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The Rupestrian Chapel of al-Wu‘ayra and the Hermitic Landscape of Christian Petra

Abstract

After the identification of a rupestrian chapel at al-Wu‘ayra, opening a new perspective on the history of the site, the authors discuss the possible character of this new pre-Crusader *facies* of al-Wu‘ayra and present a preliminary overview on the topographical and typological aspects of the hermitic settlement of Christian Petra. The latter has been for many centuries an important part of the religious geography of the town, whose vitality, at least as devotional reference point, is demonstrated by its survival after the abandonment of the town and its churches. Beside the more impressive religious buildings, mainly located in the middle of the town or in specific spots in the surrounding area, an extraordinary, extended, and diffused net of hermitic installations, up until now less known by historians and neglected by archaeologists, starts to be brought to light. Being simple reoccupations of Nabataean

complexes of different purposes, through more or less substantial modification, or new foundations purposely accommodating natural cavities, some of the most interesting aspects of the phenomenon are the reasons guiding the choice of the spot, the building techniques, and the organisation. The paper is intended to offer both a contextualisation of the rupestrian chapel of al-Wu‘ayra and the preliminary results of the still progressing survey of hermitic installations, enriching the available data for Southern Jordan.

Introduction

The site of al-Wu‘ayra, the major Crusader military installation of Petra controlling access to the ancient town area and the north-south road connections between Shawbak and the Red Sea, has a particular meaning for the history of medieval archaeology in Jordan because it underwent the first excavation by R. Brown

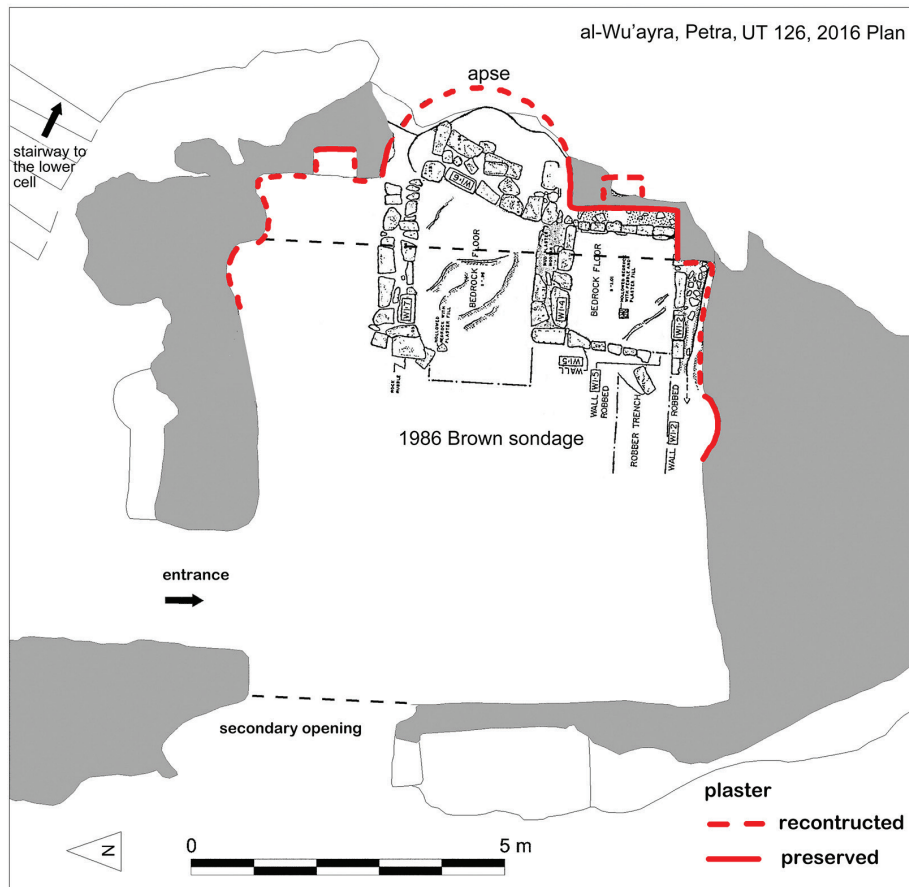
in 1987 (Brown 1987) only a few months prior to the commencement of the new research by the “Medieval Petra” Italian Archaeological Mission by the University of Florence (SAGAS Department). The first step of the research was dedicated to preparatory surveys and diagnostic studies of the site, followed by a series of sondages located in some selected spots: the southern ditch (TU 83-84), the church (TU 119), the narthex (TU 116), the north postern (TU 120), the churchyard (TU 109) and a Late Islamic dwelling unit (TU 115). Later on, most of the efforts of the research team were dedicated to the major castle of Shawbak, 25 km to the north of Petra. A new phase of the research at al-Wu‘ayra started in 2011 aiming at increasing and extending the analyses to the pre- and post-Crusader archaeological horizons in order to have a better understanding of the 12th century phases. On the other hand, the extension of the investigations to the area outside the castle keep, approximately corresponding to three-fourths of the whole surface of al-Wu‘ayra, was needed in order to have a more comprehensive knowledge of the whole site. This area is the one where rock cut structures are more abundant and visible, but most of the surface is unsuitable for excavations, due to the rough condition. Taking into consideration the geomorphological and archaeological features of the site, the application of “light archaeology” methodology was chosen as the most appropriate. This “experimental” activity was given an opportunity in order to check its efficacy in the field. The intensification of the research in the last five years confirmed its effectiveness both in terms of quality and quantity of results (Vanni Desideri and Sassu 2014; Vanni Desideri and Vannini 2016; 2017; Leporatti and Vanni Desideri 2018; Vanni Desideri and Leporatti 2020; Vanni Desideri *et al.* forthcoming).

