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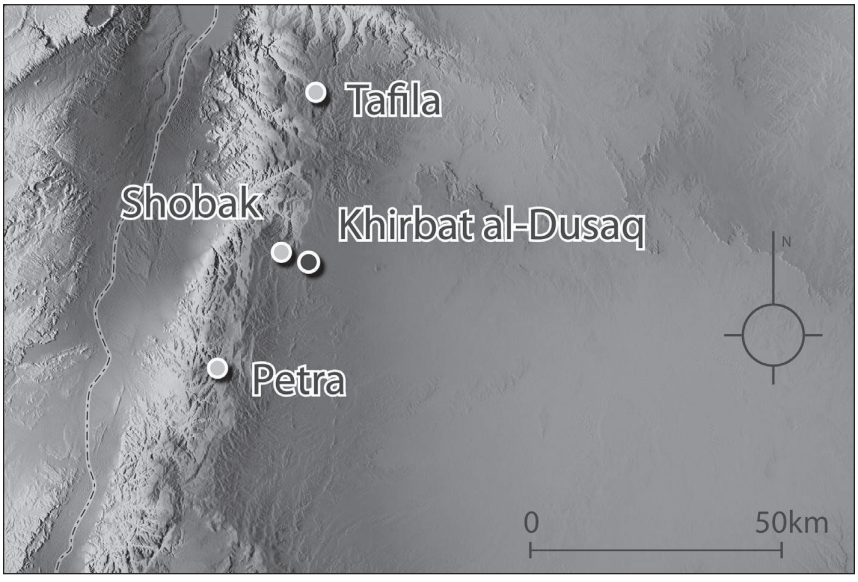
The Medieval Ḥammām of Khirbat ad-Dawsaq: An Archaeological and Historical Investigation

The site of Khirbat ad-Dawsaq is located on the summit of a hill, 1270m above sea level, and 6km to the east of ash-Shawbak Castle in southern Jordan (FIG. 1). It is comprised of three visible buildings (A, B, C), arranged in an L-shape (FIG. 2). The site was discovered by Mauss and Sauvaire in 1864 (De Luynes 1874: 154-155), but was recorded only, with no further information. In 1898, Brünnow and von Domasciewski drew a plan of the site, and published it together with a photograph (Brünnow and Domasciewski 1904: 98, 99 fig. 10). Other scholars visited the site in the early twentieth century, such as Musil in 1905 (Musil 1907: 35-37), Field in 1928 (Field 1960: 83), and the Reverend Father Savignac in 1935. Neither the purpose nor the function of the site have been explained definitively, and it remains an enigma; it has been suggested at different times by different authors that it may have been a Byzantine church (Hill 1897: 142), a caravanserai (Brünnow and Domasciewski



1. Location of the site (©Th. Fournet).

2. General view from east (©Mission Dusaq 2015/R. Elter).

1904: 98; Vailhé 1898: 107; Meistermann 1909: 39; Brunnow, Domaszewski 1904: 98), a palace (Meistermann 1909: 239; Musil 1907: 35-37), a fort (Meistermann 1909: 39; Hill 1897: 42) or even a mosque (Musil 1907: 35-37; Meistermann 1909: 239). Dr. Ghazi Bisheh described the remains in an exploration report conducted for the Department of Antiquities in the 1960's; he suggested it may have been a palace. Although the site was mentioned briefly subsequently (Mc Quitty 2001: 569; Millwright 2008: 98; Nucciotti-Hamarneh 2009: 113; Petersen 2011: 15-16), no further study was conducted until 2008.

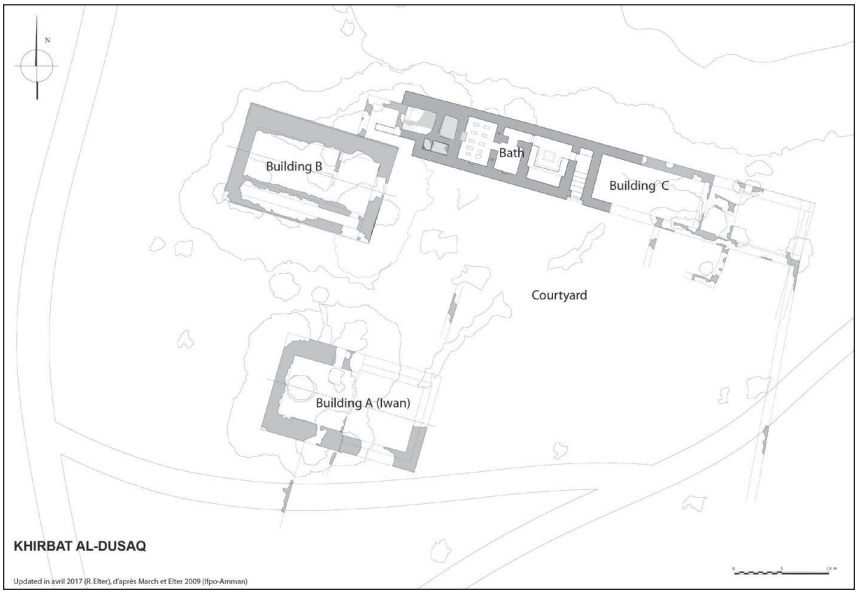
That year, a team from the French Institute of the Near East (Institut français du Proche-Orient, Ifpo) conducted an architectural survey[1] *in situ* to draw a new plan of the site (FIG. 3). Field work at this time included exploring a cavity in the north-facing wall of Building C, which opens into a metre-high space, with a ceiling supported by small rectangular pillars, and leads westwards to the entrance of an oven. It was identified as a hypocaust, hence indicating the presence of a bath. Archaeological excavations were conducted on the site in 2009[2], focusing particularly on the section overlying the hypocaust, which confirmed the presence of a bath and revealed part of its hot room. The site has since suffered considerable destruction, and part of the bath complex was destroyed by a bulldozer. Nevertheless, it was possible to conduct a field season in 2015, when the remainder of the edifice was uncovered.

