Mada'in Saleh

Revisited

Nabataean City in Saudi Arabia

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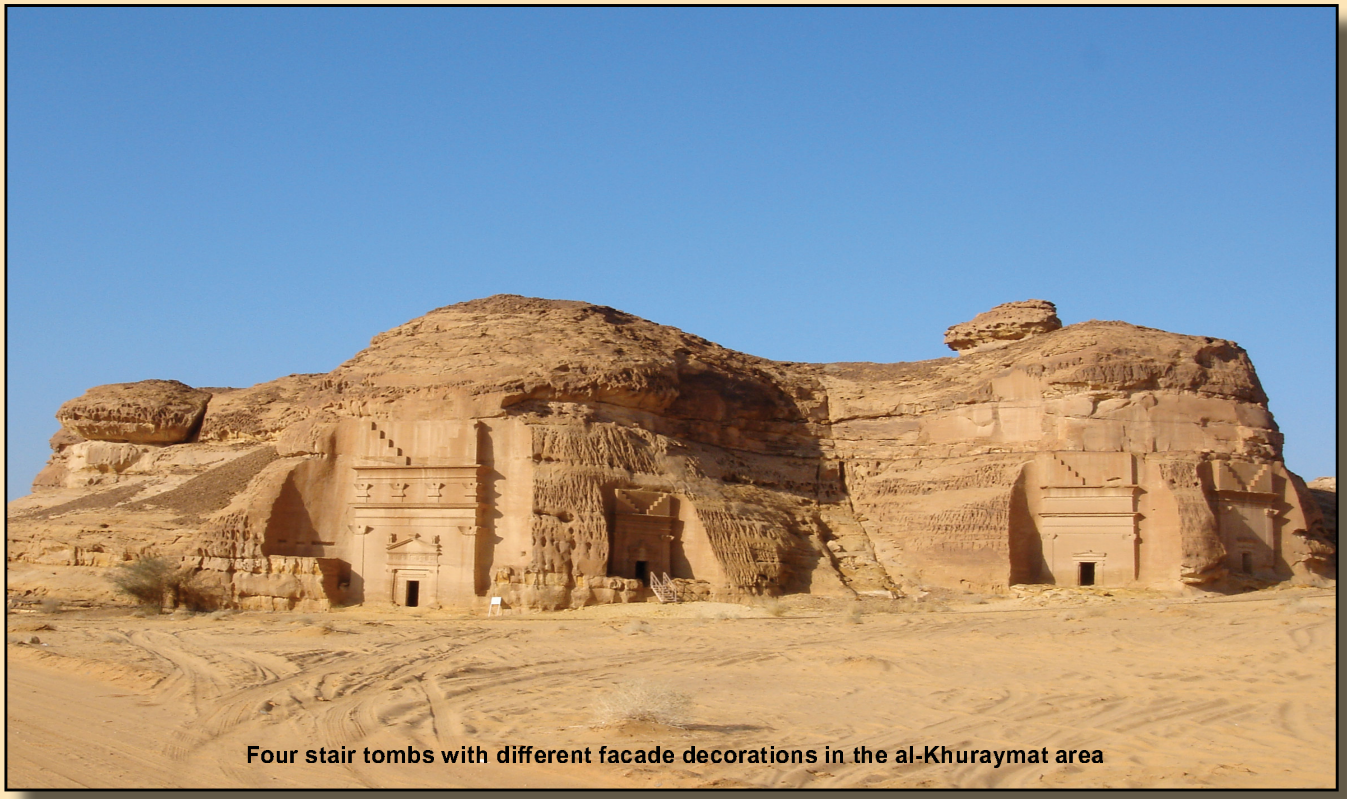
Since my first visit and article five years ago a lot of detailed research and various excavations were done by the Saudi-French archaeological team at Mada'in Saleh under the leadership of Laïla Nehmé and Dhaifallah Al-Talhi. Recently the first summary report was published in book form and studying its interesting results triggered my renewed site visit and this update article. This time I went well prepared with numerous notes and plans at hand to find some of the described locations off the beaten tourist track.

This included the over 30 previously disregarded Neolithic tombs called cairns or tumuli situated on top of the rock outcrops in the al Khuraymat area with numerous tomb facades all around on the side walls beneath. I also will refer to the fascinating results of the residential district excavations and other exciting dig finds there. Special mention will be given to a solidary rock formation to the east of Jebel Ithlib close to the perimeter fence, which is only visited by few archaeologists, who know about its importance.

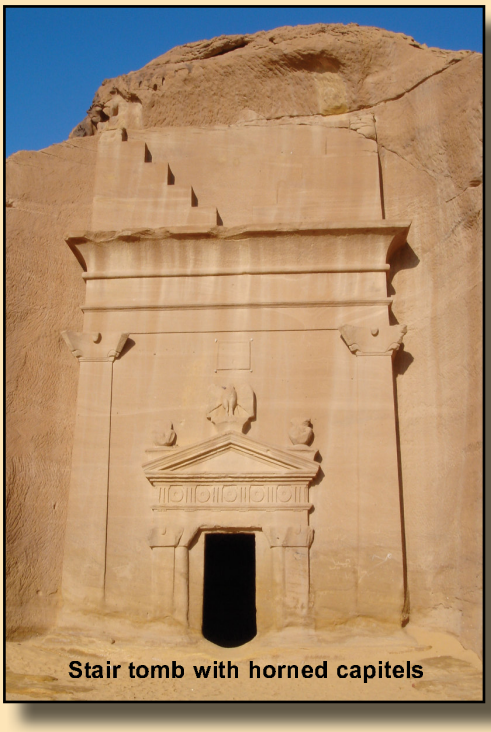


Four stair tombs with different facade decorations in the al-Khuraymat area

Mada'in Saleh Big Picture

Mada'in Saleh is Saudi Arabia's first UNESCO World Heritage site and very different to the Nabataean capital Petra in Jordan. As Mada'in Saleh, also called Hegra in Greek, or al Hijr in Arabic, is a desert city, it is situated in an open area, which is surrounded by numerous sandstone outcrops. These rock formations were used for the famous Nabataean temple like tomb facades carved into the vertical cliffs. As these sandstone rocks have a picturesque coloring ranging from beige yellow to reddish the total setting of the tomb facades and rugged rock formations are more than impressive. Because the location is considerably more arid than Petra, the tombs here are much better preserved and some just look like being created yesterday.