Apart from the problematic Nabataean

presence, mostly indicated by residual finds and rock cut structures (Vanni Desideri 2020) and the identification of the Late Islamic dry-stone village, the most important results achieved up until now concern the pre-Crusader horizon. The presence of such a phase was already inferred on the basis of particular types of building techniques (Vanni Desideri and Sassu 2014: 101 fig. 8) dispersed at certain spots as well as the kind of hydraulic plaster used in the southern cistern, with pottery sherds inset, comparable to a technique known in some early Christian hermitic cells around the Monastery of Mount Nebo (see Bianchi in this volume).

During the 2016 campaign the so-called ‘Nabataean rock cut chamber’ (TU 126) underwent a new archaeological reading. In 1987, the spot was first investigated by R. Brown through sondage aiming at verifying the mediaeval phase of the cavity, but unfortunately the same author had to admit that the unstratified deposit and the poor number of finds were not significant from a chronological nor interpretive point of view (Brown 1987).

This time the cavity was investigated through light archaeology methodology. It is located outside of the southern ditch of the Crusader castle keep, to the very southern border of the site, isolated on every side except to the north where the entrance is located (TU 126). Its approximately square plan (FIG. 1) and almost regular elevation seems to reveal more skilled work than in the known rupestrian churches in the surrounding areas. The registration and mapping of every trace of rock cuttings and single remains of plaster *in situ* led to a new interpretation of the structure as a Christian chapel (Leporatti and Vanni Desideri 2018). All fragments of plaster are homogeneous in consistence, appearance, adhesiveness, and thickness, thus most probably belonging to a same covering, once applied to the whole cavity and belonging to its first phase.



1. Al-Wu'ayra. Plan of TU 126 with Brown's excavation and reconstruction of the apse. Survey by the authors.

Although the presbytery is poorly preserved, lacking the whole south portion because of an old rock sliding, it is possible to reconstruct its plan thanks to the still preserved fragments of plaster once completely covering its walls and to propose a reconstruction of its setting (FIG. 2). In particular, a thick layer of plaster is visible at the base of the east wall due to the protection of a Late Islamic dry-stone wall. The presbytery, canonically oriented towards the east, is included underneath a triumphal arch, whose pillars, springing from the north and south corners, are still preserved. Only the northern portion

of the shallow apse still survives with a rectangular niche. This new interpretation lends support to the interpretation of the square hollow noticed by Brown on the sandstone floor, 1.70 m from the south portion of the presbytery wall, as a socket for the insertion of a pillar for the chancel screen. Outside the presbytery and along the south wall, a shallow niche is preserved, once covered by the same kind of plaster. The access to the chapel is located laterally, in the only coplanar bedrock surface at the west end of the north wall. The opening on the west wall is a Late Islamic modification meant at transforming the cavity into a



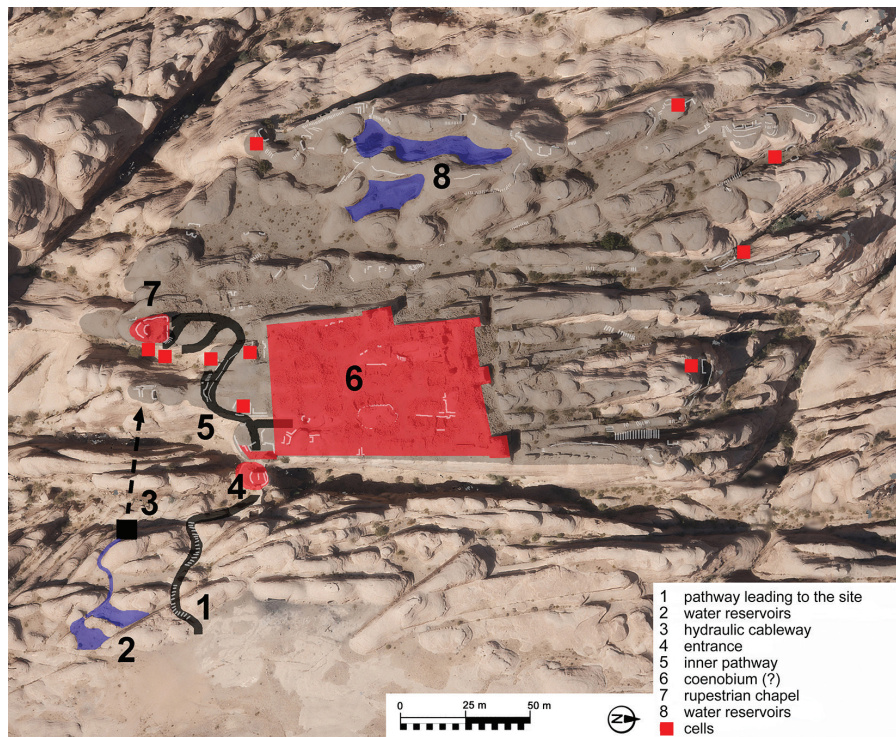
TU 126
0 5 m

2. Al-Wu'ayra. Reconstruction of the presbytery of the chapel (TU 126).



0 50 cm

3. Al-Wu'ayra. Sculptured leg of a seat from TU 150, a possible piece of the furniture of the chapel.



4. Reconstructed topography of pre-Crusader Al-Wu'ayra. Orthophoto plan obtained from photos kindly provided by APAAME (APAAME_20171001_REB0599-0613 and APAAME_20171001_RHB-0334-0344).

