



AL-HIJR ARCHAEOLOGICAL SITE (MÂDAIN SÂLIH)

NOMINATION DOCUMENT
FOR THE INSCRIPTION ON THE
UNESCO WORLD HERITAGE LIST



KINGDOM OF SAUDI ARABIA

AL-HIJR ARCHAEOLOGICAL SITE (MÂDAIN SÂLIH)

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JANUARY 2007



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Ph.3: Camels in Madāin Sālih, Madāin Sālih Archaeological Project, 2005.





المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

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INTRODUCTION

Situated in one of the oldest cultural regions of the world, the Kingdom of Saudi Arabia possesses a rich and deeply rooted cultural heritage of its own. The Department of Antiquities and Museums was established to control and preserve the antiquities in the Kingdom, and Antiquities Laws were promulgated by a Royal Decree in 1972. Significantly, the Kingdom of Saudi Arabia was among the first countries to become a member state of the 1972 UNESCO Convention.

The merging of the Deputy Ministry of Antiquities and Museums with the Supreme Commission for Tourism (SCT) is an indication of the importance given by the Government to its cultural heritage. The SCT has drawn up a work plan to protect and preserve its ancient and outstanding cultural heritage, highlight its social, cultural and economic values, and bring to the knowledge of the world its ancient civilization and the role played by it in the history of nations.

The Supreme Commission for Tourism has reviewed and updated the old Antiquities Laws, and revised legislation is currently in the process of ratification. The five-year plan is based on a strategy of increasing the national work force and its role in the economic development of the country, expansion of research, protection and preservation of the cultural heritage and securing registration of World Heritage sites.

Al Hijr Archaeological Site (Madāin Sālih) is among the three sites chosen for nomination on the World Heritage list, which is the most prominent site in the Kingdom in particular and in the world at large. It is mentioned in the Holy Qur'an, while Western and Arab travellers and historians wrote accounts of its magnificent tombs and unique sculptures. It is an example of the richness and importance of the Saudi heritage.

Recognizing the importance of this action, the SCT has started to review the registration requirements and has prepared the attached nomination file of Al-Hijr (Madain Salih). This gives a clear vision about the site and reflects the efforts of the Kingdom to protect and preserve its cultural heritage.



Sultan bin Salman bin Abdulaziz al-Saud
Secretary General
Supreme Commission for Tourism
Kingdom of Saudi Arabia



| CHAPTER ONE |

**IDENTIFICATION OF
THE PROPERTY**

Previous page - Ph.4: A view of Qasr al-Bint from the south, from Babbli, 2006, p.74.

1.a Country

KINGDOM OF SAUDI ARABIA

Pl.1: Map of the Kingdom of Saudi Arabia and the Middle East, SCT, 2006.



KINGDOM OF SAUDI ARABIA

1.b State, Province or Region

MEDINA AL-MUNAWARAH PROVINCE

Medina Province lies in the northwest region of Saudi Arabia, between approximately 22.50 degrees and 27.30 degrees North latitude and 37.00 degrees and 42.00 degrees West longitude. Occupying about 7% of the area of the Kingdom, Medina province has a coastline of approximately 200 km on the Red Sea and is bordered by Tabuk Province on the north, Hail, Qassim and Riyadh provinces on the east and Mecca province on the south. Medina City lies in the approximate centre of the province. Medina province is administratively divided into seven areas comprised of six districts and the Imara and includes 84 administrative centres.

Pl. 2: Administrative division of Saudi Arabia, SCT, 2006



1.c Name of Property

The property nominated for inscription on the List of World Heritage Sites will be known as:
Al-Hijr Archaeological Site (Madâin Sâlih)

1.d Geographical Coordinates to the Nearest Second

26° 47' 01" North - 37° 57' 18" East
(Center of *al-Hijr Archaeological Site (Madâin Sâlih)*, at IGN 132)

1.e Maps and Plans Showing the Boundaries of the National Property and Buffer Zone

In the following pages are presented five maps presenting and precisely locating *al-Hijr Archaeological Site (Madâin Sâlih)*.

Two original maps, scale 1/250.000 and 1/50.000, are joined to the file.

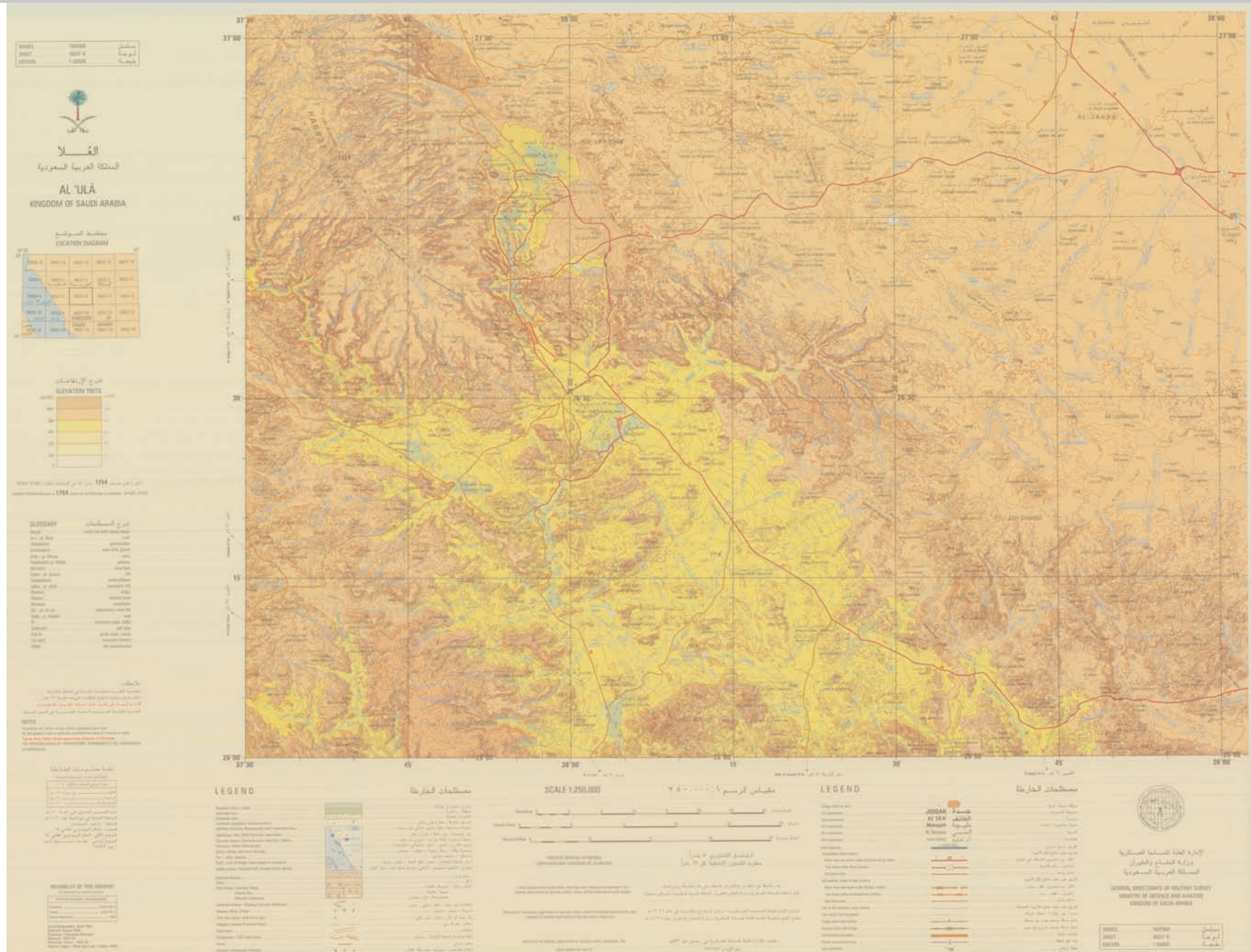
(i)

Pl. 3: *Topographic Plan of al-'Ulâ Region*, scale 1: 250.000, Series 1501NM, Sheet NG37-6 al-'Ulâ, General Directorate of Military Survey, Ministry of Defence and Aviation, Kingdom of Saudi Arabia, 2002 (aerial pictures of 1988).

(map in the following page)

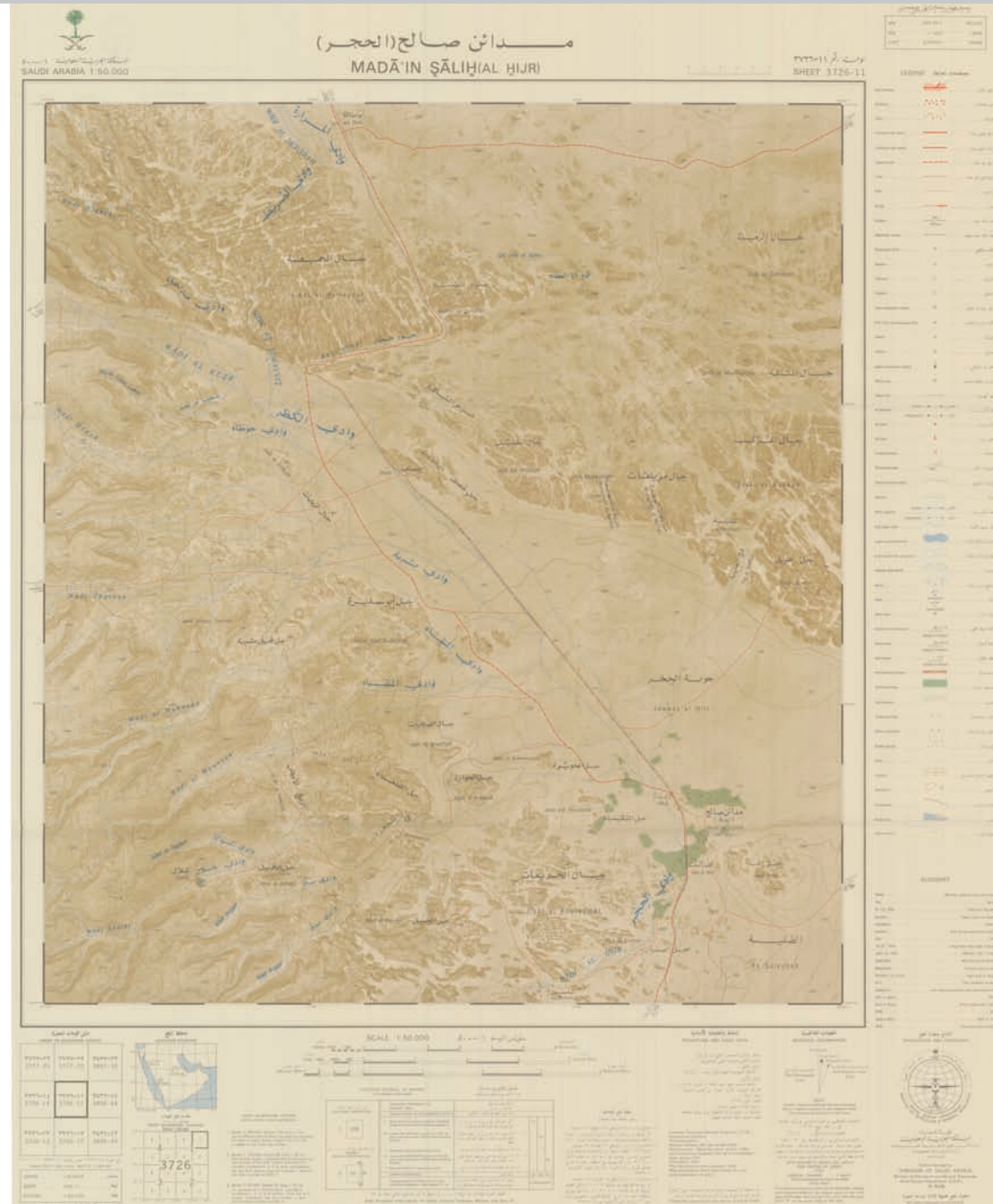


Ph.5: Flying over Madâin Sâlih, SCT, 2006.



Pl. 4: *Topographic Plan of Madā'in Šālih, scale 1:50.000, Sheet 3726-11, Ministry of Petroleum and Mineral Resources, Aerial Survey Department, Kingdom of Saudi Arabia, 1977 (aerial pictures of 1970).*

Pl. 5: *Geo-Referenced Satellite Picture of the Area Showing the Limits of the Core Zone and of the Buffer Zone, satellite colour image, elaboration SCT, 2006. (map in the following page)*



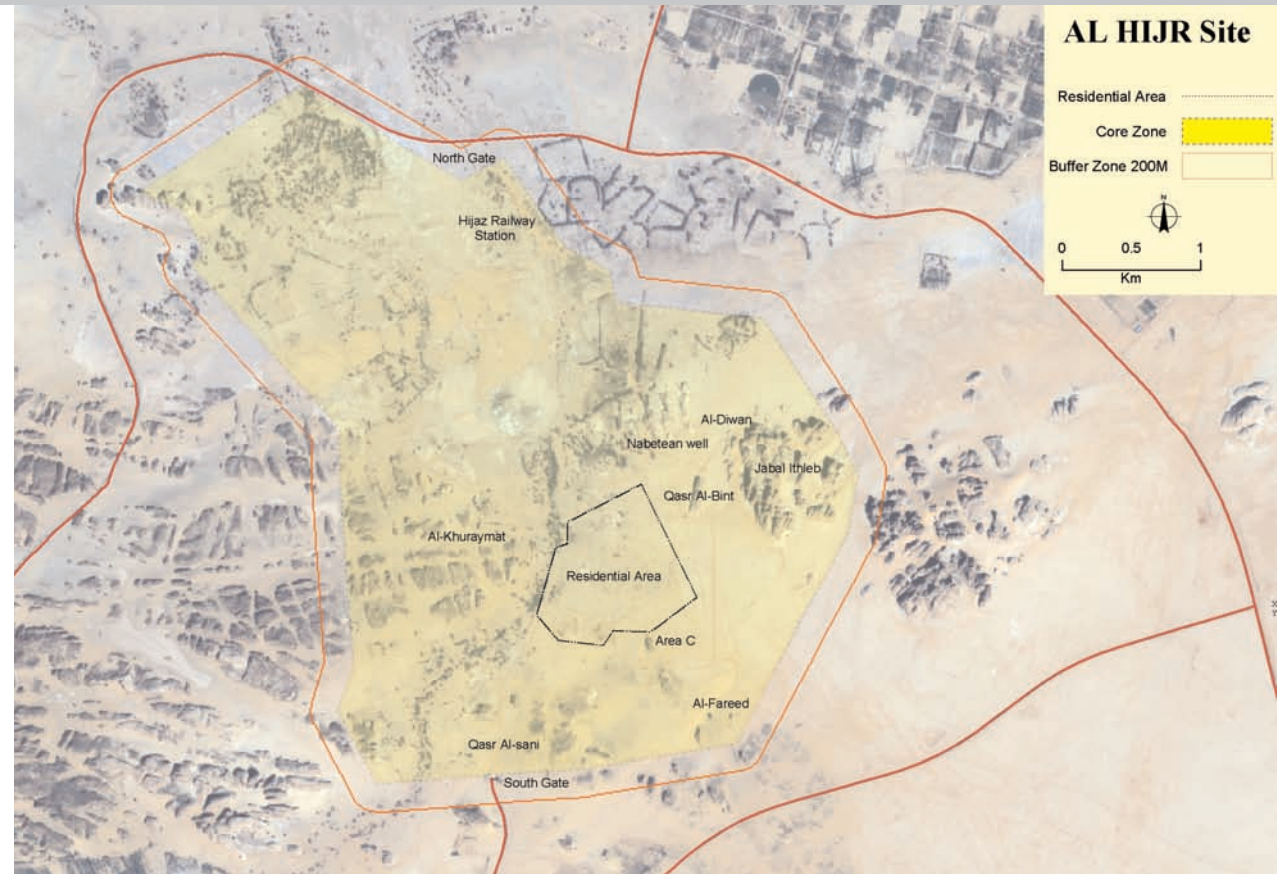


(ii) and (iii)

Pl. 6: Location of *al-Hijr* within the Kingdom of Saudi Arabia, SCT, 2006.

(right)

Pl. 7: *Al-Hijr* Archaeological Site and its Major Necropoles, elaboration SCT, 2006.



KINGDOM OF SAUDI ARABIA

1.f Area of Nominated Property (ha.) and Proposed Buffer Zone (ha.)

AL-HIJR ARCHAEOLOGICAL SITE (MADĀIN SĀLIH)

The area of the nominated property is of 1621.2 hectares.

The limits of the Core Zone are identified by the following 3 points:

North limit: 26° 48' 52" N – 37° 55' 51" E

East limit: 26° 47' 23" N – 37° 58' 17" E

South limit: 26° 46' 09" N – 37° 56' 12" E

The area of the proposed buffer zone for the site is of 1659.34 hectares.

The limits of the Buffer Zone are identified by the following 3 points:

North limit: 26° 49' 00" N – 37° 55' 31" E

East limit: 26° 46' 52" N – 38° 00' 01" E

South limit: 26° 45' 59" N – 37° 57' 43" E

Ph.6: Qasr al-Bint necropolis, aerial view, SCT, 2006.





| CHAPTER TWO |
DESCRIPTION

2.a Description of Property

GEOLOGY, CLIMATE AND FLORA

Madāin Sālih lies in a large plain, on the piedmont of the Jabal al-'Uwayrid, a large basaltic plateau which stands southeast of the Hijāz mountains.

The region of which it is part presents ancient Palaeozoic sandstones dating from the end of Cambrian, beginning of Ordovician periods (510 to 475 million years ago). These sandstones have suffered from the tectonic constraints affecting the region since the Palaeozoic and particularly from the rifting (the opening the Red Sea), which started 30 million years ago. The result of these constraints is a dense network of breaks which combine both very long and smaller joints, a phenomenon well known in the sandstones.

The strong erosion dating from the end of the Miocene period (13-5 million years) further affected this network of breaks, resulting in the dissection of the sandstone plateau and in the shaping of the hills which can be observed today.

The sandstones which border the Madāin Sālih plain are either red-brown (the older ones) or whitish (the more recent ones). They generally have a fine texture, though layers of cobbles are often observed in the red-brown sandstones, and veins of harder rock are relatively common in the whitish sandstones. These characteristics make them less suitable for rock cutting than very fine and more homogeneous sandstones.

From the lithological point of view, it should be noticed that the sandstones are not uniformly resistant and some layers are more subject to erosion than others.

The region in which lies Madāin Sālih is arid with average rainfall below 50 mm per year (40 to 50 % of the rain falls in winter and 30 % in spring). The average annual temperature is 22°C, 12°C in winter and 30°C in summer.

Wind is one of the main agents of erosion in the area. Winds are stronger in spring and at the beginning of the summer and blow mainly from the northwest.

These climatic specificities make the region a very arid environment in which human installation was and is possible only because underground water is available. Indeed, the rain which falls both on the Jabal 'Uwayrid, west of Madāin Sālih, and on the hills east of it, runs down to the central plain feeding the water table which can then be reached by a number of wells. The level of the water table has



Previous Page - **Ph.7:** Area C necropolis, from Babelli, 2006, p.84.

Ph.8: satellite view of Jabal Ithlib, Satellite Quickbird, Eurimage, 2004.

considerably lowered during the last century: water was less than 10 m deep at the beginning of the 20th century while it can be reached presently at a depth of about 20 m.

Madâin Sâlih region belongs to the Saharo-Arabic area, in which the dominant tree species is the tamarix, to which should be added Mediterranean influences.

