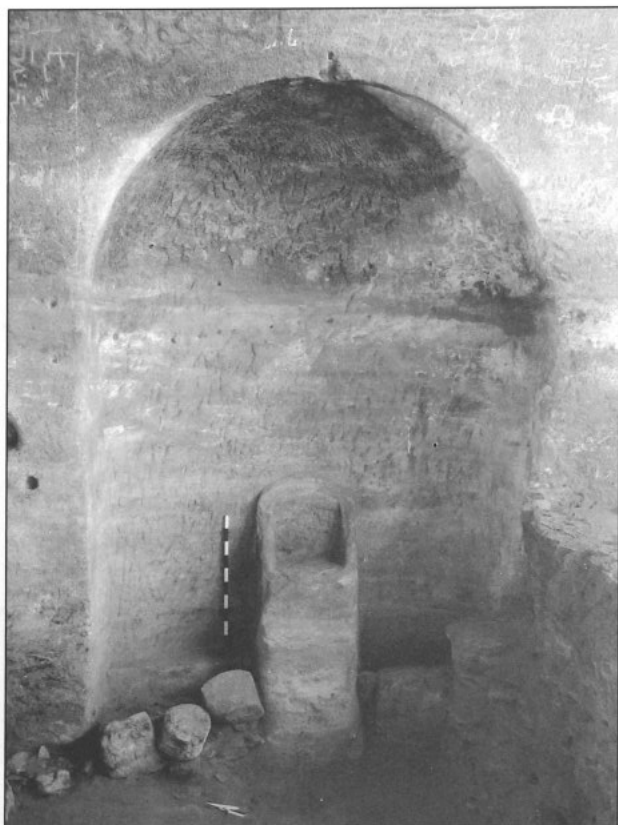
is called Khirbat al-Bayḍā. In this area are two large Nabataean halls cut into bedrock, Nabataean tombs, at least one cistern, and, nearby, numerous walls indicating habitation. Some of the habitation areas were tested and found to be very similar in that they all appear to be from late antiquity, i.e., perhaps mid-second millennium AD. The structures are poorly built but are so regularly laid out they may have all been constructed at one time, perhaps to accommodate agricultural workers or the like.

Nabataean constructions into bedrock are in evidence nearby but have suffered in recent years as they were used as animal pens, probably beginning in the era of the medieval houses, but continuing up to the present. The largest of these Nabataean rock-cut halls (7.60 x 8.70 x 7.60m high, **Fig. 2**) was cleared and it was found to have been reconfigured as a church in the Byzantine period. The modifications included the cutting of an apse, which included a bishop's chair, into the eastern wall of the chamber (**Fig. 3**). Finally, just east of Siq al-Imṭī, a rock-cut cistern was documented (**Fig. 4**). This cistern is known locally as Bir al-'Arāyis (Cistern of the Brides). It was cleared of debris by Diana Kirkbride while she was working at Neolithic al-Bayḍā in the 1950s and was cleared again by GTZ in recent times. With a capacity of 1075 cubic meters, it is the largest enclosed cistern in the region.

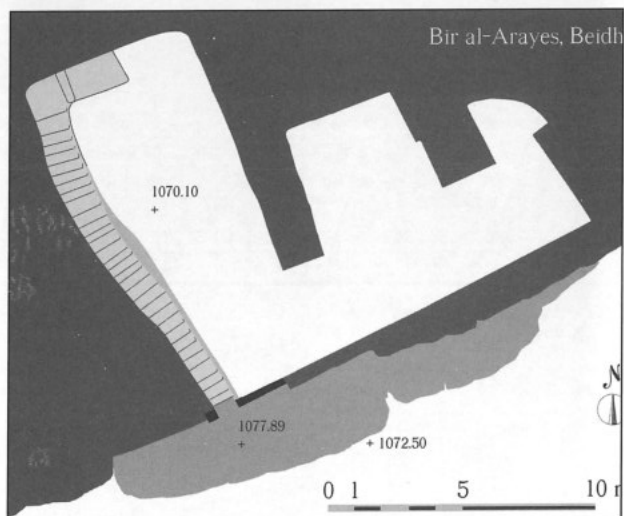
The fourth season in the spring of 2005, began with the documentation of features in the western part of the study area. In that sector more buildings of the medieval period were identified, as were installations cut into bedrock that included two wine presses, two cisterns, and large water channels. These water channels may have been connected to the main water system coming from the east on aqueducts. Finally, in the area are two rooms cut into bedrock. The larger of these is perhaps a Nabataean triclinium but this was not confirmed. Various nearby niches and installations were also documented, including a room cut in the cliff facing Siq al-Bārid.