Description of the Bath and its Equipment

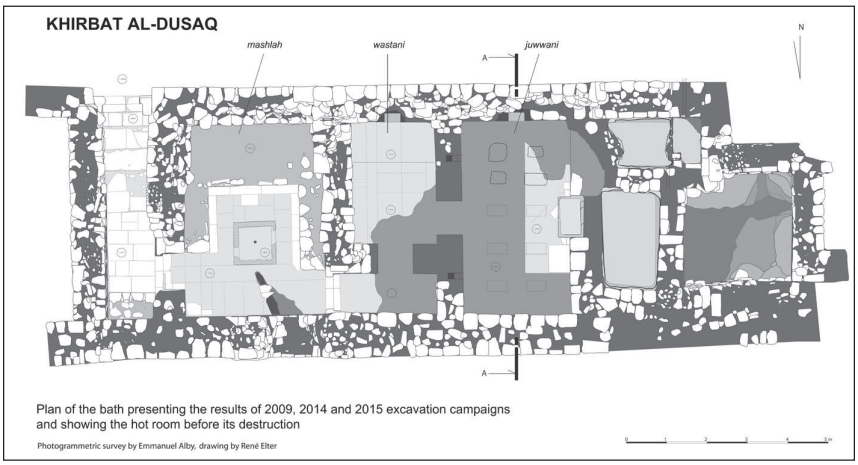
The surveys carried out in the spring of 2008 and the first excavation of May 2009 revealed and then confirmed the presence of a bath in the northern building. Three archaeological surveys and excavations followed in 2014[3], 2015[4] and 2016; it is now possible to describe it in its entirety. The bath occupies half of the North Building, also called Building C (FIG. 4). It consists of adjoining rooms which are not only related to bathing; some were probably used to provide a means of circulation, the purpose for others cannot be positively identified. They could have been used for storage, as part of the furnace operation, or other activities. It is oriented east – west, and is *ca.* 4.80m wide by 17m long. This is series of linked rooms, that is they lead into each other; there is no other entrance or exit. Due to its location on a terrace right on the edge of the hillslope, the construction was built back into the slope, thus the rear area is partially underground (FIG. 5).

Excavation reveals a chaotic stratigraphy, strongly disturbed by past and recent looting. Preserved to an average height of 2.25m, strata were comprised of building detritus related to the collapse of the bath (earth, plaster and architectural blocks). Close examination of the archaeological layers revealed that the building

1. The 2008 mission was led by Jean-Paul Pascual, Christèle March et Norig Neveu and sponsored by the "Balnéorient" program of the french National Agency for Research (AnR) this misson was led by Jean-Paul Pascual, Christèle March et Norig Neveu.
2. The 2009 mission was led by Jean-Paul Pascual, Christèle March, René Elter and Elodie Vigouroux and sponsored by the "Balnéorient" program of the French National Agency for Research (AnR).
3. The 2014 operation led by Elodie Vigouroux and René Elter, it was an emergency survey sponsored by the French Institute for the Near East (Ifpo). It aimed at evaluating the damages in order to identify the priorities of a future work.
4. That mission conducted by Elodie Vigouroux, René Elter and Julie Monchamp was sponsored by the French Institute for the Near East (Ifpo) and the French National Center for Scientific Research (Cnrs). We are grateful to M. Hani Falahat who was then the DoA representative.



3. Plan of the site (©Mission Dusaq 2017/Ch. March-R. Elter).



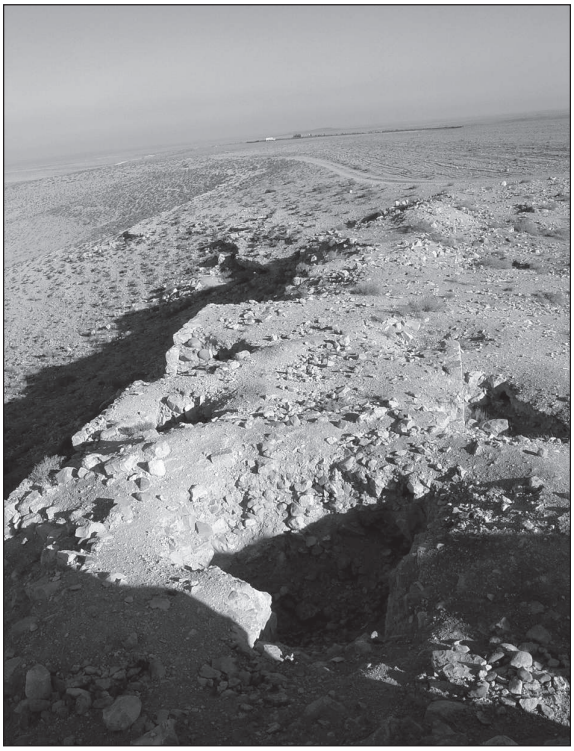
4. Plan of the bath (©Mission Dusaq 2017/R. Elter).

was re-occupied immediately after the bath complex was abandoned. The building was used successively as a shelter (it cannot be determined if occupation was permanent or temporary), a sheepfold and a necropolis until the first decade of the 20th century, as evidenced by the archaeological finds uncovered.