In total there are 139 monumental facade tombs, of which 36 have noteworthy and rather informative Nabataean inscriptions not seen at Petra, an example of which we will describe further on. In addition you can explore the ceremonial dining rooms, which are called triclinium, because of their stone benches lining the walls on three sides, as Nabataeans dined in Greco-Roman style lying down. Further you can see many votive niches with betyles, which are small stone columns representing various gods and over 100 places of sacrifice with altars and sacrifice basins. Around 300 inscriptions including Nabataean, Aramaic, Dedanic, Safaitic, Hismaic, Thamudic and even Greek and Latin scripts can be seen as well to complete the historical big picture.



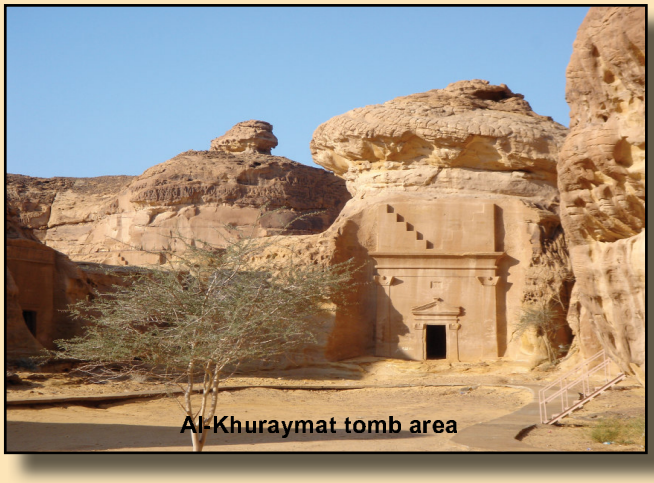
Stair tomb with horned capitels

Sensational Monumental Tombs

Madai'in Saleh was an important trading station on the famous Incense Route and populated as early as Petra around 2,300 years ago. It was the most southern Nabataean city and when Roman pressure on Petra grew Mada'in Saleh inhabitants stop burying their dead at Petra and started building monumental tombs on site. Therefore all tombs were built in a very short time span between 20 - 70 AD using five different rock formations grouped around the city center. These tombs had big chambers to be used for multiple family burials over a period of up to 250 years, and to bury over 500 deceased wealthy inhabitants. One

tomb alone was being used for 58 burials alone.

The size of the tomb facade, which can reach a heights of over 20 meters, also is an indication of family wealth. Poorer inhabitants had only one choice, to use one of the hundreds of simple pit tombs found on various rock plateaus. Alone the huge rock on the right side before entering the holy district of Jebel Ithlib has more than 150 of those pit tombs on top. These can be viewed by climbing up to the rock plateau on the right and passing the sacrifice sites in the Jebel Ithlib area, that give an excellent view across the entire Mada'in Saleh plains. In total there were over 2,500 graves discovered at greater Mada'in Saleh.

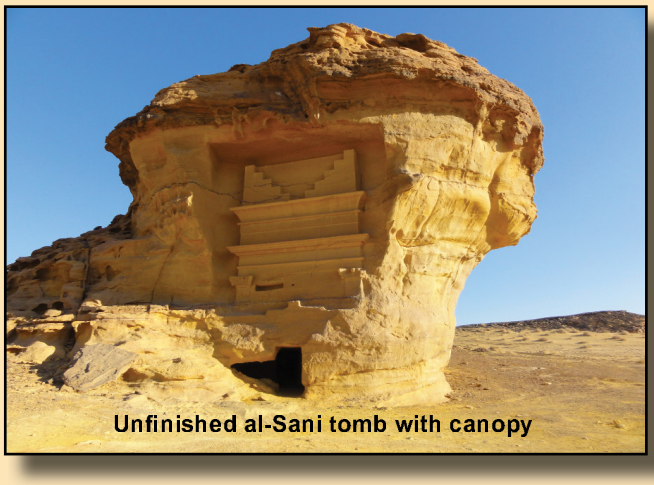

Al-Khuraymat tomb area

Unique Tomb Facades

The majority of tombs at Mada'in Saleh are the Hegra tomb type with five crow steps at the top and the simple typle with one or two rows of merlons on the top. All Nabataean tombs are easily recognizable by a unique feature they have. This are the horned capitels crowning the columns and pilasters, which are not found anywhere else and they are also an important part of Nabataean architecture.