dwelling unit, as part of the larger village established in front of the chapel (Vanni Desideri and Sassu 2014: 98–9 figs. 3–5; Vanni Desideri and Vannini 2016: 203 fig. 10). The dimension of the chapel fits with the smaller examples of cave churches of the Judean Desert monasteries (Hirschfeld 1992: 128 table 5).

A very rare piece of furniture most probably belonging to the chapel, gathered among the collapse of a nearby house of the Late Islamic village (TU 150), integrates the archaeological data concerning TU 126. It is the leg of a seat featuring two feet of a goat (or sheep) carved into the sandstone slab, realistically representing the hoofs partially covered by fleece (FIG. 3). Altogether with a twin piece, unfortunately lost, it would have supported a seat probably located inside the niche flanking the presbytery on

the south wall.

At the moment the chronology of the chapel is difficult to determine and even sondage would not be useful due to the scarcely significant archaeological deposit, as already pointed out by Brown's sondages (Brown 1987). Its pre-Crusader chronology relies mostly on some structural details revealing substantial modifications during the Crusader period. In particular, the northern impost of the presbyterial arch shows indent and an upper flattening most probably meant at insetting masonry arches, whose elements are in fact scattered in the cavity, maybe supporting a probable upper floor for defensive purpose (watchtower). These arches are built up with blocks of a lithotype introduced at the site by Crusaders and processed with a peculiar stone dressing technique.

The same can be said about the seat leg, which stands as a real *unicum* at least in the area. At the moment it is only possible to propose a generic dating to Early Medieval time, since the chapel already existed in Crusader period. In fact, already R. Brown quoted the presence of building materials peculiar of that period, such as a yellow sandstone keystone with an engraved cross over a double spiral motif (Brown 1988: 42), unfortunately lost, and other arch pieces of the same kind are still recognisable on the site.¹ The secondary flattening of the top of the left springer of the presbyterial arch and these elements, of a peculiar lithotype processed with a technique introduced at al-Wu'ayra by the Crusaders, seem to indicate that the chapel underwent some modifications maybe in order to replace the original ceiling (a barrel vault?) with arches. The aim was probably at adding an upper floor to be used as an observation post, while at the ground floor the chapel could have kept its original use.

Among the various questions springing from the identification of the church, the most important concern the interpretation of the type of settlement and the corresponding material traces connected with the chapel and its chronology. From this perspective it is necessary to reconsider the pre-Crusader archaeological evidence and some of the rupestrian cavities of al-Wu'ayra. Among the ten rock cut structures recognised so far, and tentatively interpreted as hermitic cells, different typologies can be identified. The more complex examples appear as rearrangements of ancient cavities while others are very simple artificial and shallow cavities to be completed with wooden structures.

It is then possible to propose a recon-

struction of the topography of pre-Crusader al-Wu'ayra including a communal settlement (*coenobium*), corresponding to the later Crusader castle keep, surrounded by an open hermitic settlement (*laura*) of at least ten cells provided with a chapel (FIG. 4). Some features in the area of the castle keep seem to support this interpretation, as for instance the typology of building technique not corresponding to the Crusader period building technique. It is the case of the curtain wall beside the gate, the walls coating the tower in front of the gate, and the already mentioned plastering technique of the southern cistern, comprising a double gate system.²

As to the topographic settling of al-Wu'ayra during this phase, it is very interesting to note the inner communication system of the settlement. Starting from a common access, one pathway led directly to the chapel and to the area of the dispersed cells (*laura?*), and a second one led inside the central and more organised part of the settlement (*coenobium?*). The topographic configuration, including scattered cells and a *coenobium*, has some parallel examples in Transjordan, for instance Mount Nebo, while the monastery of Saint Lot seems to match other examples of monasteries located in Palestine, such as those in the Judean Desert (Hirschfeld 1990; Di Segni 1991).

There are also clues possibly implying a somehow particular meaning of the chapel. First of all, starting from the gate, it was possible to reach the chapel without crossing the central settlement through a direct rock cut pathway. Furthermore, half of the cells identified so far are concentrated in the surroundings of the chapel. Two of them are carved into the sandstone slope at different heights (FIG. 5) and the upper one (TU126a), directly below the apse, is

¹ The motif of the cross associated to the double spiral is of a long-lasting local tradition as can be inferred, for instance, by the 6th century refectory capital of the monastery of Martyrius (Magen and Talgam 1990: 109 fig. 24).