2. Nabataean hall (Locus 310), (photo by Patricia M. Bikai).



3. Apse and bishop's chair cut into Locus 310 (photo by Patricia M. Bikai).



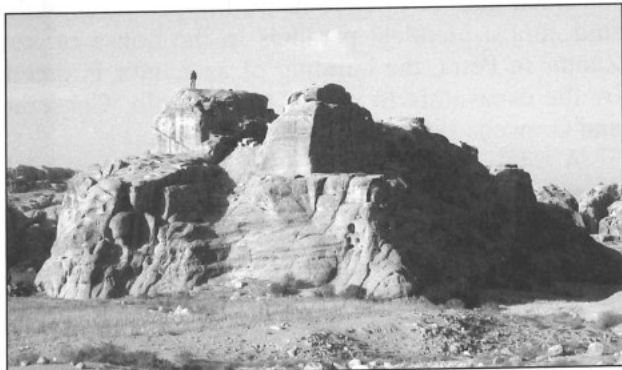
4. Plan of the cistern known locally as the Cistern of the Brides (plan by Chrysanthos Kanellopoulos).

Work then shifted to a high bedrock promontory on the eastern side of the study area. On the east end of this outcrop are two flattened areas on either side of a depression that is partially natural and partially excavated from the sandstone. Taken as a whole (the two flattened areas and the depression), the area measures 14.80 x 28m. The promontory slopes down to the west.

Near the base of that slope, clearance of a wall revealed remains of a massive portal leading to a complex above. The thick wall of the entry was secured to the bedrock with L-shaped cuts, a construction technique evident in several locations on the knoll. A large socle suggested the substantial size of the door. Inside the gate and some distance uphill, a small sounding uncovered smoothly finished white flagstones that probably had once paved the entire length of the ramped/stepped pathway that proceeded eastwards and upwards, climbing a height of ca. 8m. The size of the flagstones ranged from 44 to 61cm in length and from 32.5 to 43cm in width. They were set at a slightly oblique angle to the massive retaining wall (1.20-1.60m thick) that defined the pathway's north side.

At the top and east end of the promontory, the team excavated the depression between the two rock-cut squared projections which distinguish the knoll's east side (Fig. 5). The top edge of the depression had been cut to carry arch springers for a vaulted cryptoporticus that originally may have measured more than 20m in length. Due to the dangerous slope on the promontory's east side, the excavation team could not clear the entire length of the rectangular space. Cuts on the bedrock, however, suggest that a vault covered the entire space.

The north wall of the cryptoporticus was cut from bedrock, whereas the south wall was the natural rock face; the maximum width of this space is 3.65m. The floor of the cryptoporticus was created from cut bedrock and hard-packed sandstone fill. A natural crevice in the center of the depression had been filled with sandstone rubble and earth to create a level floor surface ca. 2.5m below the level of the springers. A 1.5m deep sounding into this rubble fill did not determine the depth of the crevice and no artifacts were found to help date the construction.



5. Sandstone outcrop at the eastern end of the study area (the promontory), the floor of the original building was at the level where the person is standing, the building materials including the capitals, were found in the notch between the two sections of bedrock (photo by Shari Saunders).

Likely, the creation of the floor was contemporaneous with a rock-cut basin located in the north wall since the basin is at an appropriate height from the floor for use as a watering station for pack animals. A tethering hole on its left side suggests this purpose. The basin (76 x 74 x 44cm) could hold ca. 80 liters of water, although 64 liters is a more realistic amount. Such an amount would be sufficient to water a few animals each day as a mature horse requires 30-45 liters of water per day. The basin was filled manually as there is no evidence of a channel to feed it from another source. Directly to the east of the basin is a tall plastered niche with a shallow basin cut in the bottom. This niche may be a manger. Four rock-cut holes in the upper sides of this niche are reminiscent of the construction of horse stalls at Mampsis (Negev 1971: 166-171). The two wooden beams that fit into these holes may have served as hitching rails for horses or donkeys. This basin, however, is rather low (ca. 35cm) for a manger, as it should be ca. 1m high for mature horses. Both the basin and the manger were finished with white plaster and combined suggest that this was a way station for animals that had carried materials for the original construction or goods for use while the building was occupied.

Large, irregularly shaped boulders capped the sandstone fill of the floor where a wall (Locus 442) was built across the cryptoporticus. This cross wall (3.36 x 0.58 x 2.22m) had a door in its first phase of construction. Later, the door was blocked with a mixture of cut blocks, small stones, a recycled doorjamb and a tethering stone. The period of time between construction and blocking may have been quite short as the method of construction is very similar. It has not been determined if the foundation of boulders is contemporaneous with the construction of the floor or if the floor was dug out in this area at a later date so that the boulders could be laid. The wall may have been constructed to support a weakened arch or it may have been intended simply to divide the space of the cryptoporticus.