The particularity of Madâin Sâlih is that it bears the vegetation which is normally found in wadis. This "wadi vegetation" forms a distinct category in Arabia. It often presents non-indigenous species, in this case of Mediterranean origin, surviving in very dry contexts thanks to the presence of underground water. The result of this combination is that the arboreal vegetation is well represented in the Madâin Sâlih plain, not only with the tamarix (which has been used for hedges) but also and mainly with acacia trees. There are also a few green species and shrubs, as well as halophilic plants such as *Zygophyllum simplex* and *Hammada elegance*.

The Madâin Sâlih area forms a subhorizontal surface surrounded by sandstone hills which are either isolated or grouped to form small massifs. It is crossed from north to south by a wâdî. The thickness of the sediment above the sandstone might reaches 11 m.

THE ARCHAEOLOGICAL SITE

Madâin Sâlih is the largest Nabataean site south of Petra. It is situated roughly 500 km south-east of Petra, 400 km north-west of Medina and 20 km north of al-'Ulâ.

It is well known among scholars and travellers for its rock-cut monumental tombs similar to those in Petra.

The site lies in a large plain across which the Wâdî al-'Ulâ runs from north-east to south-west. It is marked by a number of sandstone outcrops of various sizes and heights. The most impressive among them is Jabal Ithlib, north-east of the site, rising to almost 100 m above the surrounding plain.



Ph.9: Desert landscape, from Babelli, 2006, p.215.

Ph.10: Tombs in Jabal Ahmar, G. Ferrandisfor MSAP, 2003.



Pre-Nabataean period

The elements which can be securely dated to the period before the great Nabataean monumental building activity took place at al-Hijr are very scarce, and no archaeological remains of this period are known (although it is possible that some may appear during the excavations scheduled for 2008-2011).

The most visible pre-Nabataean remains are the Lihyanite inscriptions (a language belonging to the family of northarabian dialects) found in Jabal al-Khuraymât and Jabal Ithlib areas. Fifty texts written in this script have been recorded so far. Few Minaean (southarabian) texts, written on stones reused in more recent monuments, are also found on the site.

Apart from the epigraphic material, some rock drawings associated with Lihyanite inscriptions certainly date from before the Nabataean period. The most interesting among them, found in al-Khuraymât area, represents two life-size lions following one and other, drawn in a naïve but expressive style.



Up - **Ph.11:** Lihyanite inscription from Jabal Ithlib, SCT, 2003.

Ph.12: Lihyanite rock drawings, Jabal al-Khuraymât, Madāin Sālih Archaeological Project, 2005.

The main features of *al-Hijr Archaeological Site (Madāin Sālih)* are:

1/ Necropolises. They surround the residential area and contain 111 monumental tombs, ninety-four of which with decorated façades varying considerably in size. Thirty tombs bear, incised in a special frame above the door of the funerary vault, a dated Nabataean inscription. These documents (the earliest dated BC 1/AD 1 and the latest AD 75) are property rights, a copy of which was kept in the temple of the city. They define who was allowed to be buried in the tombs and indicate the fine to be paid by those who did not obey the rules listed in the text. Finally, more than 2000 non-monumental burial-places (simple cist-graves or *tumuli*) should be added to the monumental tombs.



Ph.13: Area C, geological detail, S. Ricca, 2006.

Ph.14: Southern part of Qasr al-Bint necropolis, Madāin Sālih Archaeological Project, 2004.

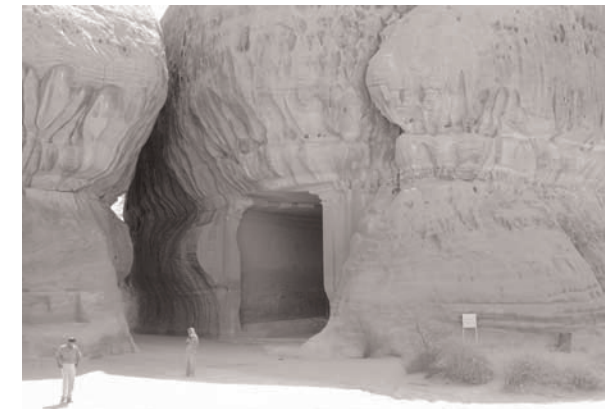


2/ Religious area. It develops in and around Jabal Ithlib, in the north-eastern part of the archaeological park. Jabal Ithlib is the highest sandstone outcrop of the site and can be seen from as far as al-'Ulā.

The internal part of the Jabal may be reached through a narrow passage between high rocks, some 40 m long which can be compared, although much smaller, with the *Sîq* of Petra. At the entrance of this pass, to the right, is carved, the so-called Dîwân room, in fact a *triclinium* where groups of people used to have meals together in Antiquity. Around Jabal Ithlib, on the outside, are carved several small Nabataean sanctuaries. Most of the niches, altars, *betyls* and other religious monuments are associated with Nabataean inscriptions, sometimes dedications but most often signatures of the worshippers who came to worship their deity there during the Nabataean period.



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Up - **Ph.15:** Nabataean niche with Betyl, Madāin Sālih Archaeological Project, 2004Left - **Ph.16:** Entrance of the *Sîq* with niches, G. Ferrandis for MSAP, 2002.Down - **Ph.17:** Entrance of the *Sîq* and the Dîwân, SCT/DMAM, 2003.

3/ Residential area. This term designates in fact the city proper, which lies in the middle of the plain. Its buildings were partly built in mudbrick and are therefore less preserved than the rock-carved monuments. The urban area was surrounded by a city wall, also built in mudbrick, which can still be easily recognized and followed on the ground on two-thirds of its length.

A large number of remains belonging to ancient buildings have been recorded in this area and three seasons of geophysical detection have been undertaken, between 2002 and 2005, by members of the Madāin Sālih Archaeological Project. The survey has revealed an extremely densely city at periods which will have to be determined through archaeological excavations.



Up - **Ph.18:** Nabataean well (well 27), Madāin Sālih Archaeological Project, 2005.
 Right - **Ph.19:** Excavations in the "residential area", Madāin Sālih Archaeological Project, 2004.
 down - **Ph.20:** Modern farm at al-Hijr, Madāin Sālih Archaeological Project, 2005.



4/ Ancient oasis. The water of the oasis was provided by 130 wells, most of which dug in the west and northwest part of the site, where the water table was most easily accessible. The diameter of these wells can reach 7 m and their depth 20 m, although most of them are smaller (average diameter 4 m). The wells were dug in the rock, while their upper part, usually dug into the softer soil, was lined with large boulders of sandstone extracted from the ancient quarries of the site. These wells were fed naturally by contact with the watertable which was still, in 2005, about 20 m below ground level. All these wells were probably associated with farms and cultivated areas which made the ancient site of Hegra an agriculture production centre.



DESCRIPTION OF MADÂIN SÂLIH NECROPOLES

There are four main necropoles in Madâin Sâlih: Jabal al-Mahjar ('Area A'), Qasr al-Bint, Area C and the Jabal al-Khuraymât, with an uneven number of tombs in each of them.

Jabal al-Mahjar is composed of four independent outcrops disposed parallel to each other. The tombs of this necropolis are scattered along the east or west flanks of these four outcrops: IGN 12-14 on the eastern outcrop, IGN 7-11 on each side of the middle outcrop and IGN 1-6 on the west outcrop. Their decorated façades are relatively small, with the highest measuring 12 meters. Tomb IGN 14 is particularly interesting since it is the only one in Madâin Sâlih whose burial niches still bear the traces of the grooves used to place the burials on top of each other.

Qasr al-Bint is the most famous of al-Hijr necropolis and the most visited. Its 31 tombs are neither the largest nor the most decorated ones but they form, as a whole, the most conspicuous and most representative group at Madâin Sâlih. They date from year 0 up to AD 58. The largest among them is IGN 20 (16m high), situated in a very prominent position in the middle of the western flank. Qasr al-Bint contains also an unfinished tomb, best visible from afar, which, had it been finished, would have been the largest tomb at the site probably reaching more than 30 m (each degree of the halfstep is more than 1.7 m high). A beautiful Nabataean inscription, written just below the tomb, says that the owner was one of the local Nabataean governors. Some of Qasr al-Bint tombs show remarkable decorative elements such as masks of frightening monsters, eagles, human faces, and other small sculpted animals. As late as the third century AD, a man still had a tomb built for his mother at the southern end of the Qasr al-Bint with an inscription written in Nabataean script but in Arabic language.

Area C necropolis consists of a single isolated outcrop situated southeast of the residential area. It contains nineteen tombs of average size, dated from 16 to 61 AD, though it seems that a few tombs on the northwest flank of the outcrop are older. These earlier tombs, without decorated façades, are all carved high on the cliff and are occupied by cist-tombs. They were presumably inaccessible in Antiquity.



Ph.21: *Jabal al-Ahmar necropolis, Madâin Sâlih Archaeological Project, 2004.*
down - **Ph.22:** *Qasr al-Bint necropolis, S. Ricca, 2006.*

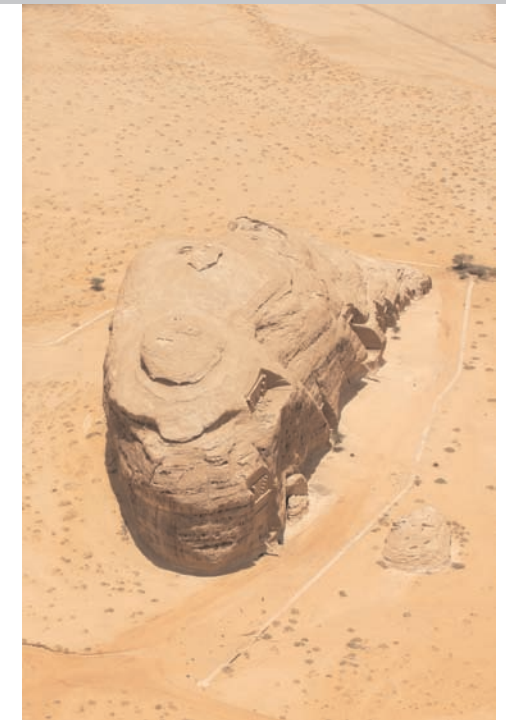


Jabal al-Khuraymât necropolis is the largest and lies in the south-western part of the site. The necropolis is composed of many different outcrops separated by sandy zones. Only eight of the outcrops, on the southeast limit of the Jabal, contain monumental tombs, with a concentration of monuments in the two middle outcrops. All the tombs face east, looking towards the city of the living. There are 48 tombs in al-Khuraymât area dating from 7 to 73 AD. Their façades have suffered from erosion more than those of any other necropolis of al-Hijr, and some of them (like IGN 56, 64, 73) have completely lost their lower part.

Their poor state of conservation is probably due both to the orientation of the tombs, facing the dominant winds, and to the poor quality of the sandstone in which they were carved. Despite the relative modesty of most of the tombs in this area (height average is 6,70 m), tomb IGN 100, extremely well preserved, is one of the largest and most decorated tomb of al-Hijr. Its façade shows dwarf pilasters in the attica, and its acroteria, on each side of the pediment carved above the door, support beautifully preserved sphinxes.



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Up - **Ph.23:** Qasr al-Bint outcrop from the sky, SCT, 2006.
 Left - **Ph.24:** Jabal al-Khuraymât necropolis, tomb IGN 100, Madāin Sālih Archaeological Project, 2003.
 Down - **Ph.25:** Area C necropolis, S. Ricca, 2006.



Besides the four major necropoles, there are a few isolated tombs carved in smaller outcrops. **Qasr al-Farīd** (IGN 110) is the most famous and the highest finished tomb on the site (21,50 m). Its façade is the only one with four pilasters instead of the standard two. **Qasr as-Sāni** isolated tomb, dated 8 AD, is situated near the south gate. It is 15 m high and belongs to the ordinary Hegra type.

ARCHITECTURAL FEATURES AND STYLES

The façades of the Nabataean tombs can be divided into five types which do not seem to follow a precise chronological order. The definition of these types helps understanding the structure of each façade. Moreover, as the largest and most complicated façades were made for the wealthiest people, the type of façade, and the choice of the decorative elements to be included in it, had an evident social significance.

The simplest type is represented by a façade crowned by one or two rows of small crenellations. These façades are usually poorly decorated and their doors generally have a very simple frame and an ordinary lintel.

Type 2 is represented by a façade crowned by two large half steps running in opposite directions. The façades belonging to this type were more open to stylistic influences than the crenellated tombs and show a greater variety of forms, ranging from simple to more elaborated shapes. Their lower part is often decorated at each end with pilasters supporting Nabataean capitals. In this case, the tombs are said to belong to the so-called “proto-Hegra” type.

Type 3 is known as “Hegra type”, after the ancient name of Madāin Sālih. This is the most accomplished architectural style, with a non-decorative attic inserted between the cavetto cornice – which is systematically carved below the halfsteps – and the entablature above the pilasters. In its most elaborate forms, dwarf pilasters with Nabatean capitals are carved in this attic, as is the case in IGN 100.

The doors leading to the funerary chamber of the tombs belonging to either the “proto-Hegra” or the “Hegra” types bear either a simple entablature or more elaborated patterns (aediculae adorned with a single or double frame of pilasters, with doric frieze, triangular pediment, etc.).

There are two more types of façades in the Nabataean tomb repertoire. The first is represented by the so-called “arch tombs”, usually small tombs whose façade is crowned by an arch resting on pilasters. The other is represented by all the tombs which can be labelled “Hellenized”, either because their façade does not contain crenellations or halfsteps but is crowned by a triangular pediment, or because



Ph.26: Qasr al-Farīd, from Babelli, 2006, p.82.

they contain features which are normally found in Greek monuments (pediments, tholos, etc.), such as the Khazna and the Dayr in Petra. There are no tombs belonging to this type in Hegra/al-Hijr.

It is generally assumed that the origin of the crenellation motive – found in most of the Nabataean tomb façades – is Assyrian (8th-7th century BC). This motive became widespread in Arabia and is used, in particular, on the site of Mleiha, in the United Arab Emirates, from the end of the third century onwards and in Qaryat al-Faw, one of the other major sites of the Kingdom of Saudi Arabia, in the 1st century AD. However, this very motive is also used in the sanctuary of 'Amrīt, on the Syrian coast, in the Phoenician period. This distribution shows that, by the time the Nabataeans adopted it, this motive was already widespread throughout the Middle East. Other elements of the Nabataean façades are typical of Egyptian architecture, like the torus and cavetto cornice which was the upper termination of Egyptian architectural structures. Finally, Hellenistic Alexandria provided other motives, such as the double door frames and the use of half or quarter columns, or pilasters.

All in all, the architectural style of the Nabataean tomb façades can be described as a mixture of elements borrowed from the neighbouring civilizations (Assyria, Phoenicia, Egypt, and Hellenistic Alexandria) combined with elements which are typically Nabataean like the horned capital (a sort of draft Corinthian capital whose volutes would be replaced by horns) and arranged in a way which transforms them into an original contribution to Hellenistic and Roman imperial art.



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Left - **Ph.27**: Arched door tomb, SCT, 2003.

Up - **Ph.28**: Crenellated tomb, Jabal al-Khuraymāt necropolis, SCT, 2003.

right - **Ph.29**: Half step type tomb, Area C necropolis, S. Ricca, 2006.

down - **Ph.30**: Nabataean "horn" capital, SCT, 2003.

THE OTTOMAN FORT

The fortress of al-Hijr, dating from 1744-1757, was one of the many forts built to protect the pilgrims' route to Mecca. It has a square plan (18x17,8 m) and is organized on two levels with rooms and a praying hall on each floor. An ancient well opens in the courtyard. The thick walls of the castle have arch slits and defensive *brétèches* above the front door and on the four corners.

The fort was restored in late Ottoman period, probably when the railway station was built (1906) and has been restored again by the DMAM in 1985.

In front of the fort lies a large water basin fed by the well through a small channel.



KINGDOM OF SAUDI ARABIA



Up - **Ph.31:** *Ottoman Fort, courtyard, Madāin Sālih Archaeological Project, 2003.*

Right - **Ph.32:** *Ottoman Fort, general view, Madāin Sālih Archaeological Project, 2003.*

Left - **Ph.33:** *Ottoman Fort, main façade, from Babelli, 2006, p.154.*

THE HIJAZ RAILWAY

The Hijâz Railway was built under Ottoman patronage at the beginning of the 20th century to connect Damascus with the holy cities of Medina and Mecca, thus extending the already established railway link between the capital Istanbul, Baghdad and Damascus.

Construction on the railway commenced in 1901, much of it funded by public subscription. The Hijâz Railway was officially opened for operation in 1908. The railway enabled pilgrims to reach the holy lands from the Middle East in 2-3 days and had a significant impact on the Muslim world.

The Hijâz Railway was billed as a religious project, since it would link the three holy cities of Jerusalem, Medina and Mecca and ensure the safe passage of pilgrims during the annual *Haj* pilgrimage. Nonetheless the railway had also political and military implications coming at a critical time for the Ottoman Empire in the Middle East. Military personnel supported the construction works and the railway played an important role in the movement of troupes to the Hijâz.

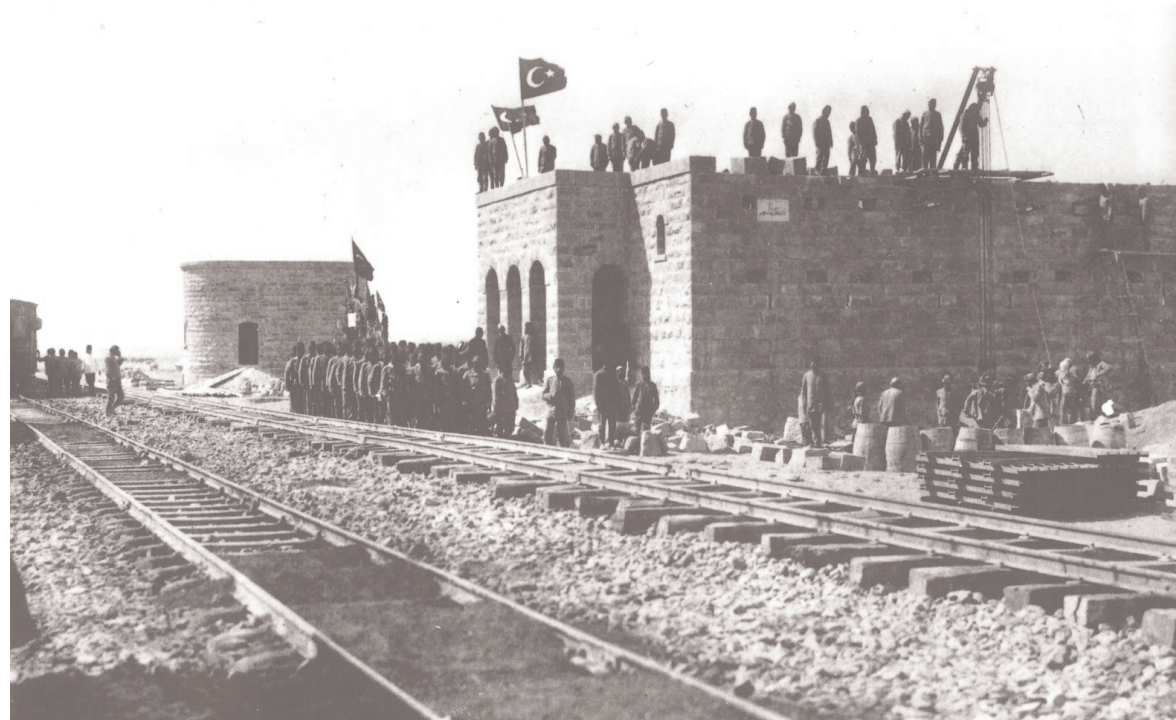
The Hijâz Railway involved matters of national security, hegemony and prestige that greatly outweighed its cost at a time when the Ottoman Empire was struggling for survival.