Entrance and Access

Access to the bath is from the internal courtyard of the complex; entry is through A 0.86m wide door, which is recessed *ca.* 0.20m from the external face of the south wall of Building C.

A 0.82m high monolithic lintel was built into the wall immediately above the door, with a 0.30m frame enclosing the side edges. It is highly probable that the top of the door ended with a pointed arch, although there are no extant remains. The door opens onto a staircase, is offset towards the east in relation to the staircase, and opens from the inside (FIG. 6). The threshold is set into the floor and is the same width as the doorjamb; there is a 0.06m high step. This design ensures the door closes tightly, thus preventing heat loss due to drafts. In the eastern corner, on the ground, the door's pivot bearing is marked by a circular recess. The staircase and the corridor which extends from it are both 1.16m wide; total length is 4.75m. The staircase is comprised of 6 steps; average tread depth is 0.54m and height 0.22m. Each step consists of two limestone blocks laid side by side. The staircase opens into and is extended

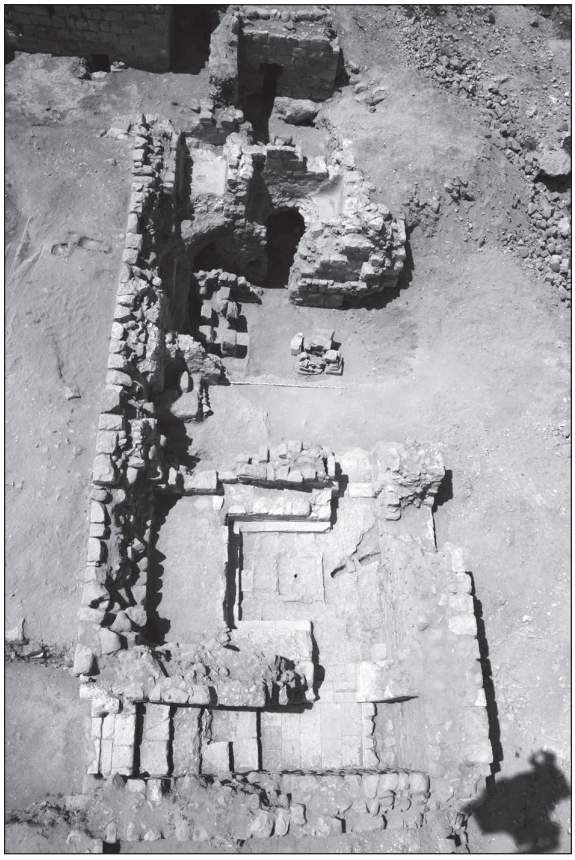


5. Building B from west before excavation (©Mission Dusaq 2008/Ch. March).

by a 2m long landing, the floor is tiled with limestone slabs. A 0.66m wide bench is located at the northern end; the seat is 0.32m above the ground. A door opens from the landing to the west onto the cold room. A low barrel vault covers the whole staircase. A plaster or lime mortar layer covered all walls of the entry area between the exterior of the building and the first room of the bath.

The Cold Room

From the landing, the "cold room" is accessed via a 0.86m wide door, and acts as the entry room to the bath (FIG. 7). It is rectangular in shape; 3.50m wide by 4.80m long, with a central 1.00m deep square basin. Benches follow three walls of the room, with a 0.12 high step in front. The largest (0.60m higher that the top of the step and 1.48m deep) extends along the entire south wall. Two smaller benches extend along both the east and west walls; all three benches are the same height, and both the east and west benches are 0.60m wide. An



6. Bath and staircase from east (©Mission Dusaq 2015/R. Elter).

7. Cold room/*mashlaḥ* from north (©Mission Dusaq 2015/ R. Elter).

arch (*ca.* 3m wide and 1.30m deep), which may have been pointed, although the top is no longer extant, covered part of the bench on the south wall. This it forms an alcove, which may have been reserved for important people, and draws attention to this section. Technically the presence of the deep arch along the south wall redistributes the space into two

distinct areas. Geometrically, the northern area encompasses a square space (each side of which is 3.5m wide), with the basin in the centre. This spatial organization is consistent with other constructions where a square room is covered by a circular dome.