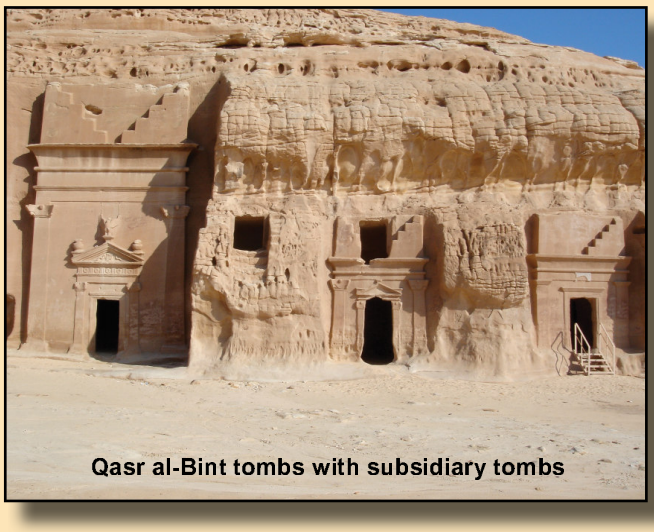
Single tomb never used for any burials

The typical Nabataean tomb facade consists of two flat corner pilasters with horned capitels, which are also used to frame the tomb entrances in smaller versions. These entrances were topped by a triangular pediment, some of which featured a row of rosettes, a gorgon face and two serpents serving as grave guardians. The pediment is crowned by two urns on each corner and a central eagle representing the main Nabataean deity Dhu Shara. Above the entrance between the various cornices the tomb builders filled a square plaque with the names of the tomb owners and builders, plus the specific burial conditions, which could be lengthy and cover various lines.


Unfinished al-Sani tomb with canopy

Tomb Construction – How it was done

Nabataean tombs were carved into the rock face without the use of any scaffolding. This was only possible by starting at the top and working your way down by using the carved out rock area as a working platform. But this needed also an excellent eye and skillful measurement not to fall short of space at the bottom. If you look at the tomb facades you can see how space was adjusted, either by finishing the door step off above ground level, or using the space between the entrance lintel and top cornice as buffer resulting in various heights of this facade portion.


Qasr al-Bint tombs with subsidiary tombs

Only at the unfinished Qasr al Fahrid tomb one can see, which technique was used to carve away

the huge rock surfaces and volumes. The same technique was used already by Egyptians masons in the Aswan quarries to chisel out the building blocks for their statues and pyramids. This was done by using hammer stones and copper chisels to create narrow channels in the rock, so that separators could be inserted and hammered in to break them off in one peace. Some of these unmoved blocks are still visible next to the Qasr al Fahrid tomb entrance.

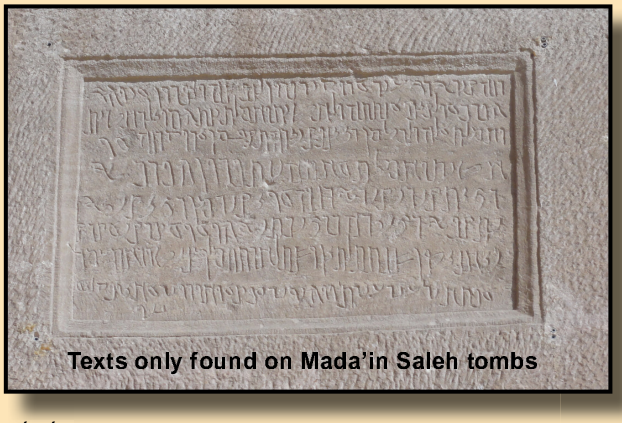
Tomb Sealing System

As most of the tombs are family tombs and were used over two centuries, they needed to be sealed against the elements, mainly sand and wind, as well as against possible theft, as we will see from the tomb texts later. Therefore archaeologists found traces of various sealing systems in the door frames of half of the tombs at Mada'in Saleh. Permanent sealing was executed with rows of stone blocks cemented into the doorways. Here side holes for blocking lintels were found, together with central and corner floor holes. But temporary sealing systems with wooden doors also were used with several door types, some with inset slotted lintels and latches, but also with double winged doors and hinges.

Finally burial chamber cells, niches and burial pits were also sealed with stone slabs, some identified with names. Some of the pits were used for multi burials with deceased stacked up on top of each other separated by cap stones.

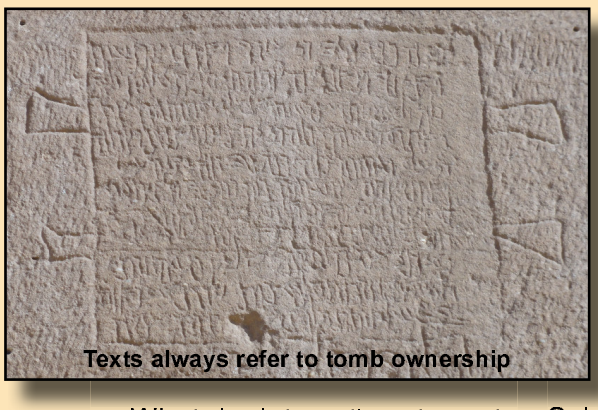
Tomb Inscriptions

An excellent and most informative inscription example is the text from tomb number 39 in the Qasr al Bint formation south of Jebel Ithlib:



Texts only found on Mada'in Saleh tombs

"these tombs are constructed by Kamkam daughter of Wa'ilat daughter of Haramu and her daughter Kulaibat for themselves and descendants in Teeba month of the 9th year of the reign of King Haretite who loves his people. Dhu Shara and his crown, Al Lat in Amned, Manat and Qaus condemn anyone who sells, buys, mortgages, gives it as a gift, removes a body or bones buried inside it or buries anyone other than Kamkam and her daughter and their descendants. Anyone who does not execute what is written here will be punished by Dhu Shara, Hubalu and Manat by five curses and a penalty to the clergyman of 1,000 Haretite coins except someone who presents a valid document written by the hand of Kamkam or her daughter Kubailat regarding the said tombs. Engraved by Wahab Alah son of Abd Obodas".



Texts always refer to tomb ownership

What is interesting to note here are various facts. Most interestingly is that women could own family tombs and subsequently also run family businesses. Secondly tombs were an asset and could be mortgaged, leased off, or even sold. This would entail an early record keeping and arbitration authority, which we know from other sources was done by the temple as responsible institution, where copies of these texts were kept, and the priesthood acted as administrators.