The construction of the railway was problematic as it was built over difficult terrain under taxing conditions, including Bedouin raids and guerrilla warfare. The provision of water was vital for the operation of the railway and wells had to be dug at most stations to provide the necessary supplies to the stations. Where routes coincided, the Hijâz Railway stations were placed in close proximity to existing pilgrim route castles and forts with their established infrastructure. Much of the operation was overseen by German engineers and many of the stations along the route are clearly influenced by German railway buildings of the time. Turkish and Egyptian engineers took over on the last section of the line after Madâin Salih as the line gained proximity to the holy city of Medina.



Ph.34: Passengers using the Hijaz Railway before its official opening in 1908, photo Maunsell 1907, in Facey 1996, p.41.

Ph.35: Building the Hijaz Railway station at Mu'azzam, one of the stops between Tabuk and Mada'in Salih, photo Hallajian, c. 1908, in Facey, 1996, p.40.

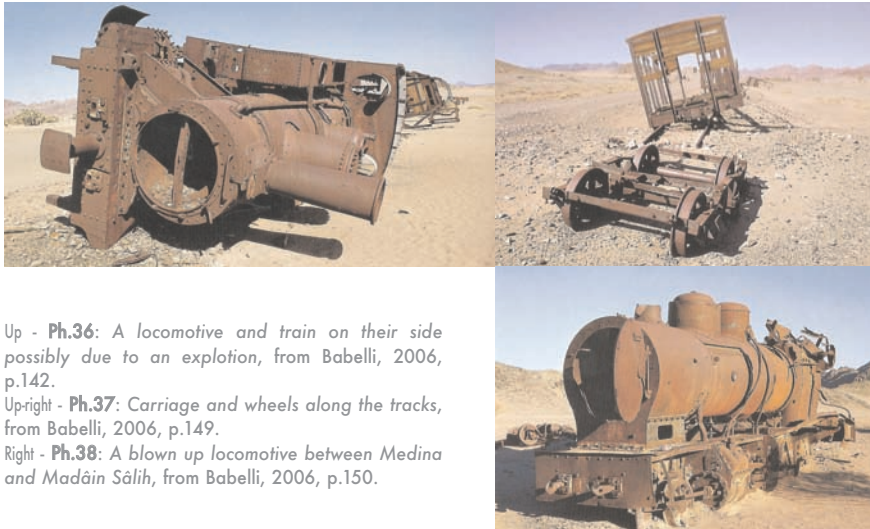


The length of the railway line from Damascus to Madina is 1303 km. It enters the Kingdom of Saudi Arabia through Tabuk province in the north and continues through Madāin Sālih and al-'Ulâ before reaching Medina. The final segment of the line to Mecca was never built.

Not long after it was completed, the railway was seriously damaged during World War I and the line was abandoned south of Amman through Tabuk province to Medina. This part of the line is also strongly associated with T.E. Laurence (Laurence of Arabia) as he led the Arab revolt during World War I.

In Saudi Arabia, virtually all the railway track and ties have been removed. Nevertheless sections of the track bed and the many stations, placed about 20 km apart, remain. The railway has acquired a landscape value as abandoned stations and even carriages still dot the landscape.

The Hijaz Railway is historically important for both Arab and Turkish history as it marked the beginning of Arab autonomy and the end of the Ottoman Empire.



Up - Ph.36: A locomotive and train on their side possibly due to an explosion, from Babelli, 2006, p.142.

Up-right - Ph.37: Carriage and wheels along the tracks, from Babelli, 2006, p.149.

Right - Ph.38: A blown up locomotive between Medina and Madāin Sālih, from Babelli, 2006, p.150.

KINGDOM OF SAUDI ARABIA



Pl.8: Hijaz railway in Saudi Arabia, SCT, 2006.

MADÂIN SÂLIH STATION

The architecture of the Hijâz railway was innovative in construction methods and technology and its forms were dramatically distinctive from the local vernacular. Gable roofs, built in sandstone or basalt were, and still are, completely alien to the architecture of heartland Arabia. The standard of architecture of the Hijaz Railroad Company was generally good and the ancillary facilities and the civil engineering works were innovative. The structures were practical, economic and easy to maintain. They are the earliest models of industrial architecture in Saudi Arabia.



The railway station complex of al-Hijr lies in the north of the archaeological area. It is composed of 16 independent buildings built along the railway in sandstone blocks covered by red-tiled pitched roofs.

The structures, all preserved, include the station building, houses for the travelers and the personnel, lavatories, a shed for carriage repairs and an engine-shed housing several carriages and one locomotive.

The entire complex has been restored by the DMAM in 1994 in view of future use for cultural activities and public services.

The carriage-shed, currently hosting an original locomotive, is meant to become a permanent exhibition hall devoted to the history of the Hijâz railway



Up - **Ph.39**: A view of Madâin Sâlih station complex from the Islamic fort, from Babeli, 2006, p.157.

Left - **Ph.40**: Madâin Sâlih Station, S. Ricca, 2006.

Down - **Ph.41**: Madâin Sâlih carriage shed, interior, Madâin Sâlih Archaeological Project, 2003.



2.b History and Development

HISTORY

Most of the monuments and inscriptions visible at *Al-Hijr Archaeological Site (Madâin Sâlih)* date from the 1st centuries BC and 75 AD.

The site was certainly inhabited since earlier periods. Objects and shards recently found at the site are evidence for some form of human settlement possibly in the 3rd or 2nd century BC. At the other end, the site was occupied as late as the middle of the 4th century AD.

The Origin of the Nabataeans and the Earliest Occupation of the Site

The origin of the Nabataeans is disputed. Several hypotheses have been put forward during the last decades, however, none of them seems entirely convincing.

Do they originally come from South Arabia, as some scholars thought because of their skills in water management and irrigation, reminiscent of the works of the Sabaeans in Yemen? Do they come from northwest Arabia, where they would have wandered, as nomads, with other tribes before migrating in direction of the Petra region, after the 552 campaigns of the Babylonian king Nabonidus in Arabia? Or do they come from eastern Arabia as the parallels drawn between their pottery and a possible original model in this region might suggest?

Nobody really knows. What is sure is that an important proportion of the Nabataean personal names have either Arabic etymologies or Arabic forms, and these, added to the fact that they are called Arabs in ancient sources, have been considered as proofs of the fact that the Nabataeans were an Arab people. Their exact origin, however, is not determined.

Evidence for occupation earlier than the first century AD is scarce in Madâin Sâlih. An Egyptian amulet dated to between the 23rd dynasty and the Ptolemaic period (8th to 4th century) and a seal, the closest parallels of which appear in the Neo-Babylonian glyptic, were found on the site but these objects may have circulated for a certain time before arriving to Madâin Sâlih. Apart from the Lihyanite inscriptions and the objects mentioned above, the earliest finds in Madâin Sâlih are the following: a black-glazed shard which, if found in Petra would be dated between the 3rd and the end

of the 2nd century BC, and an amphora handle bearing an inscription written in Latin characters dated to the first century BC. This shows that ancient Hegra witnessed, at that time, an activity which made it possible to import such objects. Nabataean fine pottery is attested in Madâin Sâlih from the 1st century BC onwards. Finally, traces of an occupation earlier than the monumental tombs with decorated façades are visible in some of the outcrops but they cannot be precisely dated since they only offer indications for relative chronology. These earlier tombs were cut high into the cliffs and were partly destroyed by the carving of the first century AD tombs.

Most monuments and inscriptions are dated to the first centuries BC/AD. This is the case of the monumental tombs, one third of which is clearly dated to the interval AD 1-75. These monuments have not suffered from later reuse and most of them are still in an excellent state of preservation. They were only, though dramatically, altered by the clearing of the inner vaults carried out in the early 1980s. This almost systematic clearing makes it now very difficult to find funerary structures with dead bodies in their original burial state. Fortunately, some of these structures still exist and are due to be properly excavated in the near future.

Major pre-Islamic routes and sea trade

The Nabataeans are well known for their important role in the incense and aromatics trade. Indeed, they controlled, thanks to camel caravans, the inland trade routes which linked the Indian Ocean to both the south part of the Red Sea and the Mediterranean, at a time when sailing in the northern part of the Red Sea was not very much practiced due to sailing difficulties.

Madâin Sâlih was not located, unlike Petra, at a crossroad of these inland trade routes, but lied instead along the main north-south track of the caravan route that continued down to Najrân and further to Tamna, in Yemen.

It is possible however, that Madâin Sâlih was located at the bifurcation of a secondary trade route connecting the inland route to a Nabataean port on the Red Sea known as Egra Kôme in the ancient sources written in Greek. This site was recently identified by Saudi Arabian scholars in a site locally known as Karamûmi, some 30 km south of the modern city of al-Wajh, where a Nabataean temple was found. Traces of this ancient route have not been found at Madâin Sâlih proper, yet

Pl.9: Pre-Islamic trade routes in the Arabian peninsula, Supreme Commission for Tourim, 2006.



recently, they were identified on the ground a little further north, and up to the Saudi-Jordan border, by a team of Saudi archaeologists who named this route the *Darb al-Bakra*.

The Hijâz region was integrated into the Roman province of Arabia, whose capital was Bosra, in 106 AD and there is no reason to suppose that it stopped being part of the various Roman and Byzantine districts which succeeded each other in this area before the 7th century. However, the written sources and available evidence indicate that Roman/ Byzantine rule never crossed the northern border of Hijâz and that their influence reached only the peripheries of Hijâz. Little is known, in fact, of Madâin Sâlih after the mid-fourth century: a few shards, only three or four of which could date from the Umayyad period and only one coin, are evidence for human occupation during the 5th century and later.

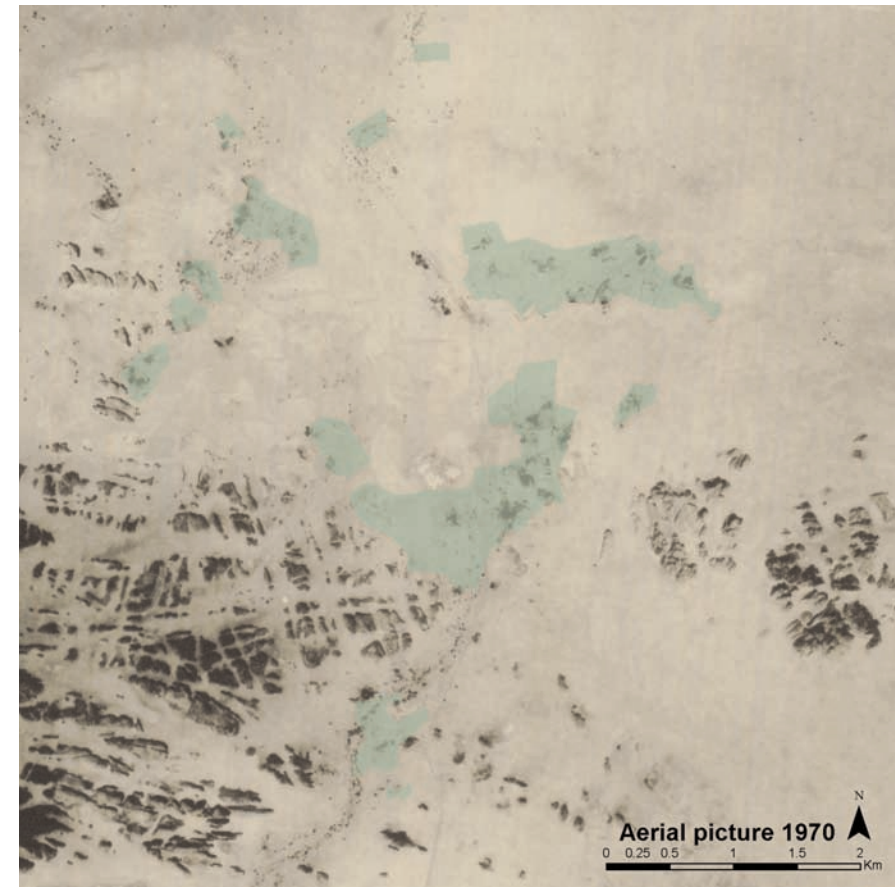
In the fourth century, in AD 356 to be exact, ancient Hegra was still run by a local mayor. A little earlier, in AD 267, we know from an inscription carved at the southern end of the most famous necropolis at the site – Qasr al-Bint necropolis – that the Nabataean monumental tombs of this area were probably not yet systematically robbed since a man had a tomb built for his mother.

In the 10th century AD, the area was still famous for its wells and its cultivated fields and it is probable that there has always been some sort of sporadic occupation of the site and of the plain around it. However, there is no evidence that the site was densely occupied at any time between the 4th and the 19th century.

In the 19th century, as Charles Doughty reported (in 1876-1877), some pheasants were brought to Madâin Sâlih from Taymâ in order to cultivate the land. They were so successful that within a few years, they earned enough money to buy wells and palm trees in Taymâ, allowing them to return to their homes. The reuse of the ancient Nabataean wells, through the traditional technique known as the *nasba*, still visible in many places, may date to this period, like the traces of plantations re-used in the 20th century.

It should be mentioned that seasonal occupation by herdsmen, pilgrims and traders has not left significant marks in the landscape, and it seems that the tombs have never been systematically used as shelters, as happened with the tombs in Petra. They are therefore, usually, better preserved than those of the Nabataean capital.

At the beginning of the 20th century, was launched the construction of the Hijâz railway and of the stations along the line, but the railway did not thoroughly modify the landscape. Yet, construction works damaged some of the archaeological structures (particularly on the western edge of the



Pl.10: Madâin Sâlih aerial view (1970) showing the 19th c. cultivated areas, elaboration SCT, 2006.

residential area) and the need for building material led to the exploitation of large quarries that altered the shape of some rocky outcrops, notably in the Jabal al-Mahjar area, north of the site, and around Qasr as-Sāni', in the south.

Hijāz railway buildings have now become an important part of national Saudi heritage.

In the late 1960s-early 1970s, the Saudi government launched a programme aiming at settling in al-Hijr area Bedouins from the surrounding *bādiya* to turn them into farmers. Each family received a piece of land with a well in it, and seeds for the plantations. The wells, most of which were ancient, were emptied manually and the sediments they contained, including vast quantities of pottery shards, left beside them. To draw water from the wells were used mechanical pumps. In order to install the pump as close as possible to the bottom of the well, their ancient masonry was severely damaged. The new farms were built on the same areas previously settled and cultivated in the 19th century, whose traces are visible on the 1970 aerial view reproduced in the previous page.

Since the creation of the Madāin Sālih archaeological site, in 1972, the development of agricultural exploitation moved north of the ancient site (mostly north of the modern road). There, intensive agriculture exploitation is taking place in a number of farms watered by new modern wells.

EARLY DESCRIPTIONS OF THE SITE

Several Arab travellers and historians visited al-Hijr and wrote brief accounts on it.

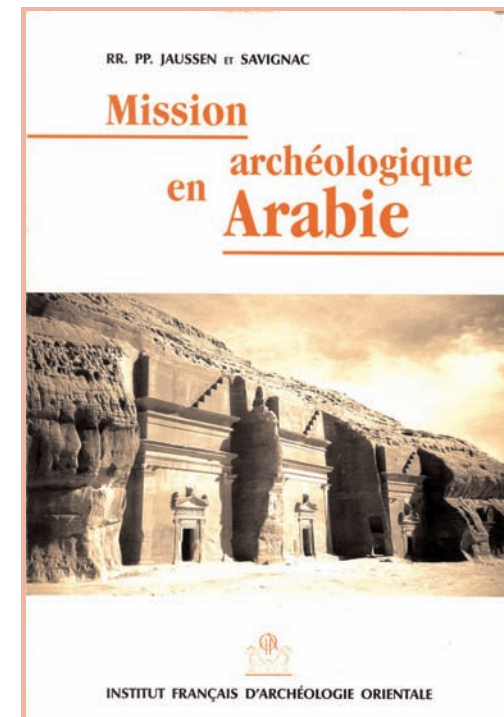
In the 10th century AD al-Maqdasi mentioned that al-Hijr (Madāin Sālih) was a small village with several farms and a number of active wells.

The famous Arab traveller Ibn Battūta (14th century) describes with admiration the so-called 'houses of the Thamūd people', in fact the Nabataean tombs, said to be carved in the red rocks and to bear steps. He noticed that these "houses" were so well preserved that it seemed they were just built. He could still see many bones inside the tombs.

In the 19th century AD, the British traveller Charles Doughty visited the site and wrote an account of his journey in Arabia in his *Travels in Arabia Deserta*.

He was followed few years later by Charles Huber and Julius Euting, two western travellers. However, the largest and most impressive exploration of the site was undertaken in 1907, 1909 and 1910 by two Dominican Fathers, A. Jaussen and R. Savignac, who published their discoveries in a book called

Ph.42: Cover page of 1914 book by Jaussen & Savignac.



Mission archéologique en Arabie (Jausсен & Savignac 1909-1922). This monumental work is still the principal source for those interested in the archaeology and epigraphy of north-west Arabia in general and of Madāin Sālih in particular.

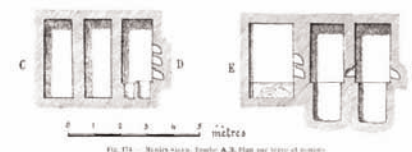
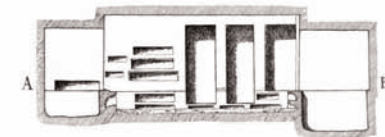
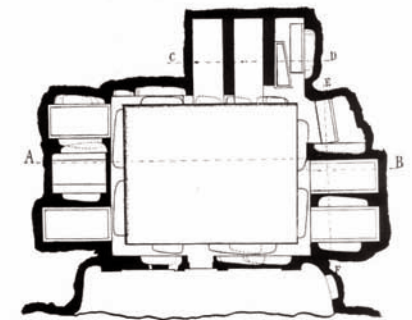
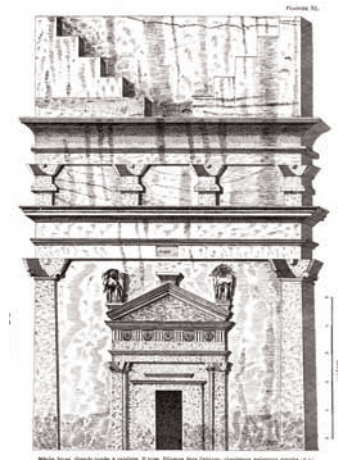
After the First World War, the site was visited by St. John Philby, who gave an account of his journeys in *The Land of Midian* (Philby 1957). He was followed by two Canadian scholars, F. V. Winnett and W. L. Reed, who visited the site in 1962 and published their discoveries, with contributions from other specialists, in *Ancient Records from North Arabia* (Winnett & Reed 1970).

Finally, in 1968, a team from the University of London, under the direction of P.J. Parr, spent a few hours at the site, collecting surface pottery and recording inscriptions, and published a report in 1972 (Parr, Harding & Dayton 1971 [1972]: 23-26, 50-51).

Since the 1960s, exploration, excavation and preservation have been undertaken by the Saudi Arabian Department of Antiquities. The latest excavations took place in the autumn of 2003 under the direction of Dr. Daifallah al-Talhi. They revealed a monumental Latin inscription dated to the years AD 175-177 which has recently been published (Al-Talhi & Al-Daire 2005).