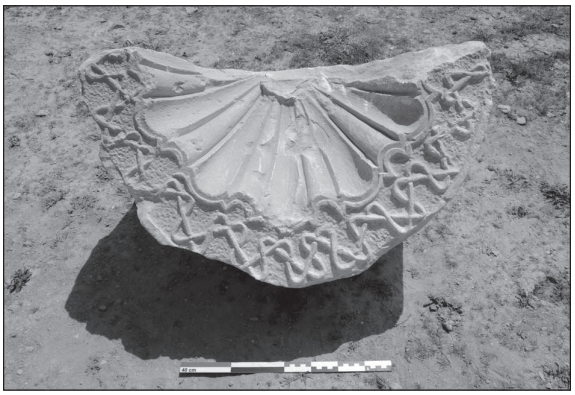
The mortar floor show traces of a regular *sectile* pavement. The basin was edged by a narrow wall (0.10m wide) and its entire base had been covered with a *sectile* pavement; this has been removed by looters. A terracotta pipe, 0.08 m in diameter, is located in the center of the basin, which supplied water to a fountain; this is no longer extant. The water for the installation was piped from the tank of cold water adjoining the hot room. A pipe is embedded in the slab which is on the north side of the basin between the basin and the wall under the pavement and then runs under the north wall of the room, this drained water to the outside of the building. The walls of the room are covered by a white lime mortar or plaster layer, the same as the staircase. The architectural blocks uncovered during the excavation of the cold room, particularly a ribbed conch (FIG. 8), indicate the architectural richness and high quality decor of the original workmanship.

The Warm Room

A door in the north-west corner of the cold room opens into a corridor (1.00m wide by 2.50m long) which leads to the "warm room". The threshold is marked by a narrow step; 0.03m high and the same width as the doorjambs. A now missing door opened from the corridor in the north-south axis of the warm room, which was 2.00m wide and 3.10m long. Architectural decoration consists only of a niche in the south wall (FIG. 9) and a regular sectile pavement. The niche is covered by a pointed arch (0.40 wide by 1.10m high by 0.25m deep at the lowest surface, which is 0.60m above floor level. It housed a basin which was supplied with water by two 0.08m diameter terracotta pipes. The floor was covered with a regular sectile stone pavement. In front of the niche, the floor is raised by a 1.00m wide and 0.10m high step, which extends the width of the room, thus forming a platform. Access into the next room, the hot room, was probably through a door in the western wall of the warm room.

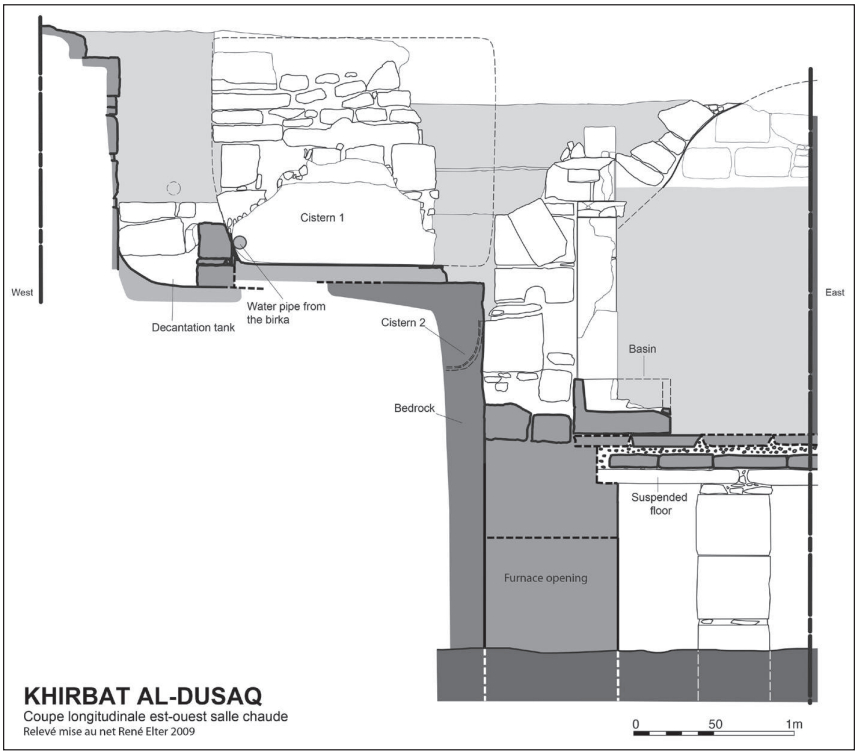
The Hot Room

The "hot room" has a rectangular plan, and was only partially excavated during the 2009 field season. It is 2.80m wide and 4.80m long. The suspended floor was located over a hypocaust system found *in situ* during the 2009 field season affirms that it was heated (FIG. 10). The south and west walls display architectural



8. Conch from the cold room/*mashlaḥ* (©Mission Dusaq 2015/R. Elter).

9. Niche in the warm room/*wasṭānī* (©Mission Dusaq 2014/R. Elter).



10. Section drawing (east-west) of the hot room/*jūwwānī* before its destruction by a bulldozer (©Mission Dusaq 2009/ R. Elter).

features. Similar to that described for the "warm room", a niche equipped with a basin was built into the south wall of the hot room. A second niche, which is more important than the one in the south wall, was centrally located in the western wall; it is also covered by an arch (FIG. 11). Its dimensions are 1.00m wide by 0.30m deep, constructed at floor level, it has a height of at least 2m at its greatest extent Regarding the architectural features of the arch, only a springer block, together with the transom on which it rests, still remain *in situ*. Carved from high quality white limestone, they both display careful craftsmanship and decoration. At the bottom of the niche, a quadrangular basin was installed directly on the floor slabs (FIG. 12). Wider than the depth of the niche, it extends 0.30m out into the room itself. Of monolithic construction, it was carved from a block of hard white limestone; its dimensions are 1.00m long by 0.65m wide and 0.40m high. The upper edges of the basin sloped inwards, to allow excess water to flow back into the interior. The bottom of the basin is sloped so as to facilitate draining the water, which flowed directly onto the floor of the room through a small hole in its eastern edge. The external sides of the basin are decorated with vegetal carvings on the lateral sides and interlacing on the main face.