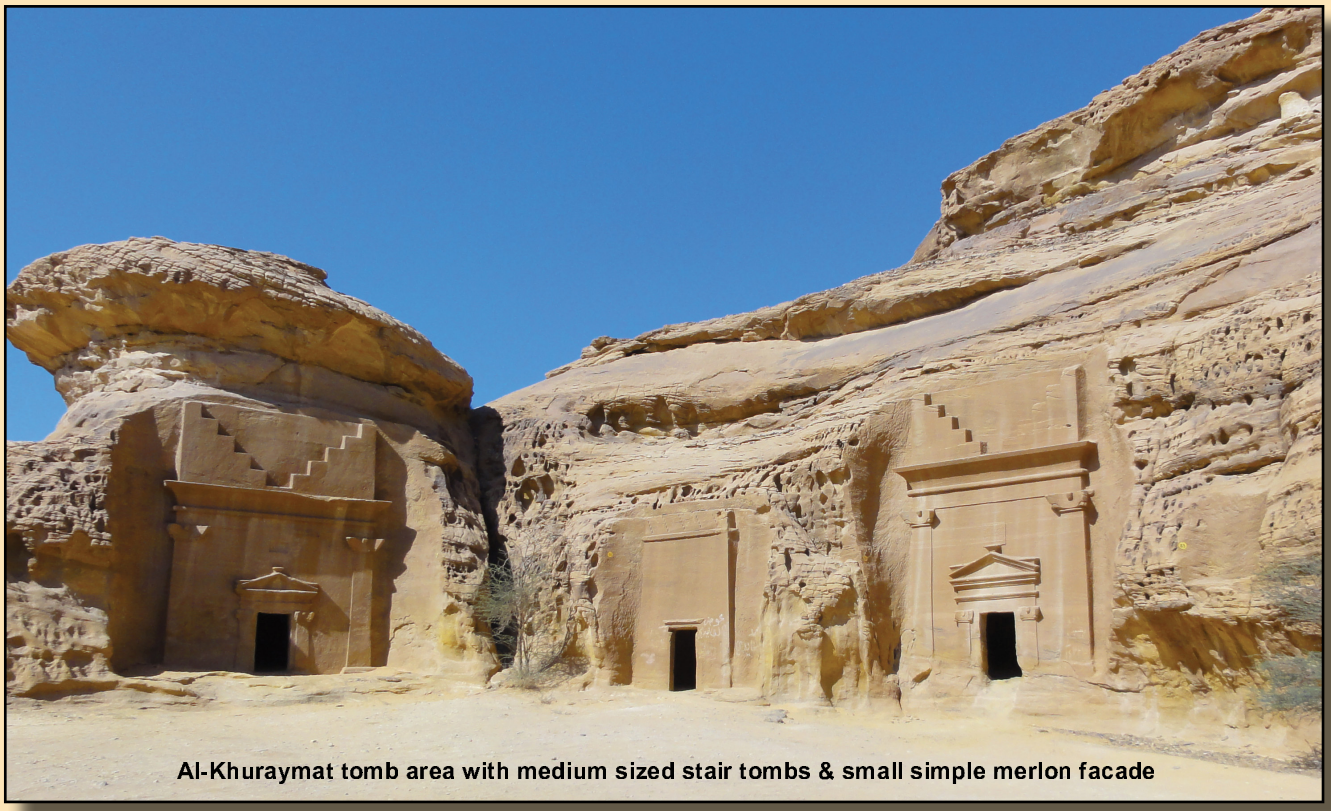
Further financial fines were applied plus punishment by curses from the main Nabataean deities named here. And finally next to the owners also the tomb builders were named. What is also interesting, same as in Egypt Nabataean tombs were built before the owners death to be ready in time.

Differences to Petra

There are various important differences between Mada'in Saleh and Petra tombs. This can be seen in the finishing techniques of rock cut tomb chambers. Petra tombs got ornamental cuttings inside with guiding strips in the angle of chambers, which were even decorated.

At Mada'in Saleh the chambers were carved out more crudely creating very rough chamber walls with no guiding strips at all. Most Petra tombs were painted both outside and inside. For that purpose a layer of plaster or stucco was used. This was not done at Mada'in Saleh.

On the other hand Petra tombs have no inscriptions with a few exemptions like the Turkmaniye Tomb. Most interestingly the Mada'in Saleh tomb inscriptions helped a lot to understand the little known Nabataean culture, as no



Al-Khuraymat tomb area with medium sized stair tombs & small simple merlon facade

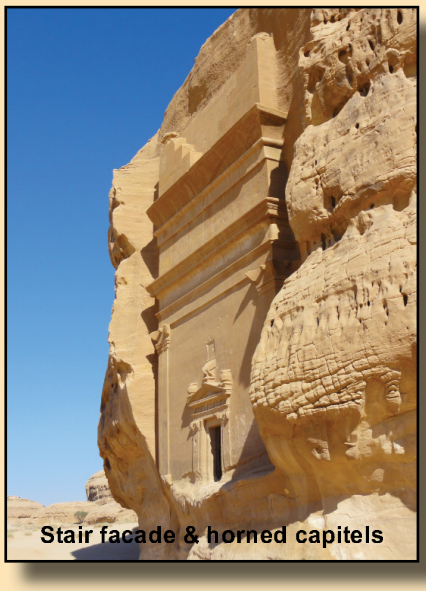
written records exist, because Nabataeans were very secretive and did not keep any royal annals like all Mesopotamian kingdoms.

In addition tombs here are better preserved then those in Petra, because of the harder sandstone and because tombs are less exposed to wind and erosion. It is important to note that Petra also suffered two major earthquakes in antiquity, which left many visible marks of destruction.