Between 2001 and 2005, a new collaborative project between the French Ministry for Foreign Affairs and the Deputy Ministry for Antiquities and Museums in Riyadh was undertaken at Madāin Sālih. The aim of this project was to study the site by all the methods which could be categorized as "survey" (i.e. non destructive), such as interpretation of aerial photographs and satellite images, ordinary ground and geophysical survey, topographic survey, architectural analysis, etc. The project included a thorough re-examination of all the rock-cut monuments, from betyls to tombs; a study of the natural potential of the site in terms of water and agriculture; a survey of the residential area, using differential magnetometry; and a re-examination of the epigraphic evidence. The ultimate aim is the publication of an archaeological and epigraphic annotated atlas of the site, the first volume of which, devoted to the tombs, is currently in preparation.

Finally, an excavation project is in under process to be carried out by the Deputy Ministry of Antiquities and Museums in collaboration with King Saud University in Riyadh and a French Team from CNRS. Planned for the period 2007-2011, the project has been approved by the Supreme Commission for Tourism in December 2006. Proper excavations are therefore, expected to take place starting from February/March 2008.



Up - Ph.43: Front elevation of Tomb IGN 100, original drawing from Jausсен & Savignac, 1914, vol.1, Pl.XL.

Ph.44: Tomb A3, plan & sections, original drawing from Jausсен & Savignac, 1914, vol.1, Fig.174.



| CHAPTER THREE |
**JUSTIFICATION FOR
INSCRIPTION**

3.a Criteria under which the Property is Proposed (and Justification for Inscription under these Criteria)

The nomination of *al-Hijr Archaeological Site (Madâin Sâlih)* for inscription on the World Heritage List is based upon criteria (ii) and (iii).

Indeed, criterion (ii) requires that *al-Hijr Archaeological Site (Madâin Sâlih)* should exhibit ***an important interchange of human values, over a span of time or within a cultural area of the world, on development in architecture or technology, monumental arts, town-planning or landscape design.***

While criterion (iv) requires that it should bear ***a unique or at least exceptional testimony to a cultural tradition or a civilization which is living or has disappeared.***

Besides, *al-Hijr Archaeological Site (Madâin Sâlih)* ***meets the conditions of integrity and authenticity and has an adequate protection and management system ensuring its safeguarding.***

Al-Hijr Archaeological Site (Madâin Sâlih) lies at the crossroad of several civilizations and trade routes linking the Arabian Peninsula with the Mediterranean World and Asia.

Its importance as international interchange site appears clearly in both the architectural style - showing a synthesis of different cultural traditions - and in the variety of languages and scripts found in the many inscriptions and graffiti visible on the site.

Al-Hijr was the meeting point of trade, caravan and pilgrimage routes both in pre-Islamic and in early Islamic period, a focal point of different social, cultural and religious entities of international importance.

The occupation of the site covers a period of time ranging from the first millennium B.C. up to the early twentieth century A.D. when the Hijâz railway, linking Damascus to Medina and passing by al-Hijr, was built to facilitate the pilgrimage to Mecca.

Al-Hijr has been mentioned in the Holy Qur'ân and in various Nabataean inscriptions located on the site, in classical Greek and Roman sources, as well as in several books by Arab and European historians and travellers. Its most outstanding architectural remains date from the fifth century BC to the third century AD, and are a unique testimony of ancient rock-cut technology.

Previous page - Ph.45: A tomb façade from the west side of Qasr al-Bint, from Babelli, 2006, p.60.

The site of Al Hijr is a major Nabataean site presenting a unique combination of urban settlement (including necropoleis, living quarters, city walls and cultic areas) as well as the remains of ancient water collecting system (wells). It hosts 94 monumental rock-carved tombs with decorated façades, with a height ranging from 23 to 2.50 meters, dating from the first century BC to the 2nd century AD.

The physical characteristic of the local sandstone and the climatic condition at the site have guaranteed an extraordinary preservation of the decorative elements of the rock-carved tombs. While the protection granted by the Saudi Arabian Authorities - who have fenced a large zone surrounding the major monuments - has allowed not only the preservation of the tombs but also of their extraordinary natural setting.

3b. Proposed Statement of Outstanding Universal Value

Al-Hijr Archaeological Site (Madāin Sālih) is of outstanding universal value because of its unique architectural features carved in the sandstone rock. The monumental ensemble of al-Hijr stone carved façades, typical of the Nabataean civilization, is an outstanding example of this type of architecture. Their architectural value is enhanced by their unique setting in a preserved landscape that has not suffered any major change since antiquity.

Ancient Hegra/al-Hijr was located at the crossroad not only of international trade but also of different cultures and civilizations, playing a key role in the exchange of goods and cultural traditions between Arabia and the Mediterranean world.

Ph.46: Madāin Sālih, tombs IGN 112-113 and Jabal Ithlib, G. Ferrandis for MSAP, 2005.



Located in a valley settled from remote antiquity, where developed the reigns of Dedan and Lihyan, the Nabataean city became a wealthy and important halt for the caravans crossing the Arabian peninsula carrying incense and spices from Yemen and India. Rich in underground water easily accessible through wells, al-Qura valley and al-Hijr area allowed the development of a flourishing agriculture that still characterizes the area. Contemporary farms have moved slightly north of the area occupied in the Nabataean period, yet they still profit of the same underground waters and often reuse ancient wells.

The extraordinary state of preservation of *al-Hijr Archaeological Site (Madâin Salih)* highlights the skills of their builders and offers a complete overview of Nabataean stone cutting technology in Antiquity.

The significance and importance of *al-Hijr Archaeological Site (Madâin Sâlih)* is reflected also in the amount of inscriptions from different civilizations visible on the site. Many façades of the monumental tombs bear beautiful inscriptions in Nabataean, while Thamudic, Lihyanite, Nabataean, Latin, Greek and early Arabic inscriptions are engraved all over its hills and rocky outcrops.

Al-Hijr Archaeological Site (Madâin Sâlih) has therefore an extraordinary value not only for architects and archaeologists, but also for linguists studying the origins and development of Arabian languages and scripts.

Al-Hijr is unique because the evidence of these past cultures has been preserved by the dry climate and by their relative remoteness. Their extraordinary state of preservation and integrity, and the absence of later re-use, make the site particularly valuable for researchers while its outstanding aesthetical quality, coupled with the enchanting scenery of Saudi Arabian deserts, qualifies it as outstanding universal cultural site.

3.c Comparative Analysis (Including State of Conservation of Similar Properties)

SAUDI ARABIAN SITES AND AL-HIJR

Al Hijr Archaeological Site (Madâin Sâlih), ancient Hegra, is one of the major archaeological sites in the Saudi Arabian Kingdom, along with Qaryat al-Faw, 600 km south of Riyadh, and Najrân, 300 km south of Abha, the regional capital of 'Asîr.

The site has unique importance in Saudi context both regarding the nature and importance of the remains it contains and because of the landscape in which these remains are displayed. Most of the remains presently visible are rock-carved monuments (mainly tombs, ninety-four of which bear decorated façades) whose importance might be compared only with the site of Petra, although with distinctive features.

In Saudi Arabia, there are two other sites presenting rock-carved monuments dating from the Nabataean period.

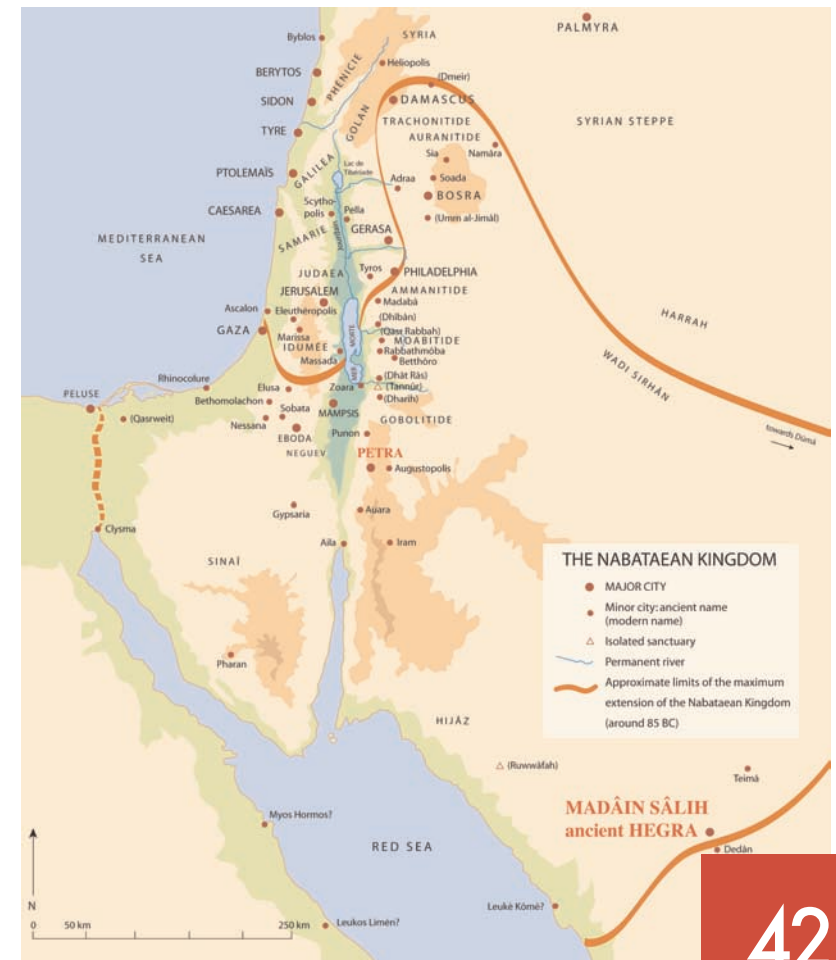
One, near the city of al-Bid, in the Tabuk Province, some 110 km south of Aqaba, contains twenty tombs which bear much simpler, smaller and less well preserved façades than those visible in Madâin Sâlih and Petra. They are carved in the local sandstone, much coarser than the sandstone of the two latter sites. The other site, ad-Dîsah, 85 km south of the city of Tabûk, contains only one, unfinished, Nabataean tomb.

NABATAEAN KINGDOM AND NABATAEAN SITES IN THE REGION

At the turn of 1st century AD, the Nabataean-controlled area extended between southern Syria in the north (Damascus was under Nabataean control from 85 to 72 BC), to the Hijâz to the south, and from the Negev and the Mediterranean Sea in the west to the wadi Sirhân in the east. Sinai was under Nabataean influence but it is not sure whether it was ever under direct control of the Nabataean kings.

Up - Ph.47: Nabataean tomb of al-Bad, photo SCT/DMAM, 2003.

Pl.11: Plan of the Nabataean Empire, from Nehme-Villeneuve, 1999, p.164.



In this area, nearly 700 km long north-south and 350 km wide east-west, several archaeological sites have been identified, and some of them have already been the object of historical and archaeological research.

Notably, three major sites, connected with the Nabataean heritage and culture, have already been inscribed on the World Heritage List.

In 1980, were inscribed the ruins of Bosra, in southern Syria, mainly renowned for its Roman period monuments and its world famous theatre, then in 1985, the site of Petra, in Southern Jordan, capital of the Nabataean Kingdom and undoubtedly the most important Nabataean archaeological site, finally, in 2005, the four Nabataean towns of Elusa/Haluza, Mampsis/Kurnub, /ObodaAvdat and Sobata/Shivta, as well as some minor fortresses and preserved ancient agricultural landscapes in the Negev Desert, all sites related to the ancient incense and spice trade routes.

Bosra

The Nabataean remains at Bosra are not immediately visible. It is usually assumed that during the first century AD the city became a second capital of the Nabataean Kingdom, even though Petra had not lost, at that time, its pre-eminent position. The reason for the importance given to this city is traditionally associated with the desire of the Nabataeans to develop agriculture as a source for economic growth, in order to make up for the possible decline of revenue proceeding from the caravan trade, progressively diverted by Rome to Alexandria via the maritime route.

The agricultural wealth of the Hawrân region is the reason of the urban development of Bosra. Recent excavations have shown that the Nabataeans had undertaken a great urbanization programme in the city. However, the traces of this programme on the ground are scarce. The most visible Nabataean remains in the city are the monumental arch with its flanking columns bearing distinctive Nabataean capitals, and a monumental building east of it. The complex is dated to the second half of the first century AD. The other important Nabataean remains at Bosra were revealed under one the Byzantine churches, the so-called great cathedral church. They form a vast portico court, interpreted as a *temenos*, a sacred enclosure. Apart from these structures, there are scattered traces of Nabataean inscriptions and isolated fragments of architectural details. Indeed, though Bosra was a major Nabataean site from the first century onwards, the most conspicuous remains at the site do not date to this period.

Ph.48: Bosra, the Nabataean arch, photo S. Ricca, 2004.



The Nabataean Cities of the Negev

The four towns of the Negev which have been inscribed in 2005 on the World Heritage list have all witnessed Nabataean occupation. They are located on the caravan routes which linked Petra to the Mediterranean. However, very much as in Bosra, their most visible remains are not Nabataean but Roman or Byzantine. Little is left, for example, of the Nabataean temple at Avdat since most of the stones were reused in the construction of two Byzantine churches. Mampsis is probably the site which has yielded the greatest number of Nabataean remains still visible today: towers of the city wall, houses with wall frescos, caravanserai, bathhouse, market, tombs, etc. Shivta, on the contrary, contains almost no Nabataean remains. As for Khalasa, it hosts the ruins of a Nabataean theatre, tombs and a water drainage system.

In this case again, the Nabataean remains are relatively limited and do not form representative examples of Nabataean architecture.

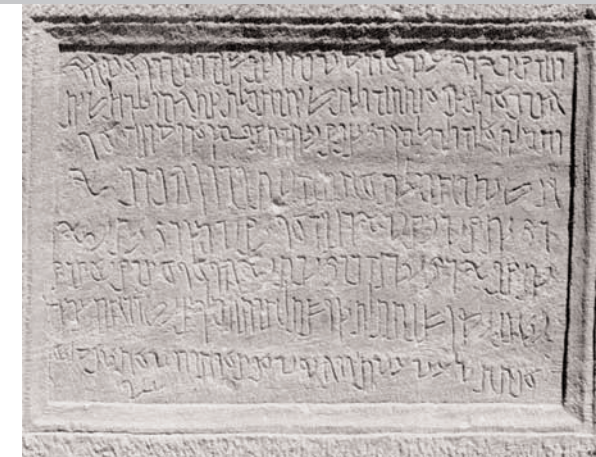
PETRA AND MADÂIN SÂLIH: A COMPARATIVE ANALYSIS

Petra and Madâin Sâlih offer a much better state of conservation and a greater variety of architectural typologies than all the previously quoted examples.

Within the context of this comparative analysis it is important to highlight the specificities of the site of al-Hijr in comparison with the more widely known site of Petra. Hereafter are listed, in a non-exhaustive manner, the main differentiating elements of *al-Hijr archaeological Site (Madâin Sâlih)*.

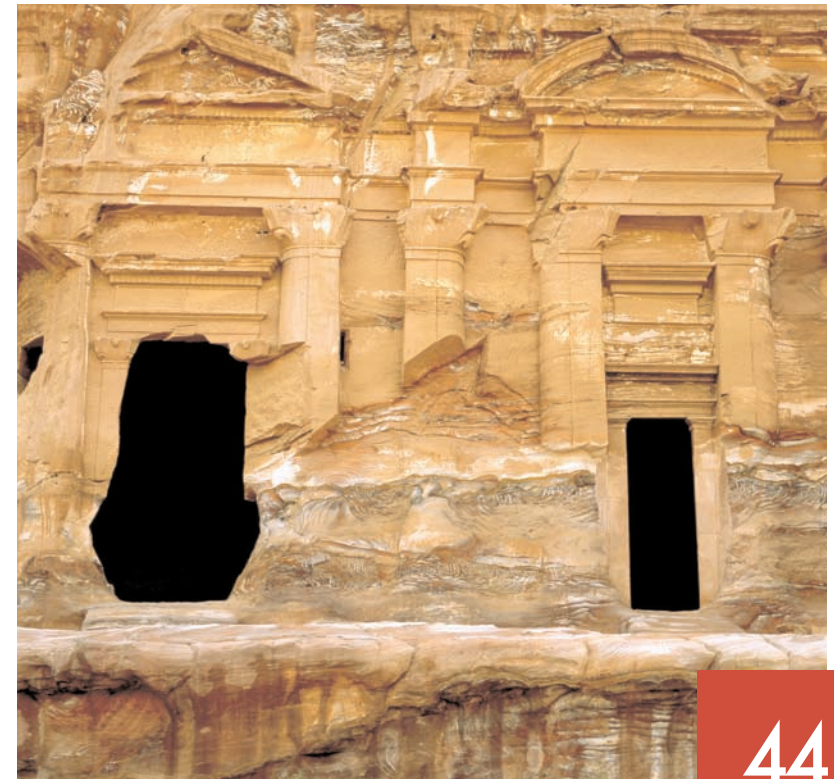
- Madâin Sâlih contains thirty-one tombs which are precisely dated by the inscription written on their façades. These inscriptions give the name of the owner of the tombs as well as the name of those who had the right to be buried in them according to the Nabataean law. This is unique in the Nabataean realm and contrasts with Petra where almost all tombs are undated and anonymous. The inscriptions of al-Hijr form the largest and best preserved group of Nabataean writing on stone.

- The vast majority of Madâin Sâlih tombs are better preserved Petra ones, which have suffered more from wind erosion and humidity-related deteriorations. Thanks to their excellent state of preservation, several tombs at Madâin Sâlih show the traces left by the tools used by the stone cutters. The traces are sometimes so clear that they allow the reconstruction of the way the work on the façade was



Ph.49: Nabataean Inscription from Madâin Sâlih (Jaussen & Saignac inscription 7), J. Simson, 1985.

Ph.50: Petra, deterioration of the sandstone, G. Ferrandis, 2003.



distributed among the workmen offering an extraordinary testimony of the ancient techniques used by the Nabataean stone carvers

- The architectural decoration which appears on the façades of the tombs in Madâin Sâlih (and the same is true of the small rock cut religious monuments) is much richer and varied than the architectural decoration visible in Petra, despite the fact that there are roughly six times more tombs with a decorated façade in Petra than in Madâin Sâlih. In Petra, apart from the normal elements such as half-steps, capitals, pediments, etc., we find the typical urns standing on the acroteria; however very rare very are masks, shields and sculpted human figures. In Madâin Sâlih, by contrast, these decorative elements include eagles, rosettes, human figures and masks, snakes, urns, lions, sphinxes, etc., all appearing in a rather large number of tombs and with some variants in their representation.

- Since most of the tombs have been cleared from the sediments they contain —whereas this is very seldom the case in Petra — they offer a unique sequence of Nabataean tomb interiors and represent a complete set of the Nabataean funerary structures.