The floor of the room is covered with quadrangular slabs of thin white limestone *ca.* 0.06m thick. In front of the western basin, the slabs are laid in an oblique pattern, as opposed to that for the remainder of the pavement, which are laid in an orthogonal pattern, aligned with the walls on either side of the niche. The niche and its basin are the most important elements of the room; hence, their decoration is immediately noticeable compared to that for the rest of it. This importance can also be observed for the ceiling decoration, immediately in front of the niche, where the arch intersects with the vault. The part of the room which was excavated demonstrated that a lime-based mortar skirting board followed the junction of floor and walls around the room; the lower part of the walls were plastered with a waterproof hydraulic mortar to a height of *ca.* 0.70m. The surface of the walls above the mortar was undecorated. The vault is still extant in the north-west corner of the

11. West niche and basin in the hot room/ *jūwwānī* before its destruction by a bulldozer (©Mission Dusaq 2009/R. Elter).

12. Basin in the hot room/ *jūwwānī* before its destruction by a bulldozer (©Mission Dusaq 2009/ R. Elter).

room; it is finely polished, and was probably originally colored in the same manner as other ancient stuccoes. Fragments of plaster, together with the architectural elements preserved in the backfill of the room, reveal that the vault was decorated and incised; the decoration forms interlacing foliage. A layer of natural ocher can still be discerned over the vault, which verifies that it was colored. Sculptured architectural elements (conches) made from fine white limestone are positioned where the vaults join with the rest of the room.

The Suspended Floor

Located immediately underneath the hot room, the suspended (hypocaust) floor was almost intact in 2008 (FIG.13). Structurally, the floor is supported by ten piers; two rows of five arranged in a N-S direction, each of which is comprised of thick limestone slabs; similar to a 'tas-de-charge'[5]. Each slab is on average *ca.* 0.25m wide by 0.45m high; some of them show signs of reuse, with moldings particularly noticeable. The support piers

13. Hypocaust and furnace opening (©Mission Dusaq 2008/ Ch. March).

5. This is a French language term for which there is no equivalent in English, which is used to describe the lower courses of ribs for a Gothic vault. These are laid in horizontal courses and bonded into the wall, forming a solid mass; this helps bond the ribs, vault and walls together. They generally rise about one-third of the height of the vault, and as they project forwards they lessen the span to be vaulted over.

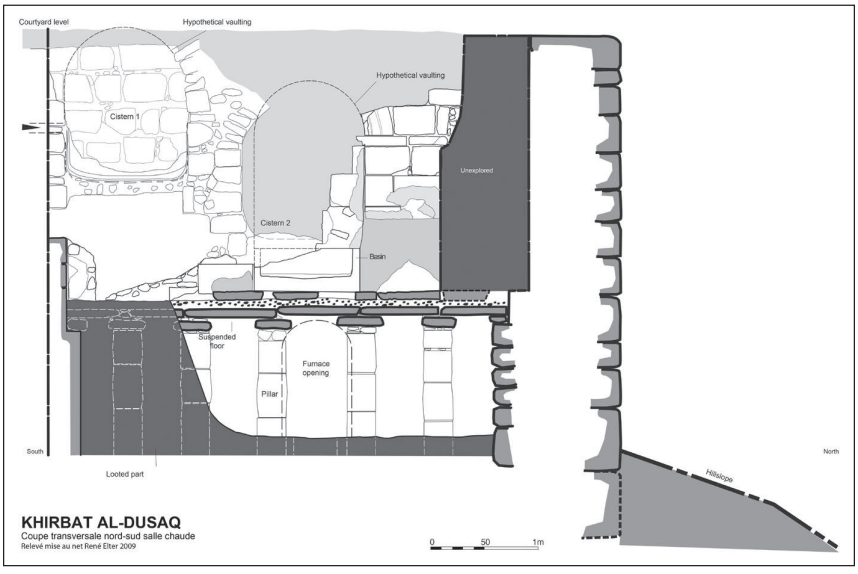
were still intact, and hence at the same height as originally constructed. They were not completely uncovered during the excavation, but remained partially buried; the maximum height uncovered was 0.90m (FIG.14). Large 0.06m thick limestone beams lie flat across the piers between the east and west walls, subdividing the room space into six parts. This strengthens the suspended floor by reducing the load borne by each beam to less than one meter in length. The floor of the hot room is formed by the slabs of the suspended floor. These slabs (*ca.* 0.30m wide by 0.80m long by 0.05m thick), are covered by a 0.06m thick lime mortar concrete. Thus, there is only 0.17m between the floor surface and the heat generated by the boiler room, which was piped to the hypocaust system by means of a vaulted heating channel constructed of baked clay bricks laid on edge. As with the observation regarding the existing mortars and plaster fragments, the study of the suspended floor reveals exceptionally fine workmanship, which has made best use of the available materials.