At Mada'in Saleh 95% of all structures are tombs, but Petra has more civic buildings and temples. All tombs at Mada'in Saleh have a very similar style and show much less diversity than those in Petra. But again certain architectural elements are not to be found in Petra such as sphinxes, ribbed urns, eagles, rosettes and human gorgon faces and serpents.

A final point of distinction is, that not a single temple building was discovered so far in Mada'in Saleh, a very unusual fact for a Nabataean city of this size. Mada'in Saleh Excavation Finds One of the important items taken from Mada'in Saleh is the only Nabataean sundial found anywhere so far. This important piece was taken by the Ottoman Empire during their occupation and construction of the Hijaz Railway about 100 years ago.

Unfortunately the rail tracks were laid right through the archaeological site of Mada'in Saleh. The sundial is today still exhibited at Orient Museum in Istanbul. This concave half dome sandstone is divided into twelve parts by radial lines with a vertical rod shedding sun light on the respective lines indicating the precise time.



Stair facade & horned capitels

Artistic Sophistication

Other finds in the residential area include various stone made daily use objects, such as water basins, mortars with handle, tumblers, censers, cooking pots, pole crowns and quartz flint spindles. Elaborate steatite, alabaster and marble vessels are proof of the high level artisan skills Nabataean craftsmen developed to create beautifully carved and embossed forms, like an eagle spreading his wings, or two wild horses raised on their hind legs, plus a sitting lion with a standing man resting his hand on the lions shoulder.

Pottery & Terracotta Items

A high percentage of the assemblage included pottery and potsherds consisting of the typical Nabataean eggshell thin ware either decorated using colors such as red, brown and brown with white. The painted ware included peach shaped pieces in red clay and

painted in cream, and the burnished ware had a smooth clay surface either red or brown.

Glazed ware found had a green, blue or yellowish enamel type surface, and even porcelain items and glass fragments were discovered here. Clay lamps and drinking cups round up the picture. A big water jar found at a bakery was engraved with the name “Fatmi”.

Jebel Ithlib sanctuary area

The discovered terracotta figurines in the residential quarters are mostly representing Egyptian deities, such as a woman with lion head possibly representing Egyptian goddess Sakhmet, or a sitting child with his finger in its mouth representing Egyptian god Horus as child, plus a dwarft with either lion or cat face pointing to Bes or Bastet, and finally the cobra headed goddess Waget.

Metal Objects

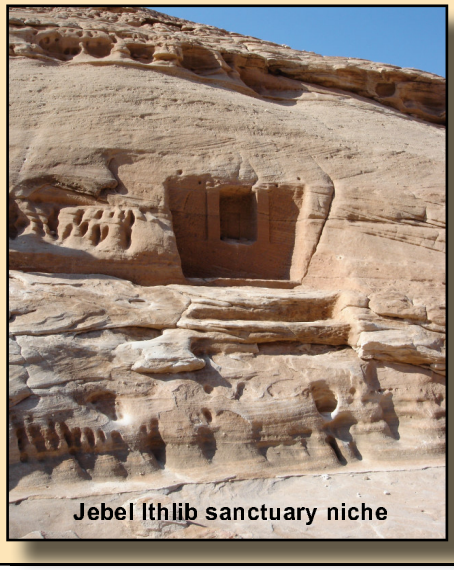
These included copper and iron nails, door hinges, handles, a pyramid shape object possibly being a yarn spindle, copper kohl sticks, bronze rings and chisels for masons to work on tomb facades. Also hundreds of silver coins were discovered across the entire housing area.

Selected tombs were excavated recently and surprising items were unearthed, as it was first believed that all tombs have been stripped of all possessions already early in antiquity. The objects discovered included many textile fragments and leather pieces belonging to the deceased clothing and death wrapping. Some wooden coffin fragments were also identified next to some skeletons, which allowed further research on bones to determine heath status and nutritional basis.

Holy Center Jebel Ithlib

This is a group of rather high rocks crossed in the middle by a narrowing wadi situated on the edge of Mada’in Saleh and was the holy precinct of the ancient city with no tombs found here. The location must have had a great importance to Nabtaeans, as most of the 100 places of sacrifice are encountered there. These include small to large shrines and votive niches mihrabs to be seen all over rock walls with symbols of deities and oratory inscriptions. But some researchers believe that the Jebel Ithlib area was actually not a sanctuary, but a center of social meetings and festivities, because of the sparse written religious dedications, which were so typical for Nabataean sanctuaries.

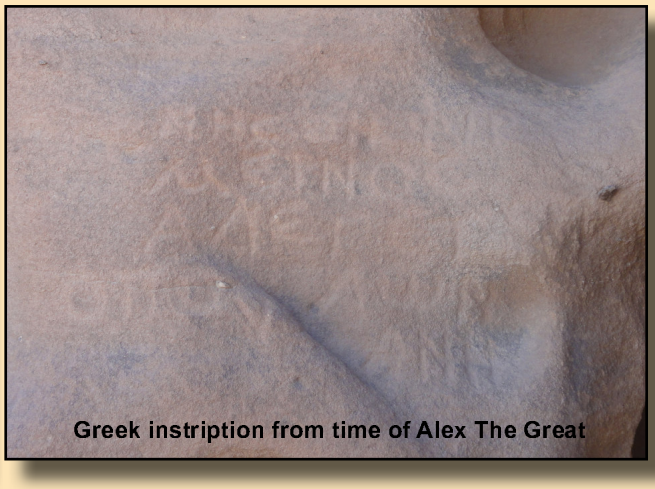
In this context it is also important to note, that Petra niches and sanctuaries are unepigraphic, which means that they did not have any votive and oratory text carvings. This fact again supports the holy purpose of Jebel Ithlib. Here the only human face like image or betyle in Mada’in Saleh was discovered, consisting of a square surface with two eyes and nose, which experts link to Nabataean goddess al-Uzza. Other gods mentioned at Jebel Ithlib are Shay’alqawm, Mat Bayla also called the lord of the temple, which is another name for main deity Dhu Shara. In total this area houses over 80 ancient inscriptions found on its


Jebel Ithlib sanctuary niche

Jebel Ithlib eye idol stone

Jebel Ithlib niche with betyle

One of the few rock art panels full of camel



Greek instription from time of Alex The Great

rock walls, most of them in Nabataean script, which became the first script writing letters together.