KINGDOM OF SAUDI ARABIA



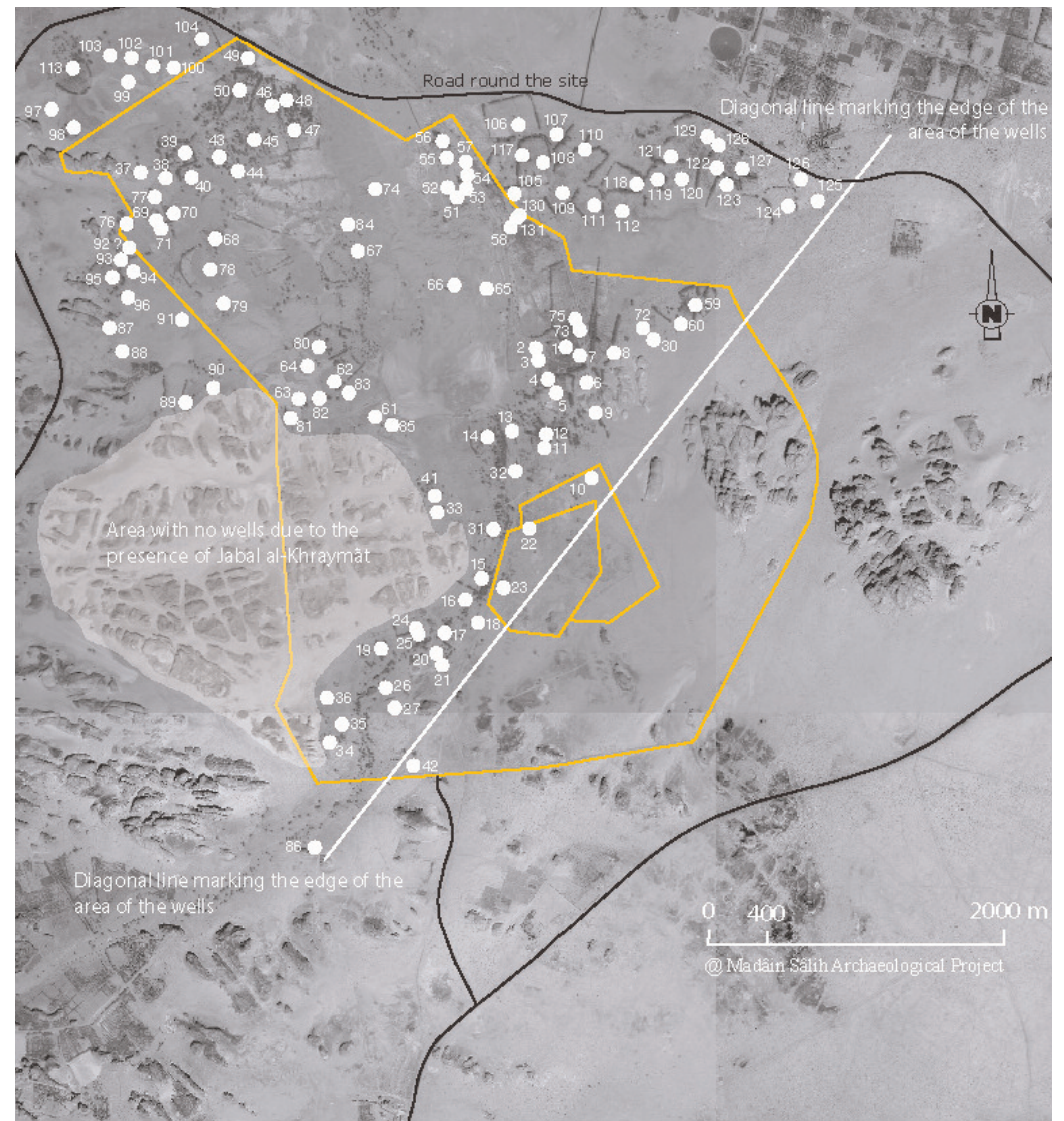
Up - **Ph.51**: Petra, stone decay, from Kühnenthal - Fischer, 2000.
Left - **Ph.52**: Madâin Sâlih, detail of Tomb IGN 100, SCT, 2003.
Right - **Ph.53**: Madâin Sâlih, detail of the stone-cutting work, from Pesce, 1975, p.74.



- In Nabataean period, water supply system in Petra was based both on the drainage of at least five natural springs located either inside or outside the site, and on the drainage of the rainfall over vast areas, thanks to a dense network of channels cut in the rock and feeding some 200 cisterns of various shape and size. In Madâin Sâlih, the water supply system is completely different: it relies on the existence of a rich and easily accessible underground water table made accessible through 130 wells dug partly in the earth and partly in the natural rock. These 130 wells form a worthy and original group of remains with no parallels elsewhere.

Madâin Sâlih appears therefore not only as one of the most conspicuous site in Saudi Arabia, with no rivals in terms of architecture and importance of the remains, but also as a site marked by specificities deserving special attention, beyond its superficial resemblance with Petra.

Pl.12: Location of the Nabataean wells, Madâin Sâlih Archaeological Project, 2005.



3.d Integrity and/or Authenticity

Al Hijr Archaeological Site (Madâin Sâlih), ancient Hegra, is one of the major archaeological and heritage sites in the Kingdom of Saudi Arabia.

The site has been protected by the deputy Ministry for Antiquities and Museums since 1972, and has been completely surrounded by a high metal fence between 1982 and 2000. Within this external protected perimeter of some 20 kilometres, a second metal fence isolates the ‘residential area’ (i.e. the Nabataean city under excavation), from the rest of the site. This inner zone is not accessible to the public. Saudi Antiquity Law regulations are applied to the site.

Overall, the site is well preserved from external threats. The archaeological remains have apparently never been re-used in the past (like it happened in Petra) and have never been the object of restoration campaigns. They present therefore an extraordinary degree of integrity and authenticity.

The landscape surrounding the major necropoles has been preserved by its inclusion within the fenced in area, but also the zone laying outside this area is still preserved from urban and industrial developments. Only the agricultural settlements established in the vicinity of the site in the 1970s have slightly altered the natural environment of the site.

THE SITE

Al-Hijr counts among the major Nabataean sites and among the best preserved archaeological areas in the region.

Apart from sporadic and seasonal occupation by herdsmen, the site has been almost completely abandoned between late antiquity and the 19th century. In the early 20th century it was ‘rediscovered’ by Western researchers, but no restoration campaign, that could have altered the original features, was ever carried out.

The comparison with the data and the pictures collected by the Dominican Fathers, A. Jaussen and R. Savignac in 1907, 1909 and 1910, offers an evident

Ph. 54: *The internal fence*, photo S. Ricca, 2006.



proof of the extraordinary preservation of the site, of its slow rate of decay and of the absence of major deteriorations during the last century.

The works carried out by the DMAM since the 1980s have made the site more accessible to the visitors with the creation of metal stairs leading to the tomb chambers, external pathways and explanatory panels. These minor interventions, though having a negative impact on the overall image of the site, did not cause damages and are fully reversible. Furthermore, panels of Plexiglas were placed on the façades in the attempt to preserve the carved Nabataean inscriptions from wind erosion. Unfortunately, not only this protective solution has not proven satisfactory, but also their fixation on the façade has been done without fully respecting the monuments. The panels are in the process of being removed.

A “cleaning” campaign was launched at the beginning of 1980s to collect the buried bodies and remove painted graffiti from the tombs. Though this campaign removed important archaeological and scientific data, it did not affect the major architectural elements of al-Hijr.

The maintenance interventions carried out by the DMAM on the rock carved façades (mostly relating to the removal of graffiti from the stone surface) were not always executed according to the highest standards, yet they have not jeopardized the overall aspect of the monuments and their impact and visibility might be reduced by adequate technical interventions.

Indeed, the tombs and all the decorative elements are all directly carved into the sandstone rock outcrops and are not masonry structures; a technique that favours the longevity of the structures and the preservation of their details.

The careful monitoring and protection of the site from the Antiquities authorities and the religious tradition considering al-Hijr (Madâin Sâlih) a ‘cursed’ site, have contributed preserving the remains from the threat of illegal excavations, guaranteeing an extraordinary level of integrity not only of the monumental structures but also of the underground archaeological vestiges. Indeed, the archaeological remains of the Nabataean city are well protected by layers of earth and sand. The internal fence built by the Antiquities Department has greatly contributed to the protection of the underground remains from illegal excavations and treasure-hunters, though some isolated cases of illegal digging have been recorded.

THE BUFFER ZONE AND THE NATURAL ENVIRONMENT

The site includes a number of rocky outcrops separated by sandy valleys. Few trees and seasonal bushes constitute the only trace of life within the fenced area that encloses a fully preserved natural desert environment.

The remains of the mudbrick buildings of the evacuated farms and of their agricultural landscape in the north of the site are slowly vanishing under the effect of rain, wind and the passage of time. This landscape, dating from the 1960s policy for the settlement of Bedouin tribes, has no major heritage signification, and did not alter significantly an area which was probably already exploited for cultivation in the Nabataean period.

The metal fence circling the core zone subdivides the landscape separating it into two zones an 'internal' one and 'external' one. The actual impact of the long fence on the landscape is relevant, yet the protection it offers fully justifies its existence.

The Buffer Zone landscape, including mountain areas and flat sandy zones, is very similar to the landscape of the core zone, though no archaeological remains subsist in this area.

The discussions and brain storming sessions related to the preparation of this nomination file have permitted to define a Buffer Zone surrounding the fenced site. The 1392/1971 Antiquity Laws mentioned the establishment of a buffer zone around archaeological sites but it did not outline or specify limits of a buffer zone, while the new Draft Antiquities and Museum Law imposes a 200-meter wide strip around the core zone as protective measure. The proposed Buffer Zone for *al-Hijr Archaeological Site (Madāin Sālih)* extends much further than 200 meters to include vast mountain and desert areas and to reach the road circling the site. The decree fixing the new boundaries has not been signed yet and will be transmitted to the World Heritage Centre at a later stage.

The extension of this protective perimeter is necessary to control the growth of the agricultural settlements in the north and south of the site, and to maintain this distance in the future. The issue is currently under review by al-'Ulâ municipality.

Ph.55: The preserved landscape of Madāin Sālih, from Babelli, 2006, p.192.





| CHAPTER FOUR |
**STATE OF
CONSERVATION AND
FACTORS AFFECTING
THE PROPERTY**

4.a Present State of Conservation

The monumental façades of *al-Hijr Archaeological Site (Madâin Sâlih)* share the physical properties of the surrounding natural rock into which they were carved. The rock façades are therefore subjected to different stresses and conditions than constructed monuments.

The present state of conservation of the site is overall very good. The rock-cut façades and the interior rooms of the tombs have not suffered from major damages caused by wind erosion, capillarity, earthquakes or rains. Indeed, no earthquake has been registered in the area in the last century and no major one is known from historic sources to have happened in this zone.

Traces of man-caused deteriorations of the façades, especially in their lower parts (graffiti paintings, voluntary desecration, rifle bullets etc.) are relatively frequent, though their effect is not such to alter the overall image of the site. Traces of bullets on the façades of the tombs, probably dating from the beginning of the 20th century, are visible, particularly on the façades of Qasr al-Bint necropolis.

The smaller and more fragile religious altars, reliefs and carved niches (betyls), especially those located in Mount Ithlib area, and some of the inscriptions and graffiti, have suffered more of man-caused deteriorations. Voluntary desecration and vandalism are relatively frequent on site and the increase of visitors' pressure on the site in the recent years has unfortunately brought about also an increase in vandalism acts.

The dry climate and the absence of major devastating rains and floods (unlike Petra) have allowed the local sandstone to preserve most of its original carved features and details; upper cornices are in most cases still protruding from the façades, underlining their architecture while, in the meantime, protecting them from occasional rain washes.

The comprehensive scientific survey carried out in the last five years by the Deputy Ministry of Antiquities and Museums in coordination with the French archaeological mission of Madâin Sâlih has collected a large amount of data that are currently being processed in view of the preparation of scientific publications. Indeed, the extraordinarily well preserved rock façades offer unique insights for the researchers about the building technology and the organization of the working site in Nabataean times.

Previous page - **Ph.56:** *Madâin Sâlih from the sky*, SSCT, 2006;

Ph.57: *Bullet holes on a tomb façade, Qasr al-Bint necropolis*, S. Ricca, 2006.



In-depth observation has shown that part of the façades, notably the zones above the cornices, were actually plastered and colored and small traces of these plasters are still visible. These plasters, already noticed by Jaussen and Savignac, are gypsum-based and therefore fragile. Indeed, gypsum is soluble in water and dissolves when dehydrates in condition of high temperature and low humidity. At the time being no plan for their restoration (conservation and fixing where necessary) has been conceived, though these delicate elements will need to be carefully recorded and protected. At least one of the tombs interior vaults also shows traces of plaster.

No scientific study has been carried out yet on the site to analyze the mechanism of deterioration of the sandstone rock, and no data concerning its physical characteristics exist.

The most important deterioration factor in *al-Hijr Archaeological Site (Madā'in Sālih)* is undoubtedly eolic erosion. This is typically affecting the bases of the rocks eroded by the projected sand carried by the wind. This phenomenon was already noticeable in Nabataean times and some tombs are carved just above the limits of the decayed area. In al-Khuraymât area, more exposed to the dominant winds, some tomb façades have been partially erased by the effect wind-related erosion.

The presence of salts deposits on the surface of the sandstone threatens locally the integrity of the rock outcrops. Efflorescences do appear in specific spots where the land surrounding the outcrops collects the rare rainwater and more impervious layers of soil create small seasonal ponds that evaporate through the rock surface.

Other forms of decay affecting al-Hijr sandstone with deep cracks and fractures are visible in some zones where localized collapses of pieces of rock in precarious equilibrium are noticeable (notably in the Ithlib Mount area). This kind of decay, resulting from the inevitable action of the physical agents on the sandstone, might be accelerated by unsuitable acts from the visitors and ill-conceived deeds, like it appears to be the case in recent vandalism acts in the Ithlib Mount area.

The metal stairs leading to the high perched tomb rooms are generally built in such a way to minimize their contact with the tomb cut façades. Localized minor damages might have occurred in some doors from the mechanical action of the metal stairs on the rock. Within the framework of



Ph.58: Eolic erosion on a al-Khuraymât façade (detail), S. Ricca, 2006.

Ph.59: Eolic erosion on a rocky outcrop, SCT, 2003.



the preparation of the new site management plan of al-Hijr, it has been suggested to remove most of them removing in the meantime this source of minor damages of the tombs (it is likely that the removal of these structures and of the other facilities for visitors made by the DMAM in the early 1980S will take place during the year 2007).

The “residential area” the zone where stood the Nabataean city, is still mostly unexplored. The only excavated parts were dug, between 1986 and 2005, by a Saudi team of the Deputy Ministry of Antiquity and Museums under the direction of M. Mohammed al-Ibrahim and Dr. Faidallah al-Talhi. Unfortunately the excavation site has not been protected since and the unearthed walls, floors and soils are rapidly deteriorating.

Finally, all the buildings of the Hijâz Railways and the Ottoman Fort were restored in the 1980s. Though not up to internationally accepted standards of conservation, these works have protected these structures form too rapid a deterioration in the last years. Their current state of conservation is therefore acceptable.



Ph.60: Metal staircase leading to Qasr al-Bint central tomb, S. Ricca, 2006.

4.b Factors Affecting the Property

(i) DEVELOPMENT PRESSURES (E.G. ENCROACHMENT, ADAPTATION, AGRICULTURE, MINING)

The Government of Saudi Arabia spent over 50 millions US dollars to acquire the parcels near and around the site in the 1970s, and on restoration projects through its relevant government agencies, to guarantee the protection of the archaeological area. The site is situated in a desert environment. It is entirely fenced and no external action directly affects the core area.

The largest town in the immediate vicinity of the site is al-'Ulâ, some 20 Km southwest of al-Hijr (Madâin Sâlih). The population of the city in 1999 was 25,452, while including the nearby villages and rural areas it reached 58,640. Al-'Ulâ is connected to al-Hijr by a good paved road leading to the southern gate

District	Urban			Rural			Total District
	Saudi	Non-Saudi	Total	Saudi	Non-Saudi	Total	
Madinah	534,398	282,739	817,137	71,334	13,162	84,496	902,232
Yanbu	107,895	52,262	160,157	37,748	16,490	54,238	214,395
Bad'r	21,961	6,846	28,807	27,166	10,222	37,388	66,195
Al 'Ula	21,053	4,399	25,452	29,685	3,503	33,188	58,640
Khaybar	10,637	3,085	13,722	35,389	5,585	40,974	54,696
Henakiah	7,816	2,541	10,357	44,762	1,496	46,258	56,615
Mahed	7,065	2,763	9,828	44,995	6,015	51,010	60,838
Total	710,825	354,635	1,065,460	291,079	56,473	347,552	1,413,611

Pl.13: Population in Medina Province 1419H/1999 AD (Source: 7th Development Plan, Ministry of Planning, KSA).

The small rural settlements closer to the site do not threaten the integrity of the archaeological zone. Nevertheless, the planned extension of the nearby farms and of the small settlement of village al-Udib, some five Km south of the site, might affect its natural environment and should be monitored and controlled by the Site Management Authority to be created. The actual development plan proposed by the municipality concerns areas outside the propose Buffer Zone.

The plan foresees new residential areas to be built, and new streets are currently being laid in view of the site development. This new settlement will be some kilometres afar from the site and almost not

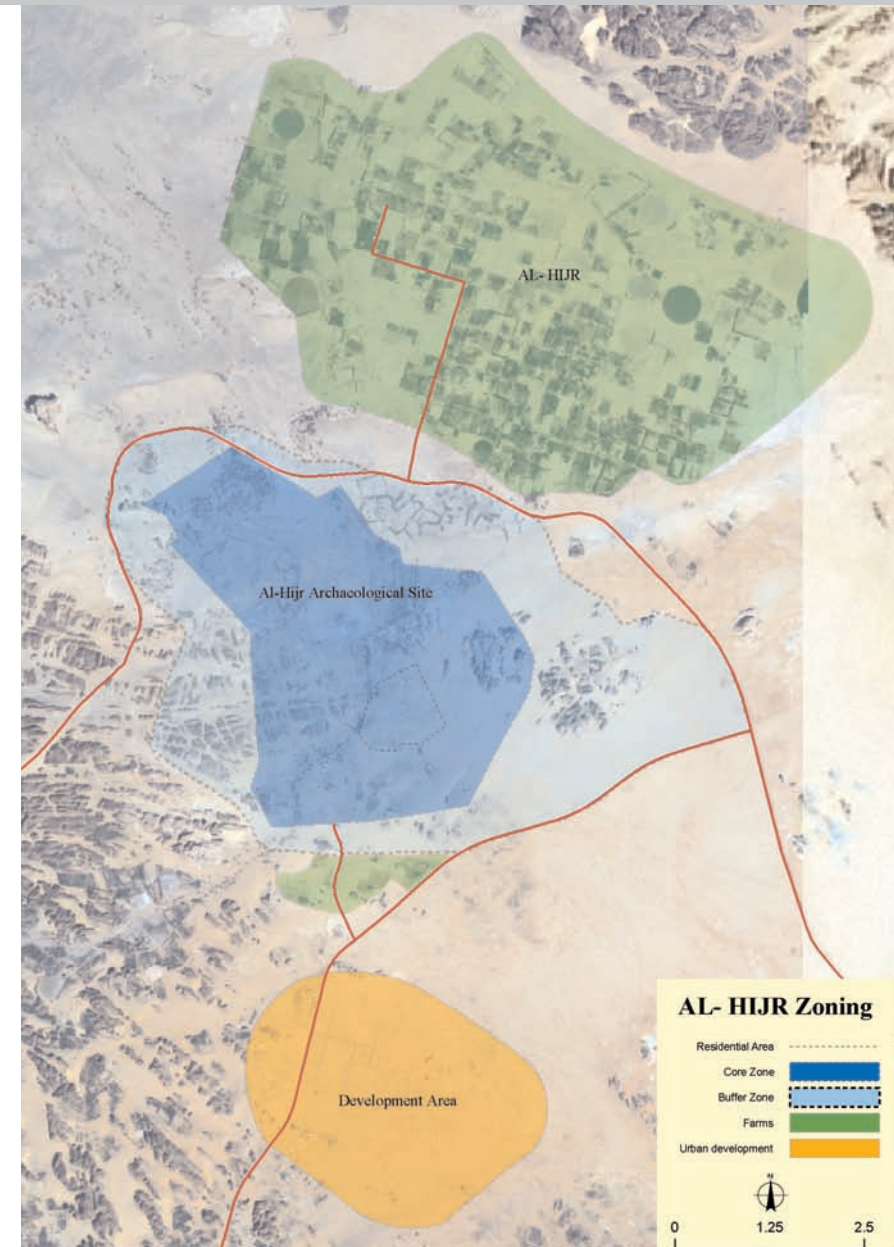
visible from within the fenced area. Its successive growth, however, will need to be carefully monitored and the Site Management Authority will need to be involved in any new planning decision. Indeed, the development plan in its present form is meant to direct the development of this sector till the year 2030. It foresees the creation of an important urban settlement over a large part of the valley and plans major agricultural and farms developments. It includes also an agro-industrial plant in the middle of the new urban centre. At the time being, only a minimal part of the planned road network has been laid down and no building has been built yet.