Water Supply System and Tanks

The various basins within the bath house, together with the fountain in the cold room, were originally fed with both cold water and hot water. Terracotta pipes embedded in the thick masonry walls supplied water from two tanks located behind the western wall of the warm room. These two tanks are situated next to each other; the southern tank is designated No. 1, and the northern No. 2. Both tanks are rectangular, and placed so that the longer sides face the wall and the shorter sides extend out from the wall. Both have concave bases and vaulted brick ceilings. The inner walls, including the roof, are covered by several layers of hydraulic plaster. In order to increase water pressure, the level at the base of the tanks is higher than that inside the bath house, so that gravity increases water flow. The large basin located 23m to the south (in the large courtyard in front of the īwān for building A) supplies water for the tanks by means of a clay pipe, 0.08m in diameter (FIG. 15). The water flows in the first instance into the rear of a small settling tank situated at the west of the southern cistern (No. 1). The water remained in this tank for some time, allowing contaminants to sink to the bottom, once the water was clear, it was piped directly into tank No. 1 by means of a short 0.08m diameter pipe; from there, it was directed either into tank No. 2 or the three bathrooms.

Cistern 1: The Cold Water Tank

The dimensions of tank No. 1 are 1.18m wide by 1.70m long; the preserved height, without the vaulted cover, which is no longer extant, is



14. Section drawing (north-south) of the hot room/ *jūwwānī* before its destruction by a bulldozer (©Mission Dusaq 2009/R. Elter).

15. Water pipes in the southern wall of the warm room/ *wasṭānī* (©Mission Dusaq 2015/R. Elter).

0.75m (see FIG. 14). The base inclines slightly (0.02m per meter) towards the east, in other words, towards the bath house, and is 1.05m higher than the bath house floor. As mentioned above, this tank received water directly from the external supply by way of the settling tank; there were then separate systems to supply water for tank No. 2 and the bath house. A single clay pipe led directly into the north tank No. 2. Two clay pipes, each of which was 0.24m long and 0.08m in diameter, were embedded in the south brick wall of the hot room; one for hot water and one for cold water, and both were protected by lime mortar (see FIG. 15). Water was piped from this point to supply cold water for the bathrooms and the fountain in the cold room.

Cistern 2: The Hot Water Tank

The second cistern is similar in nature and shape to the first. However, its base is 0.65m lower than tank No. 1, that is 0,25m above the bottom of the basin of the warm room thus gravity ensures continuous supply (see FIG. 14). Its dimensions are 1.25m wide by 2.25m long; preserved height is 1.35m. Its position over the heating channel for the hot room leads one to assume that its function was the supply of hot water for the bath.

The Boiler Room and Furnace

The boiler room was situated at the western end of the bath; dimensions are 2.70m wide by 3.40m long. There is an opening at the eastern end into the furnace channel. Due to its physical position, its aspect is more that of a "cave" or "rock shelter" than a technical room (see FIG. 4). The entrance was from outside, on the hillside north of the complex; there was no entrance into the bath complex itself. Access to this room was blocked at a later date. There is a natural rock crevice which extended 2m to the south from the boiler room; this may have been used to store fuel for the furnace. Excavation reached bedrock; several thousand pieces of the original clay used to repair the bath mortars were found in the fill. The low ceiling of the crevice accentuates the cramped working conditions for the boiler room staff. The configuration of this part indicates that excret from the latrines located above to the west and garbage from building B to the south were dumped in this area. An opening was made in the rock ceiling of the boiler room; combustible materials found in the garbage could be thrown down the channel into the boiler room, thus increasing the amount of fuel available for the boiler. The furnace duct extends from the boiler room to the east and opens out under the suspended floor; semicircular in plan, the roof can be described as more of a dome than a vault. The hot cistern is located immediately above the furnace duct, which was constructed from clay bricks and small stone squares. The furnace dimensions are 0.80m wide by 3m long by 1.80m high. Such a large size would have necessitate a correspondingly large amount of

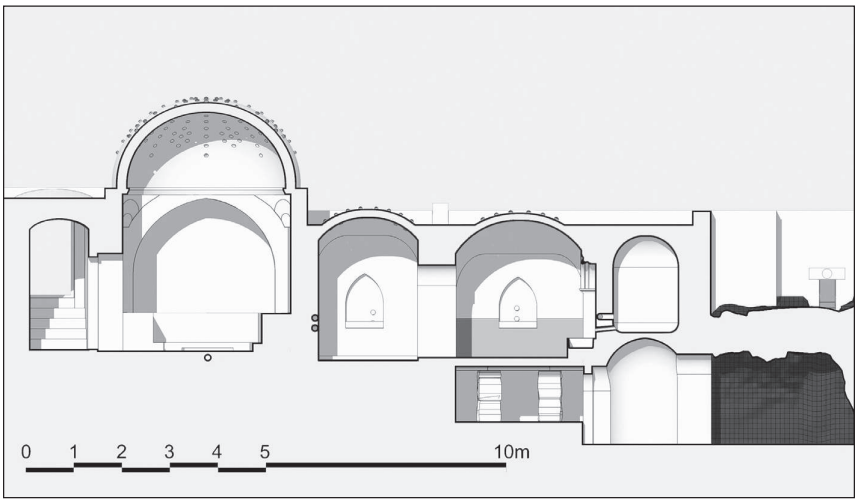
fuel; however, it also meant that maintenance and cleaning of the hypocaust space under the suspended floor would have been easier.