The cross wall defined two areas of excavation. Within centimeters of the surface, column drums appeared on both sides of the wall. The fill to the east of the wall (Locus 446) was more than 2.5m deep and composed almost entirely of architectural fragments: column drums, capital and cornice fragments and a few ashlar. Six different mason's marks were inscribed on the exterior edge of six column drums. With the exception of a few iron nails, a hinge and wood dowels, no small finds were unearthed. On the west side of the cross wall, the fill (Locus 441) included fewer column drums (25% of the total) and significantly more ashlar



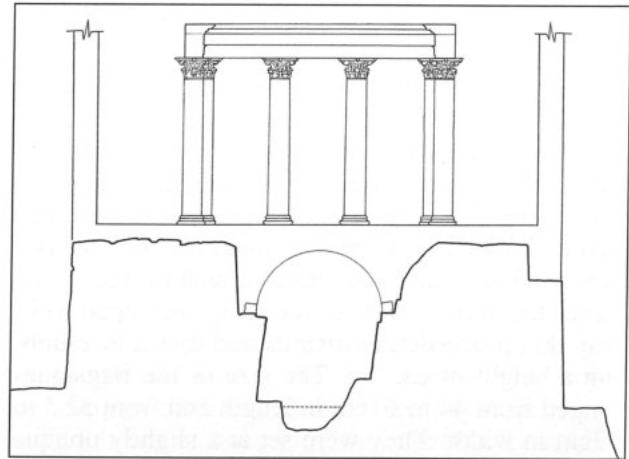
(82% of the total) as the excavation moved westwards towards the entry of the cryptoporticus. Here the deposition of architectural fragments was only ca. 1.5m deep as it lay on a 0.80m thick layer of hard-packed, wind-blown soil that had accumulated against the cross wall. Both layers of fill were compacted and the stones found there were covered with an accretion, suggesting that the cross wall also caused rainwater to collect in this area.

In only two instances in Loci 446 and 441 did two or three column drums fall in a line; in all other instances, the fill was a jumbled deposit that appeared to represent one deposition event. The insignificant numbers of ashlars and the absence of column bases and architraves suggest that this deposit is not the result of natural destruction, such as an earthquake, that would have brought all architectural elements tumbling down. Rather, the jumbled and selective nature of the fill suggests human dismantling of the building with some elements discarded into the collapsed cryptoporticus and some elements removed for reuse at another location. The thick layer of wind-blown soil on the west side of the cross wall indicates that the building was dismantled after the cryptoporticus had fallen into disuse and its entry was open to the weather.

The architectural elements recovered from the vaulted infrastructure were from a Corinthian colonnade that had stood above the vault on the flattened area of the promontory. The colonnade material includes column drums, at least five column capitals and one anta capital, a few wall ashlars, blocks of a heart-shaped corner pier and a number of cornices. The heart-shaped piers suggest that the colonnade was an interior one, most probably of a roofed colonnaded hall, an open-air atrium or, less probably, of a raised altar platform. The diameter of the columns is 0.61-0.63m. The overall width of the rectangle of the flattened area is 14.80m and the length about 28m. lengthwise, it must have accommodated structures other than the colonnaded hall. The width can accommodate the exterior walls, two columns and two heart-shaped piers (for a total of four piers). If the aisle were a reasonable width, there is no space for six piers.

Excavations to the west of the cryptoporticus revealed the infrastructure of the building's façade and the base of a staircase, the latter 2.5m wide. The elevated hall would have originally stood at least 5.50m above the floor of the vaulted infrastructure (Fig. 6).

The Corinthian capitals are of the general floral type, but the decoration features grapes and grape leaves, including grape leaves wrapped around the volutes (Fig. 7). Volutes and acanthus leaves are



6. Section through the eastern end of the promontory (plan by Chrysanthos Kanellopoulos).



7. One of the capitals (photo by Patricia M. Bikai).

treated with the fine "ripple" technique found, for example, in the capitals of the Great Temple (see Joukowsky 1998: 227). The boss on the each side of the capital is shaped in the form of a human head — a total of four heads for every column capital. Another set of capitals with seemingly the same dimensions, has a garland on the abacus and carved Medusa heads and palmettes on the abacus corners. These must have belonged to a second arrangement in the elevated structure, possibly a colonnaded gate or anteroom. Both types of capitals find almost identical parallels in the house of az-Zanṭūr in Petra, the building of az-Zanṭūr is dated by the excavators to after AD 20 (Kolb, Gorgerat and Grawehr 1999: 269, figs. 5-6).

A total of 22 sculptured heads were recovered from Loci 441 and 445. Twelve heads are female, eight are male and two are too fragmentary to determine their gender. All of the al-Bayḍā heads are carved from local sandstone and have similar dimensions, being approximately half life-size.