The development lines foreseen by this plan will need to be partially re-discussed with the governorate of al-'Ulâ in order to take into consideration the needs of *al-Hijr Archaeological Site (Madâin Sâlih)* and its new buffer zone perimeter. The major threat to the integrity of the site might be represented by the agro-industrial plant that, if not carefully designed/planned, might pollute the site and risks to be visible from within the protected area.

The eventual extension of the intensive farms located north of the site close to the fence should be monitored. It must be considered, however, that even if there is not yet a regulation defining a precise zoning for this larger zone surrounding the Buffer Zone, Saudi law does not permit the modification of the land use from agriculture to tourist development and there is no risk that uncontrolled tourist facilities and hotels will be created in these parcels. The agricultural exploitations developing around



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Pl.14: Satellite image showing the development of farms and the planned settlements near the site, elaboration SCT, 2006.

Left - Ph.61: View of al-'Ulâ city and valley, MSAP, 2005.

modern wells do not constitute a threat to the integrity of the site and do not affect in an irreversible way the landscape. Indeed, as soon as water stops to be pumped, the desert takes over again recreating the original landscape. A possible future threat for the environmental equilibrium of the area might arise from the excessive pumping of underground waters for agricultural use that might further affect the water table, and from the actual absence of a precise definition of property boundaries and ownership of the different parcels (there is no cadastre map for this area).

(II) ENVIRONMENTAL PRESSURES (E.G. POLLUTION, CLIMATE CHANGE, DESERTIFICATION)

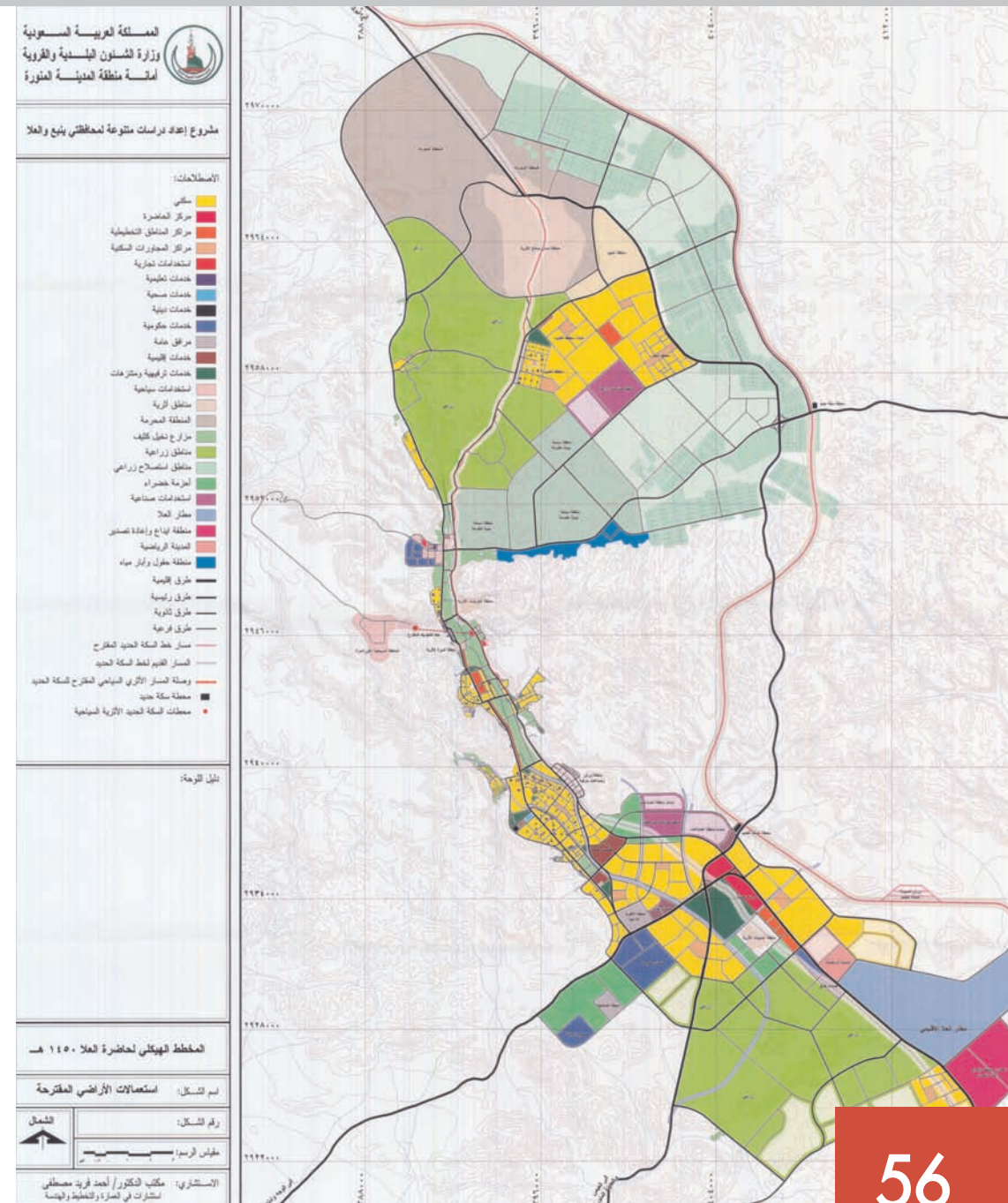
Pollution

Al-Hijr Archaeological Site (Madâin Sâlih) lies far from all major industrial and mining area of the kingdom and there are no major polluting plants in al-'Ulâ and in the nearby villages.

The major problems concern the removal of the solid waste, and the drainage system of used waters. At the time being, all used waters finish untreated underground risking polluting the underground water table, while solid waste are regularly buried in purposefully designed areas. Nevertheless, there is little ecological consciousness in the residents and often barren lands and desert zones are polluted by littering.

A new project, foreseeing the creation of a sewerage network for al-'Ulâ city and its nearby villages, is currently being implemented. Used waters will be taken some 25 km afar in Wâdi Hamd, south of al-'Ulâ.

The Site Management Authority that will be in charge of the site will develop a relationship with al-'Ulâ Municipality (in charge of waste disposal in the area) to reduce the risks of environmental pollution, while raising awareness in the visitors about the impact of uncontrolled disposal of rubbish and waste in the natural landscape.



Pl.15: Al-'Ulâ development plan, Governorate of al-'Ulâ, 2000.

Climate and climatic changes

According to archaeological researches there has been no major climatic change taking place in al-Hijr area during the last 2000 years. The site has always been extremely dry, with little precipitation, yet rich in underground waters.

Mechanical pumping and the large increase in population and water consumption in the last decades, however, have significantly lowered the level of the water table that now lies some 20 meters below the surface, while it used to be around 10 meters higher in earlier periods (as witnessed by the level of the many ancient wells).

Climatic data from al-'Ulâ meteorological station concerning the rainfall in the period 1967-2004 show that, with the exception of the month of April 1975, the per month rain is extremely low (only 37.7 mm per year) and almost inexistent from May to October.

The scarcity of precipitation and the rarity of freeze, joined to the quality of the local sandstone, have favoured the remarkable state of conservation of the rock-carved architectural details of the tomb façades.

Desertification

Al-Hijr Archaeological Site (Madâin Sâlih) lies in a desert environment and within a desert ecological system. Archaeological research has demonstrated that the climatic conditions presently visible at the site do not greatly differ from the ones that used to characterize the region during the Nabataean period, though the Nabataean surface canals that used to distribute the water to the cultivated areas of the oasis have disappeared and the ancient wells have been substituted by deep drilled wells.

Though it is known that the zone between the major rocky outcrops hosting the necropoles, used to be an agricultural area (witnessed by the large concentration of wells and proved by the archaeological researches), these agricultural exploitations were directly depending on wells and not on regular rainfalls.

The remains of relatively recent mudbrick traditional farms built in the 1960s to host sedentarized Bedouin communities and of their plantations (mostly palm trees) are visible in the site. The plants have mostly been dying out since the evacuation of the farms and their acquisition by the government.

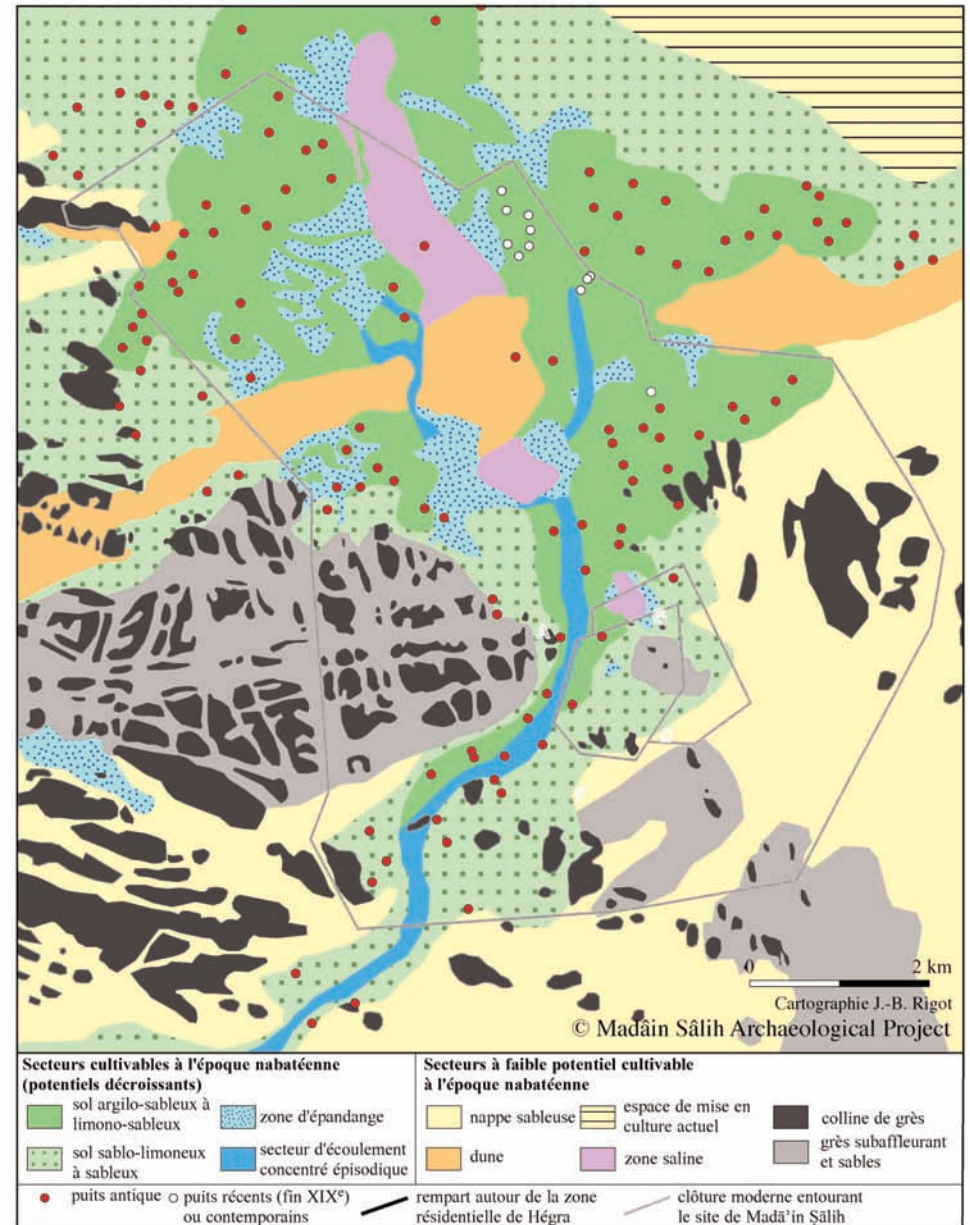
Year	Jan.	Feb	Mar.	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTAL
1967	0	2.4	0	0	0	0	0	0	0	3	24.7	0	30.1
1968	0	2.4	0	16.5	15.6	0	0	0	0	0	32.9	33.7	101.1
1969	0	5.8	0	0	0	0	0	0	0	0	12	7.2	25
1970	16.6	1.8	3	0	0	0	0	0	0	0	10.2	0	31.6
1971	0	0	24.2	6.9	12.6	0	0	0	0	0	0	5.3	49
1972	6.6	0	7.3	35.8	0	0	0	15.4	0	0	0	1.5	66.6
1973	0	0	0	0	0	0	0	0	0	0	2	0	2
1974	.8	8.4	64.1	0	0	0	0	0	0	0	7.4	4	84.7
1975	0	4	0	160	0	0	0	2.2	0	0	0	5	171.2
1976	6.2	5.3	8.8	3.6	0	0	0	0	0	4	10	0	34.3
1977	28	1.2	0	0	0	0	0	0	0	0	0	23.2	52.4
1978	0	19.2	0	0	0	0	0	0	0	0	0	1.4	20.6
1979	3.6	10.6	.2	0	11.2	0	0	0	0	20	0	4	46
1980	2.8	1.2	.4	0	0	0	0	0	0	0	23.7	14.4	42.5
1981	4.5	0	0	0	0	0	0	0	0	0	0	0	4.5
1982	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	16	0	0	0	0	0	0	7	0	23
1990	1	0	1	9	0	0	0	0	0	1	0	13.5	25.5
1991	0	29.5	36	0	0	0	0	0	0	7	27	0	99.5
1992	4	6	0	0	0	0	0	2	0	0	0	5	17
1993	4	8	2	5	8	0	0	0	0	7	0	6	40
1994	0	0	0	0	0	0	0	18	58	15	1	92	92
1995	0	11	2	0	0	0	0	0	0	3.9	0	0	16.9
1996	0	0	0	0	0	0	0	0	0	58	33	91	91
1997	25	0	12	0	1	0	0	0	0	6	0	44	44
1998	2	0	44	0	7	0	0	7	0	0	0	80	80
1999	5	0	9	0	0	0	0	0	0	0	7	21	21
2000	0	0	0	0	0	0	0	0	0	23	2	25	25
2001	0	0	19	0	4	0	0	0	0	0	0	17	40
2002	4	4	9	0	0	0	0	0	0	0	0	17	34
2003	6	0	0	0	5	0	0	0	0	12	5	28	28
2004	9	0	0	5	0	0	0	0	0	0	0	14	14
Average	3.4	3.2	6.4	6.8	1.7	0	0	.7	.5	2.5	7.2	5.3	37.7

Pl.16: Al-'Ulâ monthly rainfall, 1967-2004, al-'Ulâ meteorological station.

The slow drying out of the vegetation and the slow dissolving of the mud structures of the farms has not been confronted. The signification of the ongoing process of re-desertification of this zone should be assessed by the Site Management team within a comprehensive approach to the area's landscape. The management plan for the area will identify the most suitable strategy to confront these agricultural traces and decide for a suitable landscaping plan of the area.



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Pl.17: Madā'in Sālih, plan of soils, MSAP, 2005.

Left - Ph.62: Mudbrick farm near a tomb façade, from Pesce, 1975, p.79.

(III) NATURAL DISASTERS AND RISK PREPAREDNESS (EARTHQUAKES, FLOODS, FIRES, ETC.)

The site and the tombs do not seem to be affected by any large scale natural and environmental disasters such as earthquakes, floods or fires. Historical sources and records did not register any major cataclysm in the area in the last two thousand years.

At the time being the authorities in charge of the site have not prepared specific plans to tackle eventual natural or man-caused disasters.

The Site Authority that will be charged with the management of the site will develop a risk-preparedness approach in order to minimize the effects of natural and man-caused disasters, though no major natural cataclysm are expected.

Site managers will be asked to integrate specific measures for the protection of the World Heritage Site within existing emergency planning systems at the local, regional and national levels.

A minor issue that affects the site is the presence of wasps' nests inside the tombs. The DMAM use to spray regularly the interiors against the insects, but no definitive solution has been found yet. The presence of the nests, however, does affect only in minimal way the rock and, as long as access to most of the tombs will not be allowed anymore, this issue will not have a major impact on the visitors' safety.

(IV) VISITOR/TOURISM PRESSURES

The site is spread in a wide open area and can receive hundreds of visitors each day without jeopardizing the remains.

The development of the site in the coming years will greatly augment the amount of visitors. The reception areas, the visit circuits and the visitors' needs will have to be assessed in detail in order to plan facilities capable to guarantee the proper maintenance and conservation of the site on the one side, and the quality of the visit on the other.

At present, however, though the number of visitors is not important yet (Cf. Statistics in section 5.h) the absence of awareness and understanding of the importance of the site have led to a series of minor damages and acts of vandalism.



Ph.63: Recent and older graffiti sandblasted, al-Farid, S. Ricca, 2006.

Ph.64: Recent graffiti inside Qasr al-Bint main tomb, S. Ricca, 2006.



Monumental Tombs

The façades of the monumental rock-carved tombs show traces of minor vandalism acts. Notably graffiti and scratches cover part of the lower structures in the vicinity of the accesses. Similarly, the interiors of some of the major tombs have also been written over.

Some of these graffiti have been treated in the past by the DMAM that has sandblasted the rock to remove traces of the painting, leaving unfortunately very visible traces and affecting in depth the actual rock surface.

It is obvious that other, more suitable, techniques should be used to remove the paint, possibly profiting of the experience acquired in Petra. The new management structure will bring to the site high quality expertise at national level and establish technical contacts with other World Heritage Sites to profit from international experience in conservation.

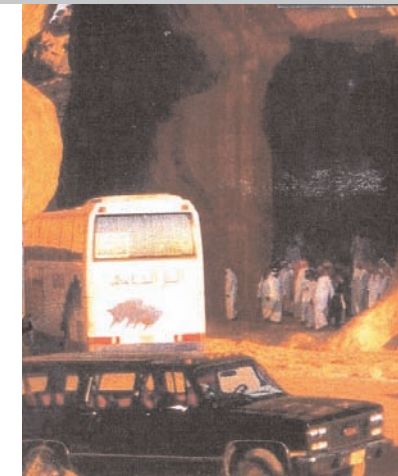
Awareness campaigns for the visitors, the presence of guards on the most visited sites during the high season, controls at the gate to verify that no material has been removed and no tools and paints are brought in, and the removal of most stairs currently permitting to accede the interior of the tombs, will significantly reduce the risk of vandalism.