² The presence of a double gate system in the monastery of Choziba is inferred by the life of George of Choziba (Hirschfeld 1992: 163).



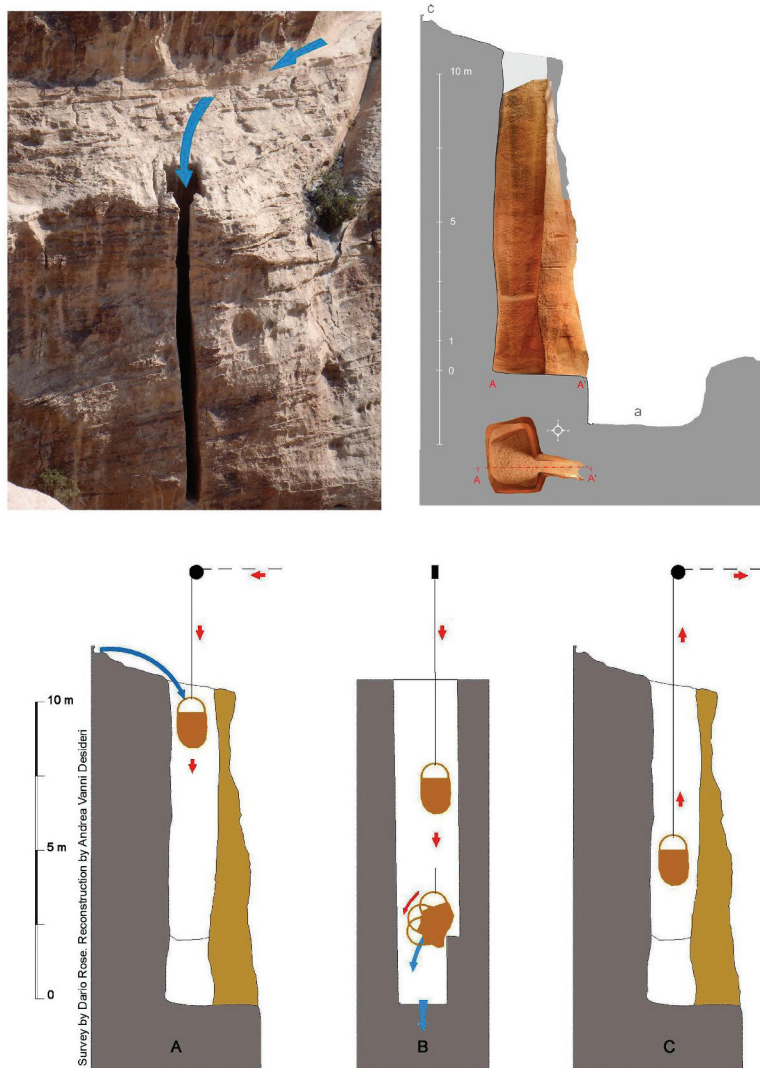
5. Al-Wu'ayra. View from the East of the chapel (TU 126) with adjoining structures (TU 126 a, b).

probably responsible of the collapse of its southern part. Its rough alcove, provided with horizontal postholes and niches, is reachable through a stairway, purposely carved around the external north-east corner of the chapel. The lower one (TU126b), closely similar to the other, is reachable through a narrow passage dug into the sandstone. In the same area TU 83 is particularly meaningful because it is carved into the counterscarp of the southern ditch, proving that the latter already existed and, as a consequence, indicating its pre-Crusader chronology.

If these elements indicate a monastic settlement, then a series of further hypotheses and questions arise concerning the reconstruction of the global history of the site, a task that can only be addressed through the progression of the research.

Anyway, the individuation of the rupestrian chapel provides a new perspective on the history of the site and on the study of the topography of Christian Petra so far described (Schick 2001; Blanquez Pérez 2014).

The extension of the archaeological analysis also led to the identification of a complicated hydraulic network and mechanism. It is located outside the east border of al-Wu'ayra, on the rocky plateau close to the Beida-Wādī Musa road. Water flowing from a spring located on the western Shara mountainside was intercepted through a rock cut channel and led into a double water reservoir including two basins obtained by blocking two natural depressions through dams. Water stored in this reservoir powered a mechanism, possibly meant to transport goods or items



6. Al-Wu'ayra. Remains of the pre-Crusader hydraulic mechanism and conjectural reconstruction of the operating sequence.

into the settlement crossing the Wādī al-Wu'ayra, *i.e.*, a sort of cableway (FIG. 6).³ The mechanism has nothing to do with the military function of al-Wu'ayra during the Crusader period, mainly due to its unprotected and vulnerable location. Instead, it fits well with the monastic

characteristics of the site.