Interesting Rock Art

There is also an interesting rock drawing of two bulls and camels showing the bulls face to face, and one bull tail tied to a camel, and here you can see the name Theos written in Greek letters under the left bull. If you explore Jebel Ithlib further I recommend visiting the place of sacrifice half way up the flat rising plateau on the right, which is assumed to have been used for slaughter of sacrifice animals, because of its two small basins and one huge pool in front. On the opposite side a carved out cistern can be found in what looks like a tomb door. This cistern was filled with run off rain water via two canals coming down from the rock walls, one from a dam higher up on the left and the other running down all the way on the right side rock wall.

The Diwan Triclinium

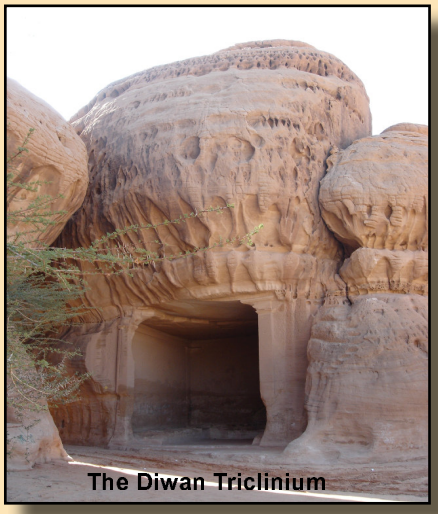
This huge cut out hall or triclinium seen above measures about 12 x 10 meters and is eight meters high and is situated on the right side just before the narrow canyon like entrance to the holy district of Jebel Ithlib. We know that these halls were used for ritual dining and an ancient record mentions a group of eleven officials meeting and dining regularly, being also entertained by two musicians playing a flute and lyre. You have to look very closely to recognize the cult figure high on rock face above on the right of the Diwan.

Shrines & Niches

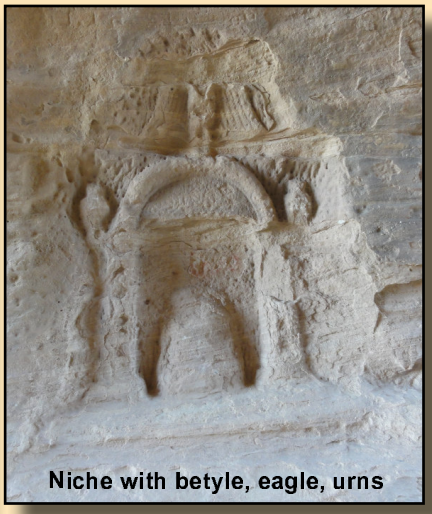
The entrance area is covered with a dozen shrines and niches on both sides, some of which are difficult to recognize, as the windy elements have taken their toll here. It is assumed that various groups, tribes, families, merchants and caravan leaders came here to have a shrine created for them devoted to their chosen deities. These were symbolized by betyles either cut in stone or even portable versions to be placed in the niche on special occasions. Close to them we find various votive inscriptions with the names of deities and/or those persons who came to worship them. Some inscriptions were done professionally; others are executed in a more crude way and assumed to be done during rituals.

Settlement & City Layout

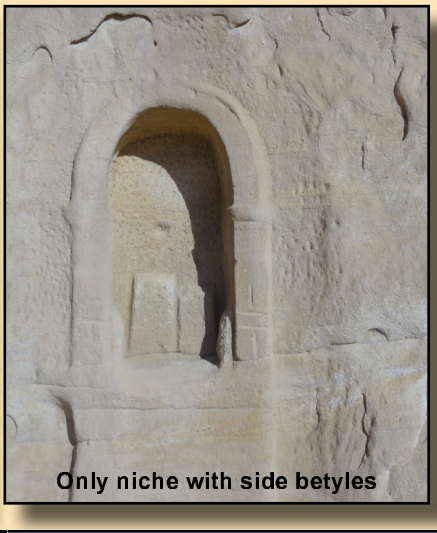
The Mada'in Saleh residential quarters are situated in the flat wide open area between the rock outcrops with the tomb facades. Today this fenced off area is not visible to visitors, as very little excavations and reconstructions were done so far. In antiquity it was protected by a city wall with over 40 watch towers and



The Diwan Triclinium



Niche with betyle, eagle, urns



Only niche with side betyles

Al-Khuraymat with fascinating Jebel Ithlib formation in the background & residential area between

extended over an area of about 140 hectares, with the closest tomb just 100 meters away.

Mada'in Saleh experienced two major occupational phases, with the first starting in the 1st century BC and the second during the 1st century AD when Romans took over Nabataean rule. During this time large housing units were built, which were repaired many times until the rise of Islam. But during the earlier Nabataean period life was more luxuriousand despite being smaller buildings were more refined.

Archaeological surveys show, that Mada'in Saleh had straight and curved streets, following a certain grid pattern. The first city wall was built hastily by Nabataeans in low quality with mud brick and without foundations, so that several repairs and reinforcements needed to be done later. At this time the city wall was constructed of sandstone and top layers of mud brick to a length of two kilometers. Unfortunately one third of the city wall was later destroyed by the Ottoman construction in 1901 of the Hejaz railway line.