Ithlib Mountain

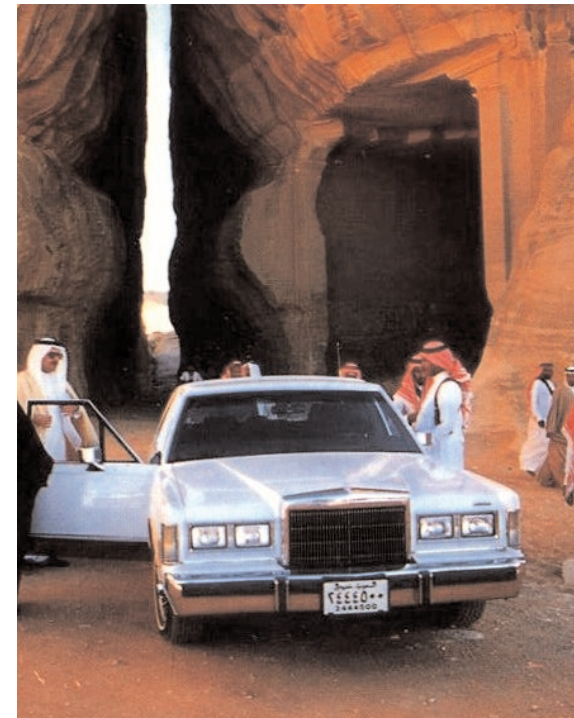
The Nabataean religious site of Mount Ithlib constitutes one of the most attractive scenery of the site and counts therefore among the most visited areas. Vandalism has unfortunately taken place in this zone - more remote and "hidden" from the guards' eyes - where are concentrated most of the Nabataean cultic sites and Nabataean and earlier inscriptions.

The protection of this area from visitors' pressure requires a specific strategy designed at reducing the facility of access (through the creation of a parking area relatively far from the site, for instance) and possibly the presence of guards on site during the day. Even now, with the currently small number of visitors, the negative impact of the visitors on the site conservation is noticeable, especially during the peak season, when indiscriminate parking in front of the Sîq threatens the vestiges.

Awareness campaigns through the presentation of Nabataean culture and religion in the Visitors Centre (that will be created within the Hijâz Station Buildings) might contribute in creating the necessary understanding and respect for the site in the visitors.



Ph.65 & 66: Indiscriminate parking in front of the Sîq, Jabal Ithlib, in Alwan, 2000.



Archaeological zone

The internal fence separating the still largely unexplored Nabataean “residential area” from the rest of the site guarantees the full protection of the zone that cannot be driven over, nor walked upon by standard visitors.

The new management plan should guarantee the continuous control of the site to avoid attempts of illegal excavations that have since now been prevented by the existing protections. The plan will also integrate the discoveries of the joint Saudi/French archaeological mission of Madâin Sâlih – that will work on the site during the next five years – within the tourist strategy for the site and the tourist paths. It seems possible to foresee special tours of the “residential area” and of the excavations accompanied by a guide. Besides, it is essential that the most suitable conservation and preservation solutions for the finds be planned (and possibly implemented) by the archaeological team before leaving the site. All attempts at partial reconstruction and didactic exhibit will need to be agreed upon by the Site Manager and the Archaeological team.

Landscape, flora and fauna

The major threat for the site landscape is represented by the uncontrolled presence of private cars/jeeps within the site. The dust, the noise and the smell provoked by private transportation within the site might greatly affect the scenery and the value of the site.

The creation of one-way road, non-asphalted but made of stabilized natural soil, leading to all the major sites and conveniently signed, will greatly reduce the problem. It is obvious, however, that when the number of visitors will grow substantially new solutions for the traffic inside the site should be designed. The management plan will propose a stage approach to this issue and monitor regularly the number of cars on site and their actual impact on the landscape. The low degree of ecological consciousness of the visitors is made evident by the presence of garbage (plastic bags, empty cans and plastic bottles etc.) dotting the desert between the necropoles. The existing garbage bins are both too visible and too little used by the visitors. Awareness campaigns, new



Ph.67: Existing unsuitable garbage bin, S. Ricca, 2006.

Ph.68: Landscape from Jabal Ithlib, S. Ricca, 2006.



garbage bins and a different management of the cleaning will guarantee the cleanliness of the site in the future.

Neither large animals nor cattle live within the fenced area anymore. Some seasonal bushes grow in rainy season mostly to die with the arrival of summer. The impact of visitors on fauna and flora is therefore minimal.

(v) NUMBER OF INHABITANTS WITHIN THE PROPERTY AND THE BUFFER ZONE

The core zone nominated for inscription on the World Heritage List is not inhabited. The only buildings in the immediate vicinity of the core zone are the offices of the site guards at the South Gate.

The Buffer Zone of the proposed site too has no inhabitants too. Indeed, because Saudi laws give private owners full control of their properties, it has been decided to limit the buffer zone to empty land already belonging to the State.

The nearest village is al-Udib, some 5 km south of the site. However, there are some farms and gardens in the immediate vicinity of the Buffer Zone with small houses for the farmers.

Within the framework of the Site Management Plan to be created for the site, regulations will be drawn to guarantee that the owners needs for development do not affect the integrity of the site.



| CHAPTER FIVE |
**PROTECTION AND
MANAGEMENT
OF THE PROPERTY**

Previous page - Ph.69: Qasr al-Farid, from Babelli, 2007, cover page.

5.a Ownership

Al-Hijr Archaeological Site (Madâin Sâlih) is located in the territory of the Governorate of al-'Ulâ, in the Province of al-Medina al-Munawarra, in the North-West of Saudi Arabia.

The site is entirely owned by the Kingdom of Saudi Arabia.

Till 2003, the site was managed by the Deputy Ministry of Antiquities and Museums (DMAM) depending from the Ministry of Education. Following the recent merge of the DMAM with the Supreme Commission for Tourism (SCT), according to the royal decree n° A/2 dated 28/02/1424 H (2003 AD) the responsibility of the site has passed in the hands of SCT.

The Supreme Commission for Tourism was established by Council of Minister Resolution No 9 of 12.01.1421 H (1999 AD), with the specific mandate "to attend, develop, to promote and enhance the tourism sector of the Kingdom". It is a technical organization with responsibility for a specialised sector being supervised by a Board of Directors chaired by the Second Deputy Prime Minister.

The entire Core Area proposed for inscription on the World Heritage List is owned by the state. The entire proposed Buffer Zone around the site is public property.

The buffer zone has been drawn with the goal to protect the site from further agricultural encroachments and in order to protect the views from and to the site. Its perimeter mostly follows the paved road circling the area, extending much further where mountains are to be found, as, according to Saudi Arabian laws, all mountains are public property.

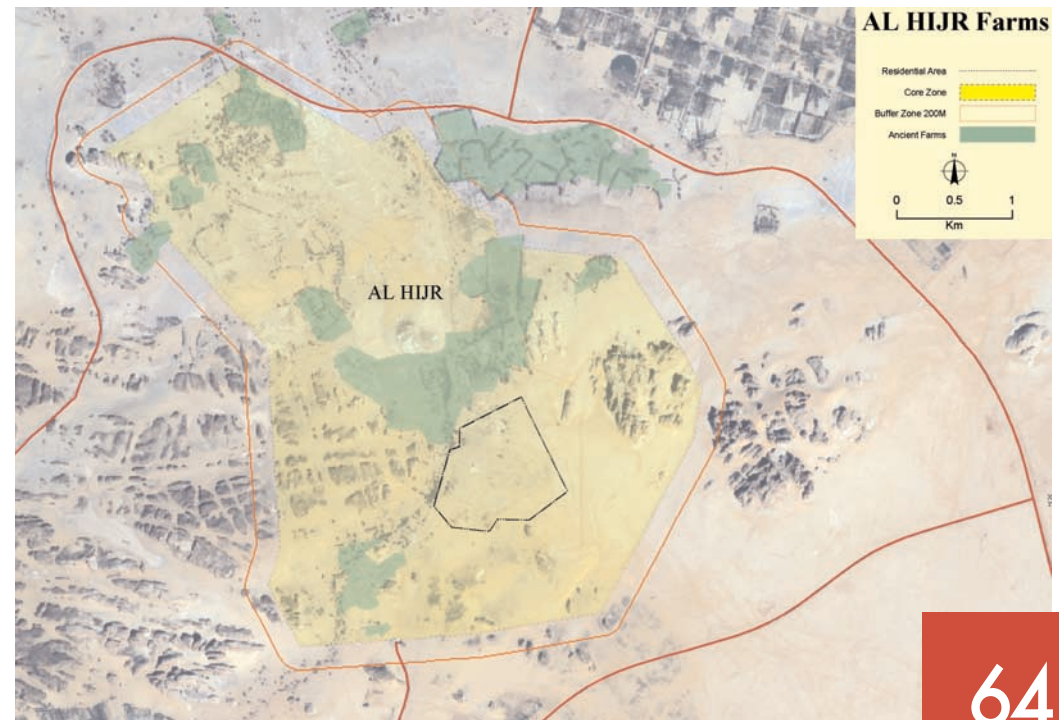
The Core Zone is entirely fenced and access to the site is controlled by guards 24/24 h.

The Kingdom of Saudi Arabia has purchased private land in the core area since 1972, spending some 50 million US dollars to acquire small farms and their land that were subsequently evacuated.

The proposed buffer zone extends over a surface of 1659.34 hectares.

There is no cadastral map of the area, but a satellite photograph elaborated by the SCT, presents the use of the land and the private properties around the Buffer Zone, and al-'Ulâ development plan has been presented in the previous section.

Pl.18: Al-Hijr farms, satellite color image, elaboration SCT, 2006.



5.b Protective Designation

The protection of Cultural Heritage in the Kingdom of Saudi Arabia is defined by the **Law of Antiquity** issued by Royal Decree no 26/M in 23/6/1392 H (the English translation of the Law is joined in the Management Plan volume) and its amendments.

According to the Law of Antiquity, the Antiquity Directorate - depending from the Ministry of Education - and the Higher Council of Antiquity are responsible of the protection of the movable and immovable properties.

The Law of Antiquities has 79 articles divided into seven chapters; Chapter two deals specifically with immovable properties.

A new **Draft Antiquities and Museums Law** has been prepared, and is currently in the final stage of the process of approval (see English version of the Draft Law in the Management Plan Volume).

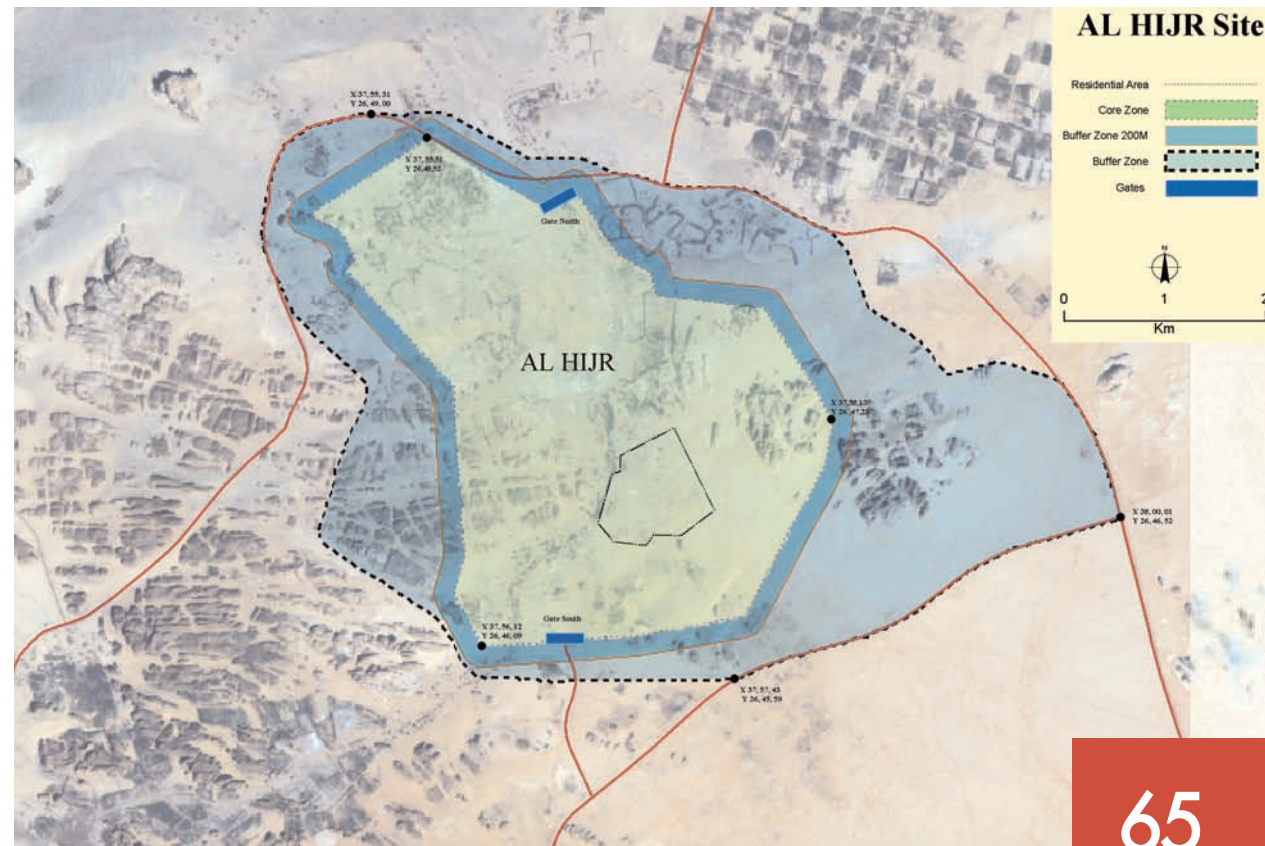
According to the new Draft Antiquities and Museums Law, the responsibility for the protection of the Cultural Heritage of the Kingdom passes under the authority of the Supreme Commission for Tourism.

The new Draft Antiquities and Museums Law is divided into nine chapters and 95 articles. Chapter two (articles 22-25) deals with archaeological & historical sites and urban heritage sites, chapter five defines protection perimeters and regulations for urban and archaeological sites.

The Ministry of Municipality and Rural Affairs (MOMRA) collaborates with the supreme Commission in the protection and classification of urban heritage.

Article 50 of the new Draft Law foresees "... that a protection area of 200 metres should surround all immovable urban and archaeological sites." This protection area could be extended to maintain the visual environment of the registered antiquity.

Pl.19: Al-Hijr buffer zones, satellite color image, elaboration SCT, 2007.



The new Buffer Zone of the site nominated for inscription on the World heritage List is much larger than the 200 metres protection area. Both perimeters are shown in the map.

Al-Hijr Archaeological Site (Madâin Sâlih) is a registered site protected by the 1972 Law. In 1976, was launched the first archaeological survey to register all the antiquity sites of the Kingdom. *Al-Hijr Archaeological Site (Madâin Sâlih)* has been registered in two phases with the code numbers 1392 to 1398 and in a second phase with code numbers 1426 to 1430. The register is regularly updated with addition of new sites; the last edition dates from 2006.

The mechanism of registration and the whole Antiquities Inventory is currently being updated and reformed to comply with modern international standards and to become an effective tool for the protection and management of the country's rich Cultural Heritage. All sites and all data concerning them are going to be integrated in a geographically referenced system (G.I.S.).

5.c Means of Implementing Protective Measures

INTERNATIONAL CONVENTIONS

The Kingdom of Saudi Arabia ratified the 1954 The Hague "Convention for the Protection of Cultural Property in the Event of Armed Conflict" on 20/01/1971.

On 07/08/1978, the Kingdom of Saudi Arabia ratified the 1972 "Convention concerning the Protection of the World Cultural and Natural Heritage".

The Kingdom has submitted its Tentative List to the World Heritage Centre on 25/09/06.

NATIONAL LAWS

The **Antiquities Law**, issued by Royal Decree No 26/M in 23/6/1392 H, defines and protects as antiquities moveable and immoveable properties older than 200 hundred years. More recent properties might be considered as antiquities following a resolution by the Ministry of Education

(art.5). The responsibility for preservation and registration of antiquities lies within the Directorate of Antiquities (art.6).

Antiquities Law imposes planners to seek Directorate's approval for all development plans in villages and cities (art.12).

Existing laws concerning heritage in the country are in need of strengthening as they are difficult to enforce and leave many important resources without protection. In order to overcome this situation, the Supreme Commission for Tourism has drafted a new ***Draft Antiquities and Museums Law*** currently under review by the Saudi government.

This new legislation includes various chapters covering: provisions and general provisions; archaeological historical and urban sites; underwater antiquities; trading in antiquities; surveys and excavations; urban heritage; museums; penalties for non-compliance and effectiveness.

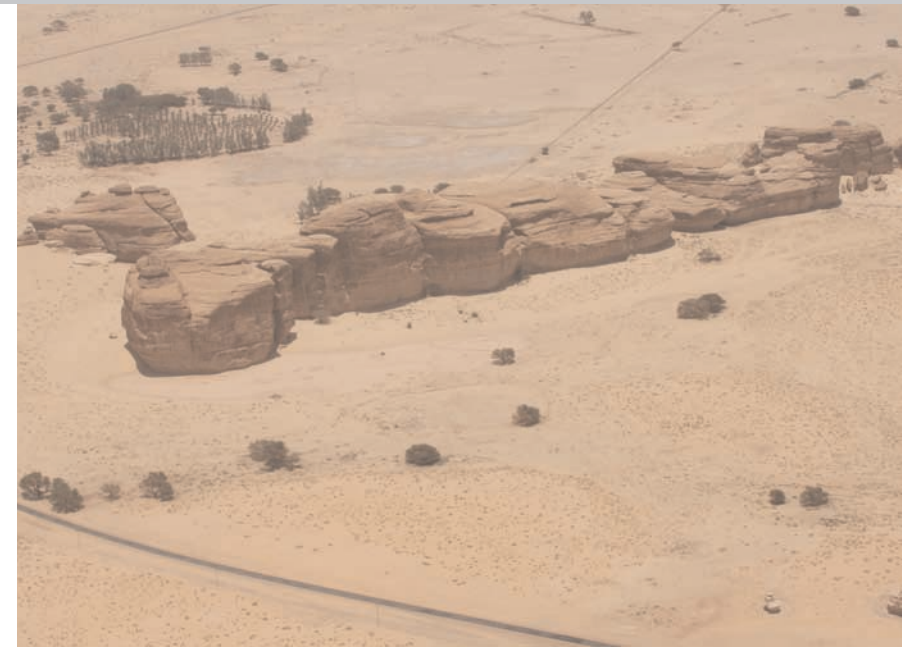
It foresees also regulations to cover all the detail requirements for implementation of the law. These will be subject to the authority of Government departments and Ministerial control, and where required, will be ratified by the Council of Ministers.

According to the analysis of the existing legislative framework elaborated in 2004, within the *Strategy and Action Plan for the Antiquities and Museums Sector of the Supreme Commission for Tourism*, there are still key elements to be defined concerning notably the issues of general legislation relating to real estate (affecting the rights of the SCT to acquire and to lease for development) and the liability to identify precisely ownership through an effective system of land registration.

AL-HIJR ARCHAEOLOGICAL SITE (MADÂIN SÂLIH)

Having acknowledged the actual limitations and shortcuts of the existing legal system for the protection of Cultural Heritage within the Kingdom of Saudi Arabia, it should be stated unambiguously that the protection system currently in place at *al-Hijr Archaeological Site (Madâin Sâlih)* guarantees the full preservation of the site.

Indeed, the core area is entirely fenced (the fencing of the site took place between 1403 and 1421 H at a cost of some 20 million Riyals) and its two only vehicular accesses are controlled by guards. Besides, the most delicate area, where lies the yet unexcavated Nabataean city, is further protected by a second, internal fence isolating it from regular visitors.



Ph.70: The limits of the site, aerial view, SCT, 2006.

At the site, the Antiquities Law is enforced by the local police, by the governor of the region and by the antiquities staff and local museum administrators. 16 guards are posted at al-Hijr with vehicles to patrol the site and control the visitors. Their efforts are doubled by the national Police that have its own office near the one of the Antiquity guards at the southern entrance of *al-Hijr Archaeological Area (Madāin Sālih)*.