The interpretation of pre-Crusader al-Wu'ayra as a monastic settlement does not contrast with the already supposed previous presence of a Late Roman fortification if we consider the common settling behaviour of early medieval monks in the area. In fact, they usually profited from abandoned military installations, as for instance indicated by the foundation of the Castellion reported in the *Life of Mar Saba* (di Scitopoli 2012: xxvii;

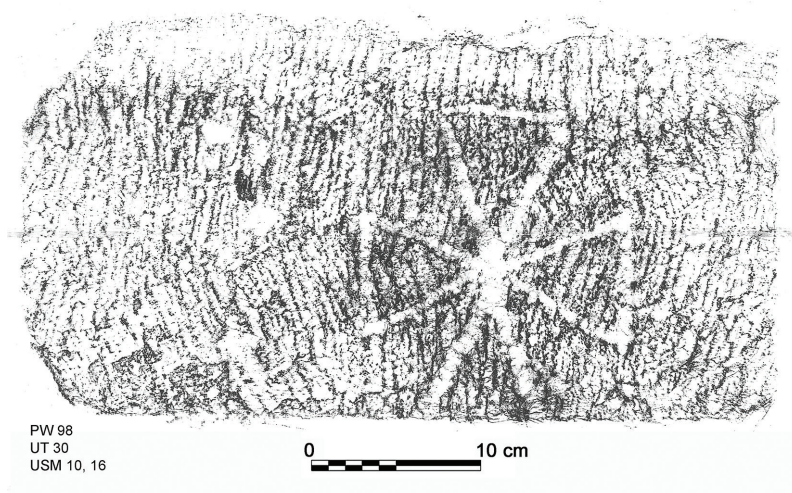
³ A first description of the system is provided in Vanni Desideri and Vannini 2017; Vanni Desideri and Leporatti 2020.

Hirschfeld 1990: 33–4 fig. 39; 1992: 52 fig. 27–28). At the moment it is not possible to determine whether the monastery was still vital when the Crusaders settled at the site. Nevertheless, they could have profited from Christian presence and from an existing somehow fortified monastery (*castron*) easily transformable into a real military stronghold. In this case, the only real Crusader addition to the previous buildings corresponds to those already identified by the research on the basis of a peculiar building technique (Vanni-Desideri and Sassu 2014: 101 fig. 8 type 1): *i.e.*, the church, the west and the north-east towers, and the northern curtain wall provided with arrow slits. But obviously at the same time they also could have reused or rearranged in a more or less radical way the buildings they found on the site. From this perspective, the block with an engraved cross carved on the base of the left jamb of the arrow slit of the north-east tower of the castle, judging from its location, must be interpreted as a reuse of Early Christian building material (FIG. 7; Vanni-Desideri and Sassu 2014: 101 fig. 10).

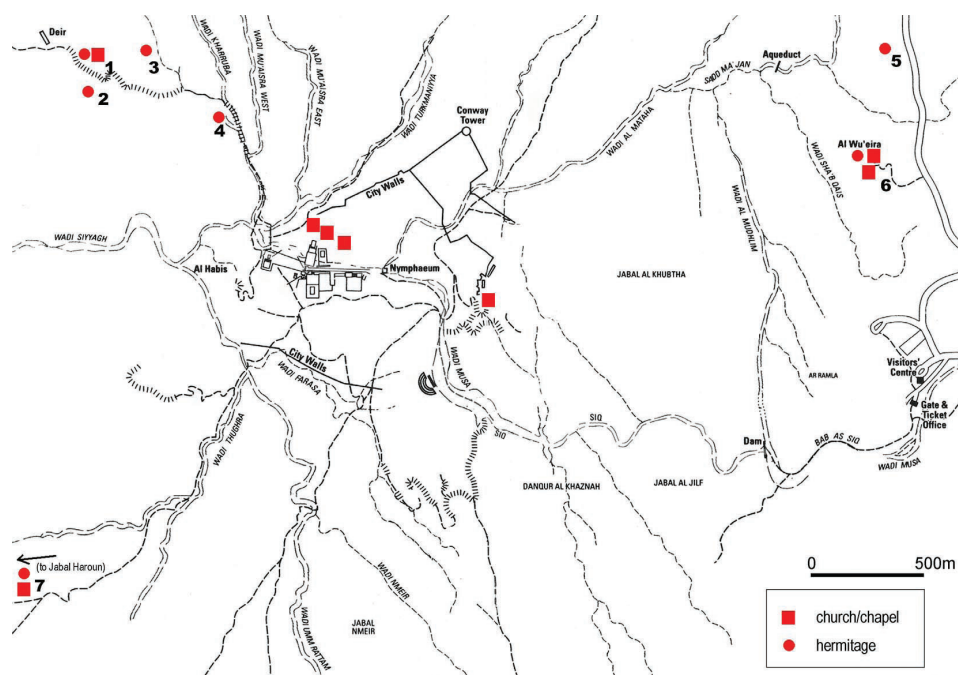
The Hermitic Installation Survey

The newly recognised rupestrian chapel together with its related monastic settlement is situated in a religious landscape that the ongoing surveys by the Medieval Petra Mission by the University of Florence are progressively revealing in its extension and variety, contributing to a more complete and articulate knowledge of the Christian settlement in the area of Petra.