Typology and Dating

Excavation of the bath buildings at Khirbat ad-Dawsaq revealed a plan similar to other medieval urban models, that is, several rooms each dedicated for a special use. Comprised of three main rooms, it was a simplified and smaller version of other medieval urban baths found in the region, particularly those of thirteenth-century Damascus (Ecochard and Le Coeur, 1942: 17-25). Its scale (both in terms of the size of the spaces and the capacity of the cisterns) is comparable to that of the castle of Sadr, founded by Salah ad-Din (1193 AD/ 589 AH) in the Sinai (Mouton 2010), and thus probably served a limited clientele (FIG. 16).

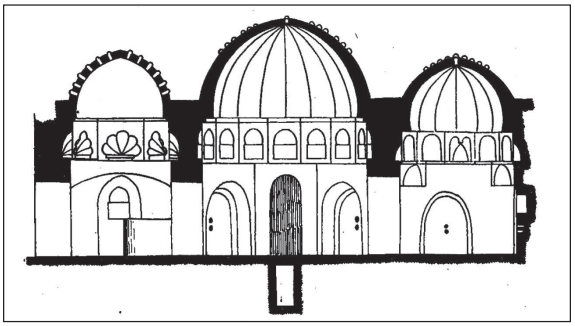
The bather undressed in the "cold room" (*mashlaḥ* in Arabic), wrapped himself in a piece of fabric, (*fūṭa*), and then entered the smaller "warm room" (*wasṭānī*; Room 4), which was positioned at a right angle to the entrance to prevent heat from escaping. There would have been both hot and cold water inlets and a basin in the *wasṭānī*; here he could wash or receive treatments such as massage or waxing. Bathers then moved to the "hot room" (*jūwwānī*), which would have been extremely hot, as heat was produced by two separate systems; the hypocaust underfloor heating on the one hand, as well as steam, which was a by-product of the overflow from the basin situated immediately below the furnace-heated water tank. After perspiring in the hot room, bathers first washed, then retraced their steps, returning to the *mashlaḥ* in order to dry off, relax and have something to eat.

The site displays great mastery of contemporary construction techniques, by adopting and optimising the capacities and possibilities of the available materials, for both the mortars and rendering, as well as the suspended floor. The bath design also demonstrates the builder's abilities, not only for efficient distribution of both hot and cold water, but also for creating a luxurious environment. Three architectural limestone blocks (0.45×0.25m×0.23m) carved to resemble a shell (conch) were found in the destruction layers of the "hot room" during the excavation (FIG. 17). The workmanship is of a high quality, and was accomplished with serrated tools, similar to those in use in the thirteenth century, notably in Damascus (Vigouroux *et al.* 2015: 193 and 203). The quality of workmanship was assisted by the composition of the limestone used, which facilitated such fine carving. Furthermore, these blocks are very similar to those used to decorate drums for the cupolas of several Damascene mausoleums, which have been dated from the late twelfth century to *ca.* 1230 (627 AH). Similar conch shell decoration is often seen in the squinches (which form

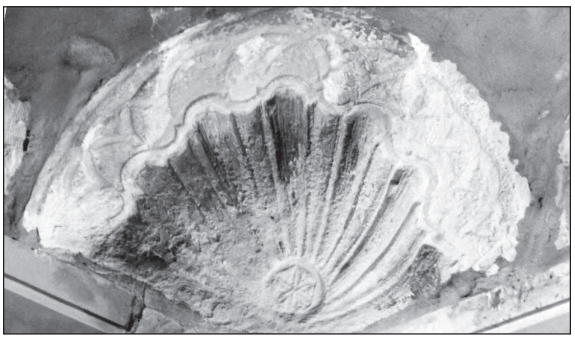


16. Hypothetical section of the bath (east-west) Mission Dusaq 2017/© Avril 2017, Maxime Santiago.

17. Squinch from the hot room/*jūwwānī* (©Mission Dusaq 2009/ E.Vigouroux).



18. Section drawing of the Hammam Sama in Damascus (Sauvaget 1930, fig.5 p. 377).



19. Squinch in Maqām Abū Sulaymān in ash-Shawbak (©Mission Dusaq 2015/ E.Vigouroux).

a transition zone from a square building to a cupola) in the Damascene baths dating to the Ayyubid era; for example, the Hammam Sitt ‘Adhra and the Hammam al-‘Umari, both of which can be dated to the late twelfth or early thirteenth century (Ecochard and Le Cœur 1942: 23-26 and 40-43; Ecochard 1940: 93-99). However, the conch shells discovered in the hot room of the bath at Khirbat ad-Dawsaq are not exactly the same as those from Damascus, as they have five ribs only. This is a rare form, the only comparison for which can be identified in the warm room of the Hammam al-Sama in Damascus, which dates to the late twelfth or early thirteenth century (FIG. 18).

The larger conch shell (0.70m × 0.45m) displaying fine interlacing patterns (see FIG. 8), was discovered in the destruction layers of the “cold room” is very similar to those which decorate the drum angles for the cupola of the Maqām Abū Sulaymān near ash-Shawbak (FIG. 19), which has been dated to the thirteenth century (Walmsley 2001: 536; Milwright 2006: 17-18; Nucciotti 2007: p. 30 and fig. 14, 31; Marahleh 2011: 227-230).