Excavated houses with pottery storage jars

Water supply in excavated area

Settlement Inscription

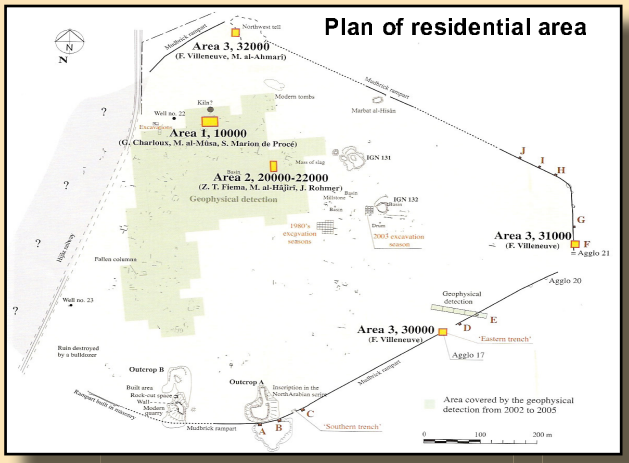
A Latin inscription was discovered in the residential area carved in a red sandstone slab with the following text:

"for the welfare of Emperor Caesar Marcus Aurelius Antonius Augustus Armeniacus Parthicus Medicus Germanicus Sarmaticus Maximus the community of the Hegreni restored the wall, destroyed by the passage of time, at its own expense, under the governorship of Lulis Firmanus, legate of the Emperor with the rank of Praetor, the work being arranged by Pomponius Victor centurion of Legion III Cyrenaica and his colleague Numisius Clemens and construction being supervised by Amrus son of Hainan the headman of their community".

Taking the full list of titles into account this inscription can be dated between August 175 to March 180 AD during Roman rule of Mada'in Saleh.

It is a rare complete inscription from the time of Emperor Marcus Aurelius not found elsewhere

in the entire Eastern Roman Empire. It is interesting to note that this inscription giving account of the restoration of the main public square has two spelling errors, dilabsum vs dilapsum and collegae vs college. It also proves that Mada'in Salah was still inhabited 100 years after the last tomb was built and that the city was still important enough to rebuilt the main square. It also tells us that the Roman name Amrus was actually Amr Ibn Hayyan the Nabataean leader in Mada'in Saleh at the time.



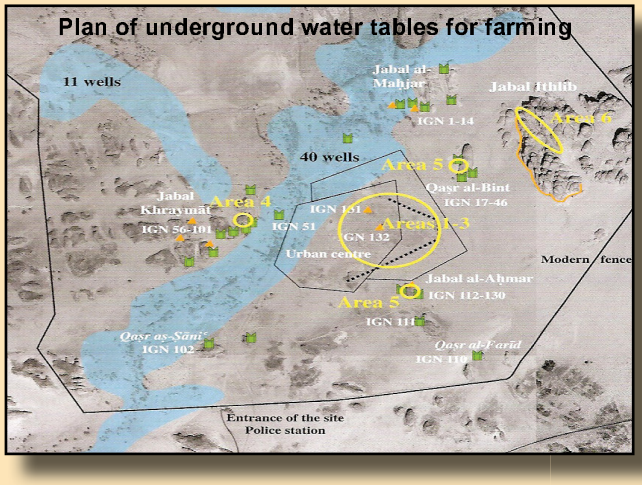
Sufficient Water Supply

We know from Petra that Nabataean houses offered a high level of luxury with water channels, pools, fountains, which were supplied with water by two major wells inside city walls. In total there were 75 wells in and around the city center, and over 50 wells were used for agricultural purposes. There was a sufficient subterranean water flow to feed all these wells, which had an average depth of about 10 to 20 meters. The Mada'in Saleh plains were fortunate to have various aquifers and a low underground water table, being the main reason to establish a city here. The aquifers were fed by run off rain water from the huge Harrat Al' Uwayrid area nearby.

Farming Activities

With sufficient water agricultural production was possible to feed a growing population. For example 750 liters were necessary to produce one kilo of maize, and over 1,000 liters to produce one kilo of wheat, just to put things into perspective. But what did Nabataeans farm? Experts established that a variety of grains were produced, such as hulled barley, naked wheat, lentils and field peas. Fruits included date, fig, olive, pomegranate, peach, grape and fruit tuaxon, which is a red berry belonging to the jujube family.

These are only some of the bio-archaeologically proven menu items, be assured that the true list of floral food items is much longer, as our ancient Nabataeans living at Mada'in Saleh had a very rich and balanced diet. Just remember that the Neolithic hunter-gatherer societies living in the area 7,000 years earlier already had over 100 different grains, nuts and fruits on their menu.



Nabataean Trading

The main trading goods passing through Mada'in Saleh were high quality frankincense, myrrh, perfumes and ointments, various spices and gem stones. The list included over 100 items sources as far away as China, India and Zanzibar. Frankincense originated from the various Yemeni kingdoms of Saba, Ma'in, Qataban, Hadramaut and later Himyar. This active trade resulted in Nabataeans controlling about 25% of Roman trade and even installed trade offices in Rome to manage the complete supply chain and increase their profitability. But they did not only trade with luxury goods hungry Rome, the Egyptian Empire was supplied on the north route via Gaza and Sinai, and the west route via Tayma, Daumat Al-Jandal supplies the various Mesopotamian kingdoms.

Possible Temple Site?

The settlement area also has various hills, one with steps leading to its top, which features a Thamudic inscription and water basin with two circular cavities possibly used for libation ceremonies. The second has remains of small buildings on top with massive walls still preserved, again with stone carved steps and foot holes offering access. A third is probably a sanctuary, because of the niches carved into its flanks and again stones and mud brick remains on top are indications of a shrine. The last was again a sanctuary with niches carved into its sides, and archaeologists assume that a stone building was built against it which is evidenced by wall foundations and column drums with horned

capitels found in the vicinity. As no temple building has been identified at Mada'in Saleh yet, this might be the missing temple site.