Four heads remained attached to capitals and two to capital fragments, providing solid evidence for their original placement. They were the decorative bosses that embellished the center point of the abacus on each side of the capital. In fact, the

line that was cut into the top surface of capitals to guide symmetrical sculpting appeared on the flat crowns of nine heads. This evidence serves to identify the probable function of similar heads found in Petra (Fiema *et al.* 2001: 353, no. 130). Similar capital decoration has been well attested at Khirbat at-Tannūr (Glueck 1965: pls. 132-134); az-Zanṭūr (Kolb, Gorgerat and Grawehr 1999: fig. 6); Temple of the Winged Lions (Hammond 1997: 51); Mā'in (Glueck 1965: pl. 132c); and the Ḥawrān (see Glueck 1965: 224). As elements integral to the architectural design of a building, the heads must be viewed as very high relief rather than sculpture in the round. Perhaps this limitation to the third dimension was what led Glueck to label the Khirbat at-Tannūr examples as 'masks'.

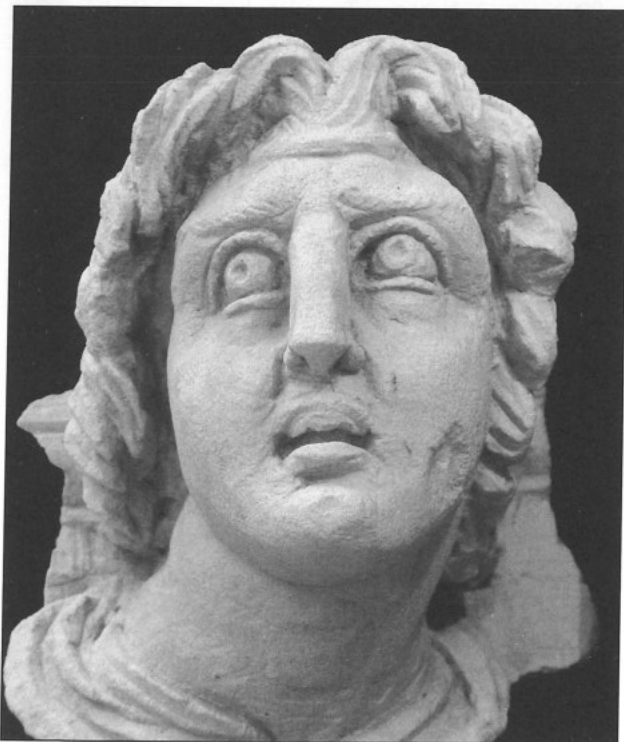
Initial examination of the al-Baydā group suggests multiple sculptors at work. Some faces are sculpted in a classicizing style whereas others are strongly provincial, but many share a mixture of features. Take, for example, al-Baydā Head 18 (Fig. 8): the wild, Alexander-like hair, the turned head with upward gaze, the furrowed eyebrows and slightly open mouth all feature in the *pathos formulae* of Hellenistic sculpture. A similar sculptural style is seen in the so-called "1967 Group of Sculpture" from Petra's Temenos Gate (McKenzie 1990: 134-135, and particularly pls. 62 and 65), and the Doric frieze of Qaṣr al-Bint (McKenzie 1990: pl. 68c). On the other hand, the rather harsh

modeling with strong transitions between planes, the frontal aspect and the four columns of ringlets on each side of al-Baydā Head 11 (Fig. 9) are reminiscent of stylized Parthian sculpture. A group of sculpture from Petra, Khirbat at-Tannūr and Khirbat adh-Dhariḥ has been recognized recently based on their similarity their fleshy faces, ornamental hairstyles and stiffly carved features (Schmid 2001: 394). It would seem that some of the al-Baydā heads belong to this group.

The duality of style on the al-Baydā monument, which seems to have one building phase, suggests that sculptural style should not be used alone as a chronological indicator since the "1967 Group" is dated to the late first century BC, while the more stylistic group is dated to the middle or second half of the first century AD. It is interesting that the two examples from al-Baydā presented here share some stylistic features, such as strongly delineated eyelids and deeply carved pupils.

Preliminary observations suggest that the Baydā heads represent Greco-Roman deities, although the paucity of depictions of their unique attributes makes identification difficult. Initial observations have suggested that the group includes Aphrodite/Venus, Bacchus, Demeter/Ceres, Dionysus, Hebe, Heracles/Hercules, Hermes/Mercury, Pan, Persephone/Kore and Zeus/Jupiter.

Currently, the heads and capitals are being conserved and restored.



8. "Hermes / Mercury" (photo by Patricia M. Bikai).



9. "Aphrodite/Venus" (photo by Patricia M. Bikai).

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