This typology and the decorative features of the bath allow us to propose the first half of the thirteenth century for construction. Moreover, the finesse of the decorative elements and the technical mastery indisputably testify to the wealth of the person who commissioned the bath, as well as to close links with Damascene architecture. Thus, it is possible to consider the raison d’être of such a bath in such a place, as well as the identity of its founder.

Raison D’être

ash-Shawbak castle was built by King Baldwin in the southern part of the Kingdom of Jerusalem in 1115 (509 AH) (Devais 2008: 28-30), and originally called Montreal. It was seized by Salah ad-Din in 1189 (585 AH) after a year-and-a-half-long siege, who then entrusted the region to his brother, al-‘Adil Abū Bakr (Humphreys 1977: 63) It was later controlled by al-‘Adil’s son, al-Mu‘azzam ‘Īsā, who was appointed Governor of Damascus province during the period his father was occupying Egypt in 1200 (596 AH) (Humphreys 1977: 125-154). According to the historical sources, the thirteenth century was an economically prosperous time for the region (Walmsley 2001; Milwright 2006: 15-19, Milwright 2008: 114-115; Hamarneh and Nuccioti 2009: 110-119; Hamarneh 201: 182-183). Consequently,

al-Mu‘azzam ‘Īsā (1227/624 AH) made adjustments to the fortress and to the village of ash-Shawbak (Brown 1988; Nucciotti 2007: 45-47; Milwright 2008: 74-75; Vannini 2011: 153-154): “he made it a city worthy in its own right and increased its defences and charms”. He also encouraged the development of agriculture, even introducing “strange” fruit trees from various regions (Ibn Shaddad, al-A‘laq al-Khaṭira: 80). ash-Shawbak then enjoyed a certain prosperity, to such an extent that medieval Arab authors lauded the town, the abundance and quality of its water, and its gardens and orchards, which they compared to those of Damascus (al-‘Umarī 1923: 133; Dimashqi 1894: 291). Traces of a 200m × 100m enclosure, which may corroborate the existence of a sizeable orchard at the Khirbat ad-Dawsaq site, only 5km from ash-Shawbak, have been identified by examining aerial photographs taken by the Wings for Science team in 2013.

The inscription discovered in 2016[6] is consistent with a construction date for the complex within the reign of Prince al-Mu‘azzam ‘Īsā (1218–1227/615–624 AH) who by this period had been invested as the sultan of the Ayyubid province of Damascus (Humphreys 1977: 155-192); thus, it could well have been part of an agricultural development programme for the region, with the residential structures used as a vacation residence.

However, an alternative hypothesis can also be envisaged. Before the Franks occupied this region in the twelfth century, Syrian caravans making the *Hajj* pilgrimage to Mecca followed the same route than the Roman *Via Trajana Nova*, which was not only secure but also provided sufficient stops to replenish water supplies; this trade route corresponds to the “King’s Highway” in modern Jordan (Petersen 2013: 21). Between 1115–1189 (509–585 AH), when the region was controlled by the Crusaders, the castles of Montreal and Karak posed a serious threat to the *Hajj* caravans, which were subject to taxation and pillage by the overlords. As a result of this, Salah ad-Din’s secretary, *al-Qāḍī al-Fāḍil* (1199/595 AH), declared that Karak was “the obstacle that strangles the throat … the ambush set up on the frequented road … it was a sin for this century … the excuse of he who neglects to accomplish the pilgrimage” (quoted by al-‘Umari Demombynes 1923: 132).

After Karak and ash-Shawbak, together with their hinterlands, had been conquered by Salah ad-Din’s armies, the *Hajj* route became more secure, because of its proximity to these fortresses and the troops stationed there. Improvements were thus needed to equip this road, which had been more or less abandoned for almost a century. However, as the King’s Highway, descending from the north, led to the foot of Khirbat ad-Dawsaq, at the junction with the road leading to ash-Shawbak, the existence of the site may be linked to a renewed frequentation of this route; if this hypothesis is correct, it could then be identified as a *Hajj* stopover site. This theory is corroborated by the fact that contemporary writers affirm that Prince al-Mu‘azzam ‘Īsā wished to install baths, wells and caravanserai at each stage along the pilgrimage route (Humphreys 1977: 191-192). According to Sibṭ Ibn al-Jawzi (1256/654 AH), he commissioned the construction of a rest house and two baths at the Ma‘ān staging post. On the other hand, it should nevertheless be stressed that the diminutive dimensions of the bath at Khirbat ad-Dawsaq, which could only have serviced five or six bathers at any one time, indicate that it was intended for a select clientele. It is thought that al-Mu‘azzam ‘Īsā himself completed the pilgrimage in 1211 (608 AH) in the company of several of his close

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confidants; perhaps this bath was intended for the prince and his retinue? Once the inscription that we discovered in 2016 has been analysed by prof. Frédéric Imbert (ifpo) it was provide more information about the date of the building and the identity of its patron.

Moreover, further exploration of the site will provide additional evidence, not only for the use of the buildings, but also regarding the water supply, without which the construction of a luxurious bathing complex in this semi-arid region would not have been possible.

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