The survey of monastic/hermitic installations in the area of Petra originated from the need for a contextualisation of the new Early Medieval phase recognised at al-Wu'ayra, at the same time contributing to a better knowledge of the articulated religious life in Christian time. This research focused on a less monumental but widespread phenomenon, which survived many centuries after the abandonment of the major monumental Christian foundations, that will help us to achieve a more comprehensive knowledge of the articulate topography of Christian Petra and to reveal the variety and consistency of archaeological documents as well as their chronological, functional, and



7. Al-Wu'ayra. North-east tower. Frottage of the sandstone block with cross reused during Crusader times.



8. The area of the thematic survey of hermitic installations. Plan after Schmidt modified by the authors.

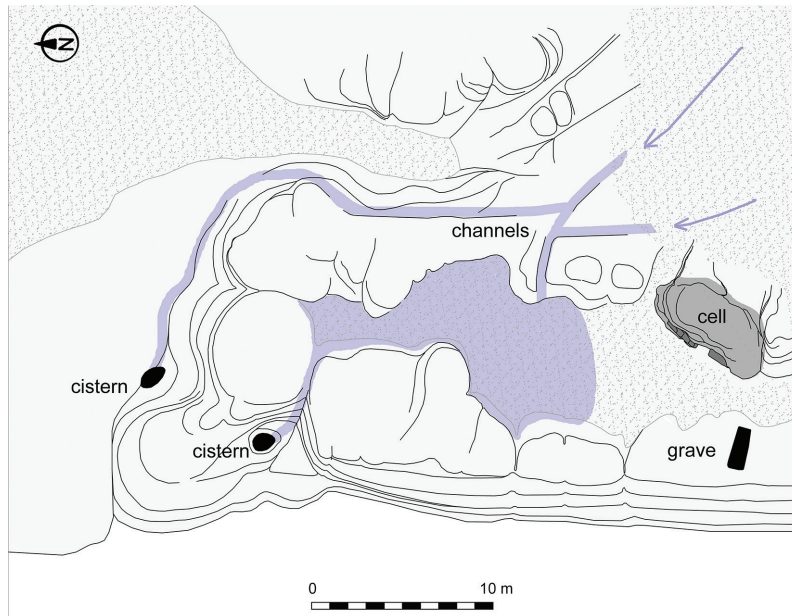
typological coordinates.

At the moment, the survey is concentrated on the areas around al-Wu'ayra and the eastern mountainside of Petra (FIG. 8).

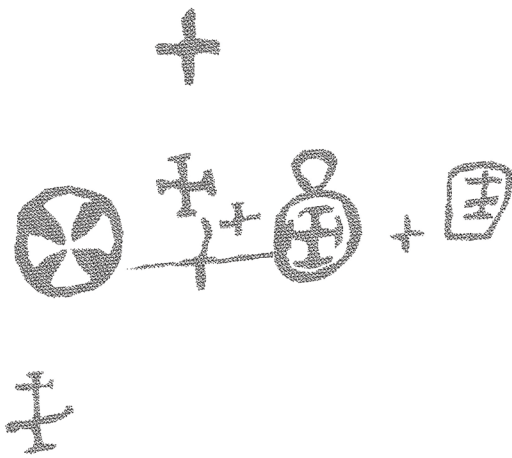
Apart from the several clues of hermitic presence scattered all over the suburb of Petra (Schick 2001), an artificial dwelling cave has been identified on Jebel Urf ad-Dik, some 100 m to the north of al-Wu'ayra. The complex, located next to a couple of ancient cisterns, includes an artificial cavity, later reused by Bedouin shepherds as a shelter for their flocks. The cell, dug into a sandstone outcropping, is provided with two irregular inner benches (FIG. 9) and on the back wall an engraved cross is barely visible among some badly preserved graffiti. In front of the cell, a rectangular grave is cut into the sandstone bedrock. Christian symbols are engraved on many rocks and Nabataean monuments along the way up to the Dayr. A Greek cross is on the right jamb

of a tomb close to the Lion's Triclinium, another one is traced on a betyl at the Qattar ad-Dayr meant at Christianising the pagan idol (Dalman 1908; FIG. 11). Further up, another cross engraved on a rock seems to mark the entrance in the area of the hermitic settlement. Nearly in front of it, an irregular natural cavity hanging over the so-called Klausenschlucht is decorated with a large panel with several crosses and a pendant (FIG. 10).

The research at the moment concentrated on the complex and long-lasting monastic/hermitic sparse settlement located below and around the ad-Dayr. Albert of Aachen and Foucher de Chartres already noticed the presence of Greek monks in the area (Runciman 1993: 343 n. 1, 364-5 n. 1) apparently lasting until the late 19th century (Politis 2001: 589). According to Gianmartino Arconati Visconti, when he visited the Deir in 1865, the Christian