Text Interpretations

Archaeologists get their best indication of dating an ancient site by the potsherds found in the excavation strata. But inscriptions are a more precise source, if they are readable and decipherable. The problem of all ancient Arabian script is that they only used consonants and it needs some experience to interpret them correctly.

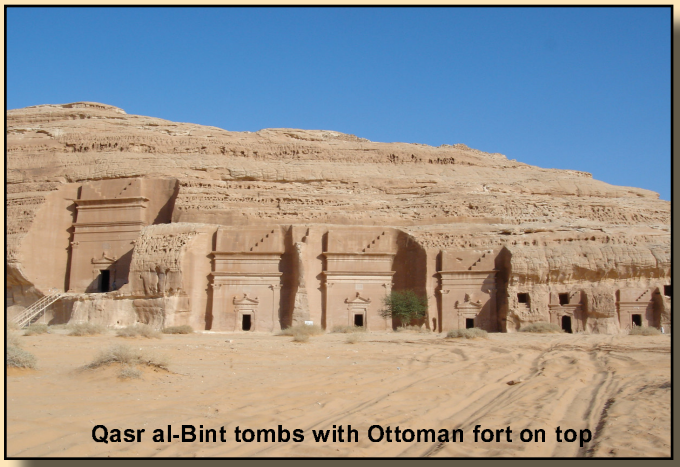
The following text might help us to understand this better. This is the text as seen: *`hd šly lmr byt` `lhh* and this is the modern-day language translation: *"Šullay took for the lord of the house his god"*. For our better comprehension experts added this comment: the lord of the house or lord of the world (in other texts) is meant to be the Nabataean main deity god Dūšarā. These were just two of his many names. But in Mada'in Salah a temple built for any god or goddess was not found yet and this might be the first written indication that future excavation might reveal this missing piece of the puzzle.

Human Sacrifice?

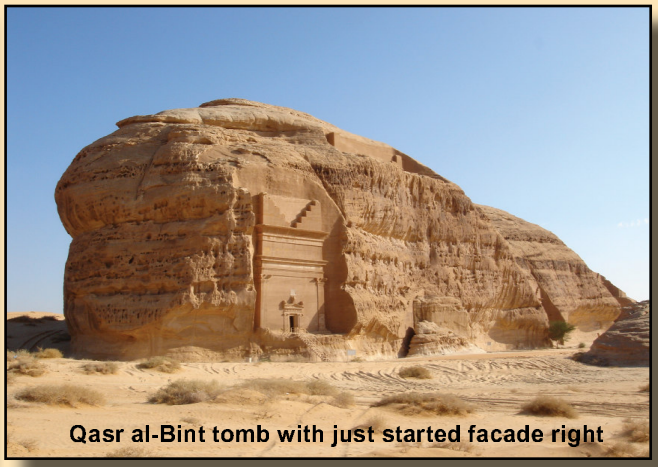
Another inscription reads: *dkyr zydw smypr` br klbw,* and is translated as: *"may Zaydū the standard bearer son of Kalbū be commemorated"*. The profession of Zaydū smypr` is a Greek loan word shmeioforovi meaning standard bearer, who acted for religious rituals and ceremonies. But very intriguing is an inscription indicating that human sacrifice was practiced in the Nabataean Emire. The inscription was translated as: *"abd-Wadd priest of Eadd and his son Salim and Zayd Wadd have consecrated the young man Salim to be immolated to Du Gabat"* the main deity at Dedan in al' Ula. A second indication of human sacrifice at the time exists, pointing to Duma in Hauran in Syria where it was performed for goddess al-Uzza.

Summary

Mada'in Saleh is the most important archaeological site we have in Saudi Arabia, despite not being the oldest. Due to its perfect preservation it is a site one must visit to understand the history of this country and its people. Its Pre-Islamic cultures already had a high level of sophistication and artisan skill. They also prove a long Arab tradition of deeply imbedded trading proficiency. Just imagine that recent discoveries show that horses were actually domesticated in Saudi Arabia and not Asia and 4,000 earlier as previously thought. Now when are you planning to visit Mada'in Saleh if you haven't yet? And for those who have been its certainly worthwhile another trip, just follow my example, I highly enjoyed it again and so will you.



Qasr al-Bint tombs with Ottoman fort on top



Qasr al-Bint tomb with just started facade right

Travel Tips

Al 'Ula has 3 interesting sites: Mada'in Saleh (UNESCO site), Dedan, Wadi Abu Oud & only 200 km north Tayma
You can make a short week end trip or a full week holiday with lots to explore
Since October 2011 the new al 'Ula airport is open, there are flights from Riyadh on Saturday & Monday
3 airports all 400 kms close to al 'Ula: Madinah, Hail & Tabuk, using these is better than driving 1,000 km to al 'Ula
ARAC Hotel is the best – phone manager Ahmed Saleh al Gauraany at 0503334891 or mail: hotelalula@arac.com.sa,
the hotel will also pick you up at Madinah airport if you fly in on a Wednesday
For professional local guide – phone Ahmed al Fadel in al 'Ula 055333828
Dedan is not open for visitors, but can be seen & photographed from the fence, it is close to the hotel
Wadi Abu Oud is the new secret tip with various sites of fascinating rock art & petroglyphs close to the hotel
Because of sand dunes you need well equipped 4x4 or ask local guide Ahmed to take you with his own Toyota
Mada'in Saleh like any other fenced archaeological site needs a SCTA visitor permit, which the hotel can organize
You can apply directly to SCTA in Riyadh via fax 01 880 8844 or go to their offices next to the National Museum with
your written application naming the site, visitor names & time of visit & always attach copy of your iqama
Applications take normally a week and can also be given by the few SCTA regional offices, soon also in al 'Ula