9. Jebel Urf ad-Dik. The hermitic complex. Survey by S. Leporatti.



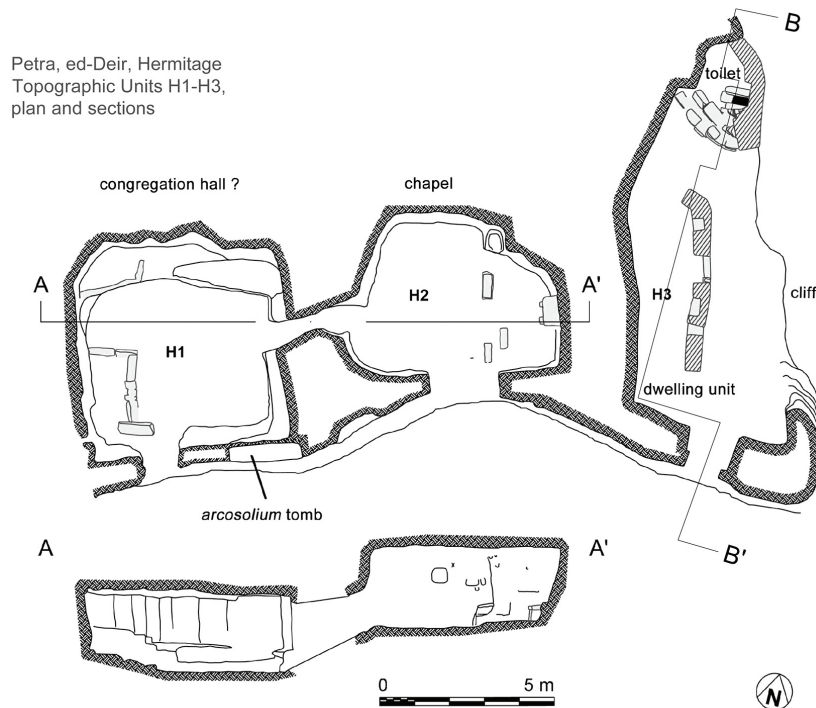
10. The Hermitage. Cluster of engraved crosses. Note the presence of a possible pendant. Survey by A. Vanni Desideri.

the Klausenchlucht, but apparently its core corresponds with the Hermitage. It consists of three artificial caves dug into the vertical cut of a Nabataean quarry, on a terrace facing south-east. The complex in its original setting included some buildings surrounding a courtyard on the same terrace where a large arcosolium tomb is also visible,⁴ nowadays only indicated by a heap of collapsed materials and some clues of wall basements. Among these cavities a room is recognisable (TU H1), whose possible function as a congregation hall is indicated by benches along the walls, connected to a chapel (TU H2) followed to the east a dwelling unit (TU H3). The latter profits from a natural shelter hanging over a narrow *wādī*, enlarged, regularised, and completed by drystone structures in order to accommodate a single hermit (FIG. 11). Accordingly, it is provided with a narrow toilet separated from the living room (FIG. 12). The site is scattered with a

epigraph painted on the entablature of the monument, noticed by Burkhardt around 50 years before, had already vanished (Arconati Visconti 1875; 354).

The hermitic settlement is located across

⁴ For arcosolium tomb comparison in the area, see Avni Dahari 1990: 302–4 figs. 1–4; Burri *et al.* 2011: 292 figs. 7a–c.



11. The Hermitage. Survey by the authors.

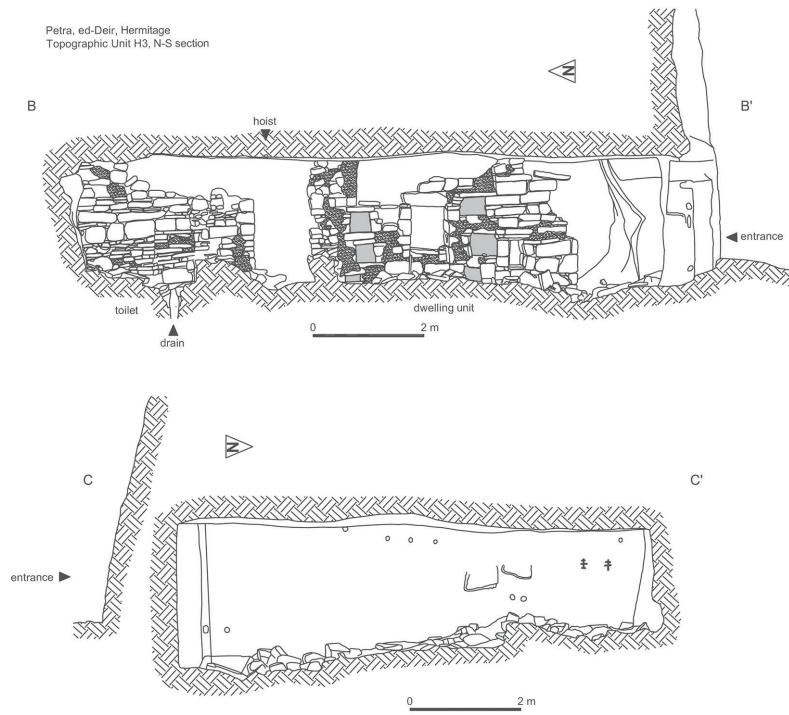
quantity of painted and engraved epigraphs in Greek and Arabic with Christian symbols and monograms.⁵ The complex clearly demonstrates its link with the settlement opposite, on the west *wādī* side, due to a small opening carved into the corresponding wall of TU H1 in order to have a visual connection with another hermitic complex. The latter profits of two Nabataean funerary complexes already surveyed by Dalman (1908: 441–2 abb. 196). The presence of Christian hermits is here indicated by a number of red painted or engraved crosses.

The hermitic settlement of the Hermitage seems to benefit from two water supplies located in a nearby *wādī*. Both complexes

are meant at collecting rainwater filtering through permeable geological formations and flowing along an impermeable layer, as in the case of the water catching system of the monastery of Khallat ad-Danabīya in the Judean desert (Goldfus 1990: 229–30). The largest one, or Lower Qattar ad-Dayr (FIG. 13), established in Nabataean time as a real sanctuary provided with idols, epigraphs, and a triclinium, was already surveyed by Dalman (1908: 252 abb. 192) who also noted the Christianisation of a betyl. In addition, an example of destruction of idols (maybe block idols) is to be underlined and a more explicit clue of the hermitic presence, strictly connected to the water catching system, was revealed by research in the surroundings. It consists of a small Nabataean cave tomb reoccupied by a Christian anchorite who

⁵ The various epigraphs are under tracing and study by J. Maczuga, Universität Bonn.

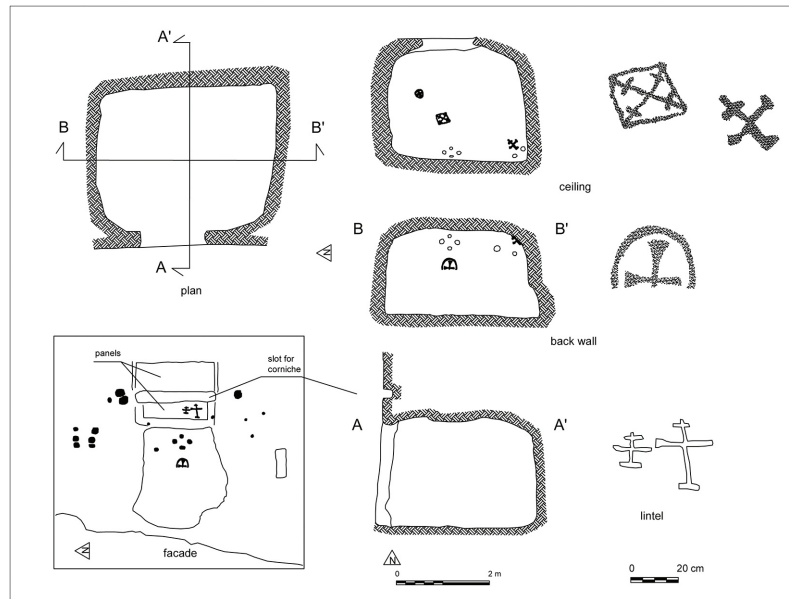
THE RUPESTRIAN CHAPEL OF AL-WU'AYRA AND THE HERMITIC LANDSCAPE



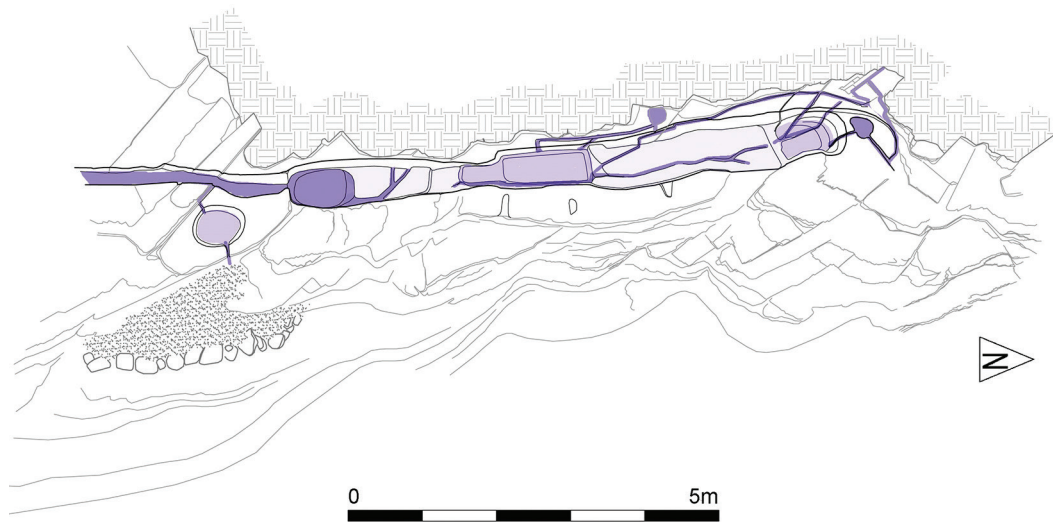
12. The Hermitage. The dwelling unit (TU H3). Survey by A. Vanni Desideri.



13. Lower Qattar ad-Dayr. Survey by S. Leporatti.



14. Lower Qattar ad-Dayr. Hermitic cell. Survey by A. Vanni Desideri.



15. Upper Qattar ad-Dayr. Survey by S. Leporatti.

left a number of engraved and red or yellow painted crosses on the walls and on the ceiling (FIG. 14).

Further up in the mountain, a new small water catching system was surveyed and

conventionally indicated as Upper or Small Qattar ad-Dayr (FIG. 15). This complex of rock cut channels and basins was certainly established in early Christian time, due to the fact that no archaeological or epigraphic

Nabataean traces are visible at the site, but a cross overlooks the battery of water-catching basins.

A completely new perspective opens up for the research that the mission's next programs intend to tackle: on one hand, by deepening the analysis on the site through sondages aimed at solving specific problems, on the other hand, trying to contextualise the case in question by completing the surveys already started in the area of Petra with the aim at reconstructing the topography of the Christian hermitic settlements.

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