Besides the legal protection, a strongly felt religious tradition, considering the site doomed, has played a major role in the preservation of the site in the past, preventing its re-use by Bedouins and local farmers as residential area.

According to this tradition, the visitors are refrained from sleeping and living on the site favouring therefore its actual preservation. This “informal” regulation is currently imposed by the site regulations.

The relative importance of this tradition and its actual relevance for the Saudi visitors and on the development of the site is somehow controversial. The issue should be assessed by the management plan in order to achieve a commonly-agreed system that will not go against traditions.

The limits of the area concerned by the religious prohibitions are not precisely defined. Nevertheless, it is known that the Railway Station was built outside the “sensitive” area. Indeed, the Ottoman fort was built near the well of *Bir al-Nâqa* (the she-camel well) where Muslim pilgrims used to have a halt in their travel to Mecca along the Syrian pilgrimage route. The Ottoman railway station was built in the immediate vicinity of the fortress to avoid stepping over the area concerned by the religious tradition.

Following the approval of the 1972 Antiquity Law and the 1976 official registration of the site, Saudi Arabian Government has bought extensive pieces of land – removing farms and farmers from the immediate vicinity of the archaeological remains – in order to guarantee the protection of the tombs and of their landscape natural setting.

The new Draft Antiquities and Museums Law foresees the creation of a buffer zone around archaeological sites on a width of 200 metres. In 2006, during the process of the preparation of the nomination file, the perimeter of this buffer zone for *al-Hijr Archaeological Site (Madāin Sālih)* has been reconsidered. The new protective perimeter presented in this file is currently in the process of being approved.

Saudi procedures for the approval of the Buffer Zone are relatively simple, requiring in fact only approval at the local level. The system foresees that the proposed perimeter, drafted by the SCT, is submitted for discussion and approval to the local department of Antiquities of al-'Ulâ and then submitted to the local department of the Ministry of Agriculture. If approved, the document is sent back to the SCT for signature and approval by the SCT Secretary-General. This procedure usually requires some six months and al-Hijr new buffer zone perimeter is expected to be approved by the end of 2007.

Copy of the approved perimeter should be sent to the Medina department of the Ministry of Municipal and Rural Affairs (MOMRA) in order to be integrated in their planning procedures.

In this case, a copy of the approval decree will also be sent for information at the World Heritage Centre headquarters in Paris to be included in the *al-Hijr Archaeological Site (Madâin Sâlih)* nomination file.

5.d Existing Plans Related to Municipality and Region in which the proposed Property is Located (e.g. regional or local plan, conservation plan, tourism development plan)

Tourism planning in the Kingdom is directed by a National Strategy for the Development of the Tourism Industry. Local committees for the development of tourism exist at the provincial level.

The main object of the Regional Tourism Council is to enhance, share, cooperate and provide all kinds of help and assistance in the development of tourism in the region and in each of its district. Its object is to encourage investment of the private sector and co-operate in developing recreational and cultural heritage tourism sites in the region in cooperation with the Supreme Commission of Tourism.

In Medina, the Regional Tourism Council is headed by the Governor of al-Medina al-Munawwara, and consists of the following members: 1) Mayor of al-Medina; 2) Director of al-Medina Police; 3) The governors of the 6 regions of the province (al-'Ulâ, al-Yambu, Badr, Khayber, Mahd and al-Hanakiya); 4) Director General of Royal Commission at Yanbu; 5) Director of Pilgrimage Department in al-Medina; 6) Director General of Ministry of Commerce and Trade in al-Medina; 7) Chairman of al-Medina Chamber of Commerce and Industry; 8) Member of Majlis Shoura (Parliament) and Head of Yanbu Chamber of Commerce and Industry; 9) Secretary General of al-Medina District Council; 10)



Ph.71: Core zone landscape, S. Ricca, 2006

Representative from Recreation Development Programs; 11) Representative of Housing Sector; 12) Representative of Tourism and Travel agencies.

The Saudi Arabian planning at local level is done by the technical offices of the municipalities, ratified at the provincial level and finally approved by the Ministry of Municipalities and Rural Affairs (MOMRA).

In 2000, a consultant working for the Municipality of al-'Ulâ and Medina MOMRA office prepared a Regional Plan for the Municipality of al-'Ulâ setting the guidelines for development of the city till the year 2030. The plan was approved by al-Medina Province and al-Medina Regional Council in 2002. It anticipates a large-scale increase of the population of the city and foresees the creation of a new large residential area some 15 km north of al-'Ulâ. The new settlement will be surrounded by a zone of intensive agricultural exploitation in the south and by large farming zones in the north, in the immediate vicinity of Madâin Sâlih.

Till now, only a minimal part of the infrastructures for the new settlement have been laid down. The new road network is visible along the road leading from al-'Ulâ to al-Hijr archaeological area, some 5 kilometres before reaching the fence, but it concerns only a minimal part of the vast urban extension designed by the planners in their zoning plan to accommodate the expansion of al-'Ulâ and al-Udib village in the vast empty areas north of the city.

The inscription of Madâin Sâlih on the World Heritage List and a more comprehensive approach to ecological development and sustainable tourism suggest that the plan be modified according to criteria jointly decided by the Governorate and the al-Hijr Management Unit. Though the very size of the World Heritage nominated property partially protects it from the most dramatic effects of the foreseen development, this plan risks jeopardizing the overall tourist development of the region.

A certain level of urban development is compatible with the highest standards of protection of the site, as it is likely that the new residential neighbourhoods will be low-density areas with low (1-2 levels) houses. Nevertheless, the overall scale of the planned settlement seems excessive. Notably, the presence of a large agro-industrial compound – in violet in the plan – in its very centre seems particularly worrying and incompatible with the overall landscape and heritage protection of al-Qura valley. Alternative options and locations need to be considered. It is likely that the growth of al-'Ulâ towards the south where the new airport is being built, might offer suitable answers to the needs of part of the population meant to settle in the northern extension of the city.

The slow rhythm of implementation of the project seems to indicate that the plan assumptions might have not been based upon a thorough assessment of the city's needs, but more according to a consolidated praxis of technical planning looking for technically compatible and easy solutions without taking sufficiently into consideration the ecology, the landscape and the heritage of the area. The policy designed by the Supreme Commission for Tourism and the overall objectives of the Tourist National Plan for this region – meant to become the “capital” of Saudi tourism – propose an alternative vision of economic development based on services, on tourism and on the re-appropriation of local identity (the old city of al-'Ulâ, for instance) that dramatically modifies the planning assumptions on which the plan was based (economical development based on intensive agriculture and agro-industries).

The sustainable tourism development imagined by SCT should lead to more eco-friendly and heritage-friendly plans. It will be the role of SCT to convince the local community that other options are available to achieve the economical development for the region. The legal implications of the partial re-drawing of this development plan need to be assessed at the central level, and discussed with the local community.

5.e Property Management Plan or other Management System

At the time being there is no specific management plan for the al-Hijr site. *Al-Hijr Archaeological Site (Madâin Sâlih)* is still run by the administrative structure that used to be in place under the DMAM. The recent merge of the DMAM with the SCT has not brought about any major change in the local system of management.

Hereafter are presented the organizational charts of the SCT and the detail of the Division of Antiquities & Museums. A third scheme, focusing on the site of Madâin Sâlih, shows how the site is currently run.

A new proposal for the management of the site, meant to answer the new needs and challenges related to the SCT policies and the nomination on the World Heritage List, is presented in the following pages.

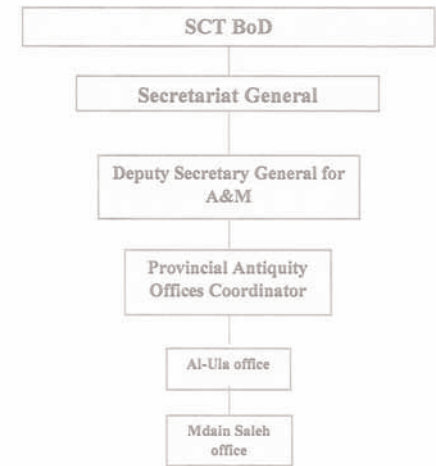
The reflections that have brought about this new organizational chart are detailed in Volume II: Management Plan. The discussions held during the preparation of the Nomination File have been instrumental in defining the guidelines of the site management plan and this organizational chart. The full support of the higher echelons of the SCT and the commitment of the Saudi Kingdom to the sustainable tourism policy developed by SCT, guarantee that the steps outlined in this report will be soon transformed into practical legal and administrative blueprints.

THE EXISTING MANAGEMENT SYSTEM OF THE SITE

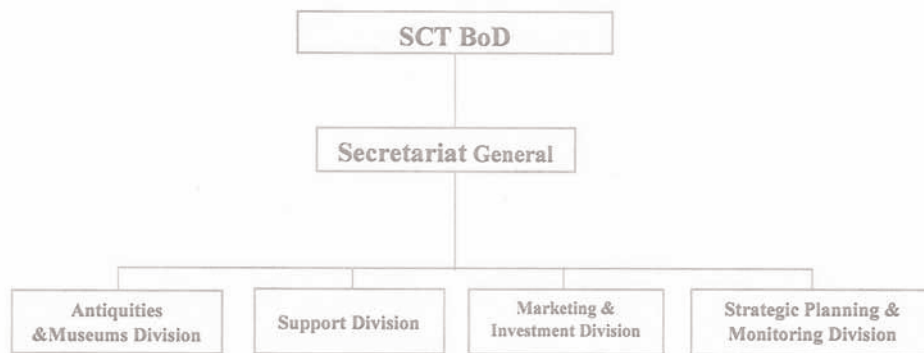
At the time being, before the new Site Management Unit is created, *al-Hijr Archaeological Site (Madāin Sālih)* is run by the newly established Division of Antiquities ad Museums within the Supreme Commission for Tourism that is in charge of the preservation of the site, of the development of scientific research and excavations and of the safety of the visitors.

The relative complexity of the existing administrative system in place at al-Hijr does not seem capable to answer effectively to the new challenges and pressures brought about by the nomination to the World Heritage List.

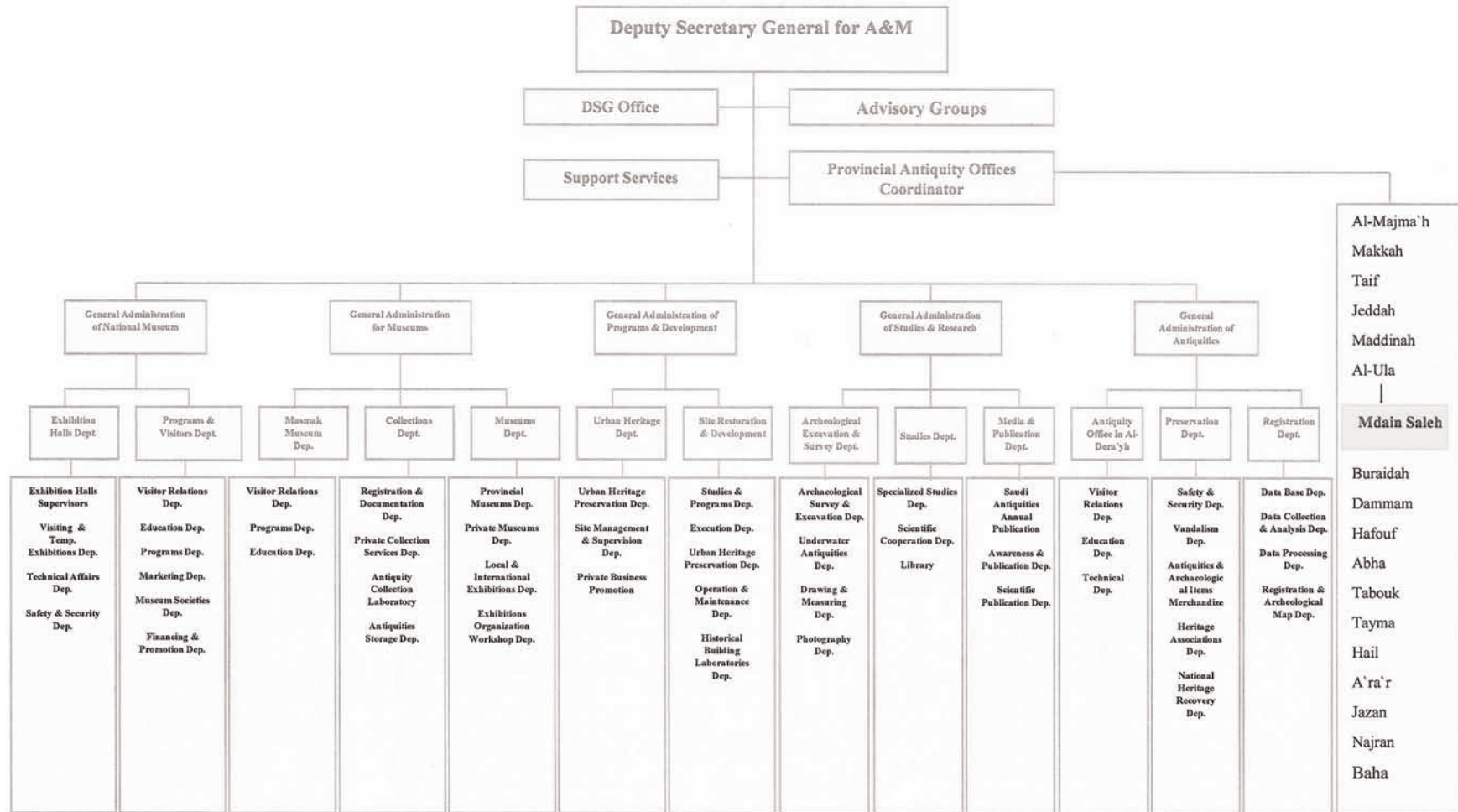
A new system, allowing a direct connection with the highest echelon of SCT on the one side, and with the local community on the other in order to be able to monitor and to debate local exigencies and expectations, is needed.



Pl.21: Administrative structure of Madāin Sālih Antiquities Office, SCT, 2006.



Pl.20: The four departments of the Supreme Commission for Tourism, SCT, 2006.



Pl.22: SCT/Department of Antiquities organisational chart, SCT, 2006.

THE NEW MANAGEMENT SYSTEM FOR AL-HIJR ARCHAEOLOGICAL SITE (MADÂIN SÂLIH)

The operational guidelines for the implementation of the 1972 World Heritage Convention explicitly require that a management plan (or system) be in place to manage and protect the properties nominated for inscription on the World Heritage List.

The importance of establishing a proper management plan for al-Hijr is evident to all the concerned parties within the kingdom of Saudi Arabia and the preparation of this Nomination File has constituted an important catalyzing factor in this process.

The establishment of a single unit in charge of the management of such an important and large archaeological site seems the most suitable solution to answer the multiple requirements of the site itself, of the local communities around the protected area and of the international organizations in charge of World Heritage Sites.

The will to raise the awareness and the interest towards national cultural heritage, in the Saudi public at large and in the local community of al-'Ulâ, constitutes the backbone of the future development plans for the area. The international requirements for the inscription of a site on the World Heritage List act as guidelines directing the ongoing efforts of the Saudi authorities and constitute the underlying framework of all future action.

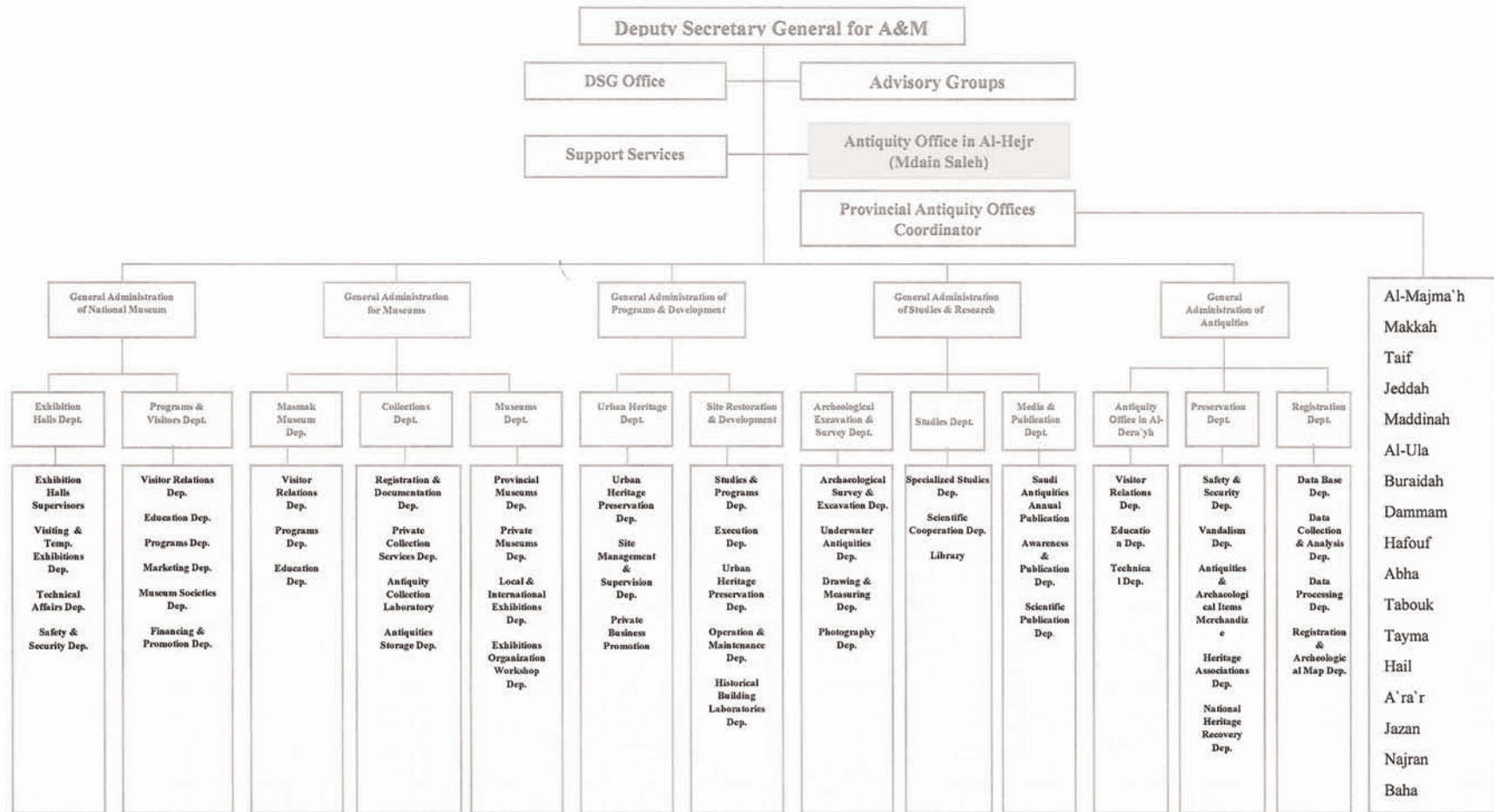
Nevertheless, it is obvious that a country that has for many decades focused its energies on the creation of a modern state and modern infrastructures, does still partially lack the human resources capable of developing such a comprehensive approach to heritage sites, and that this new approach to site management will need to grow and evolve gradually in parallel with the overall upgrading of the country's technical and managerial skills in the heritage sector.

The discussions surrounding the al-Hijr Management Plan are a "*première*" for the Kingdom and an extremely positive aspect of the whole nomination process. Different departments and people are brought together to share their vision and their approach to this issue.

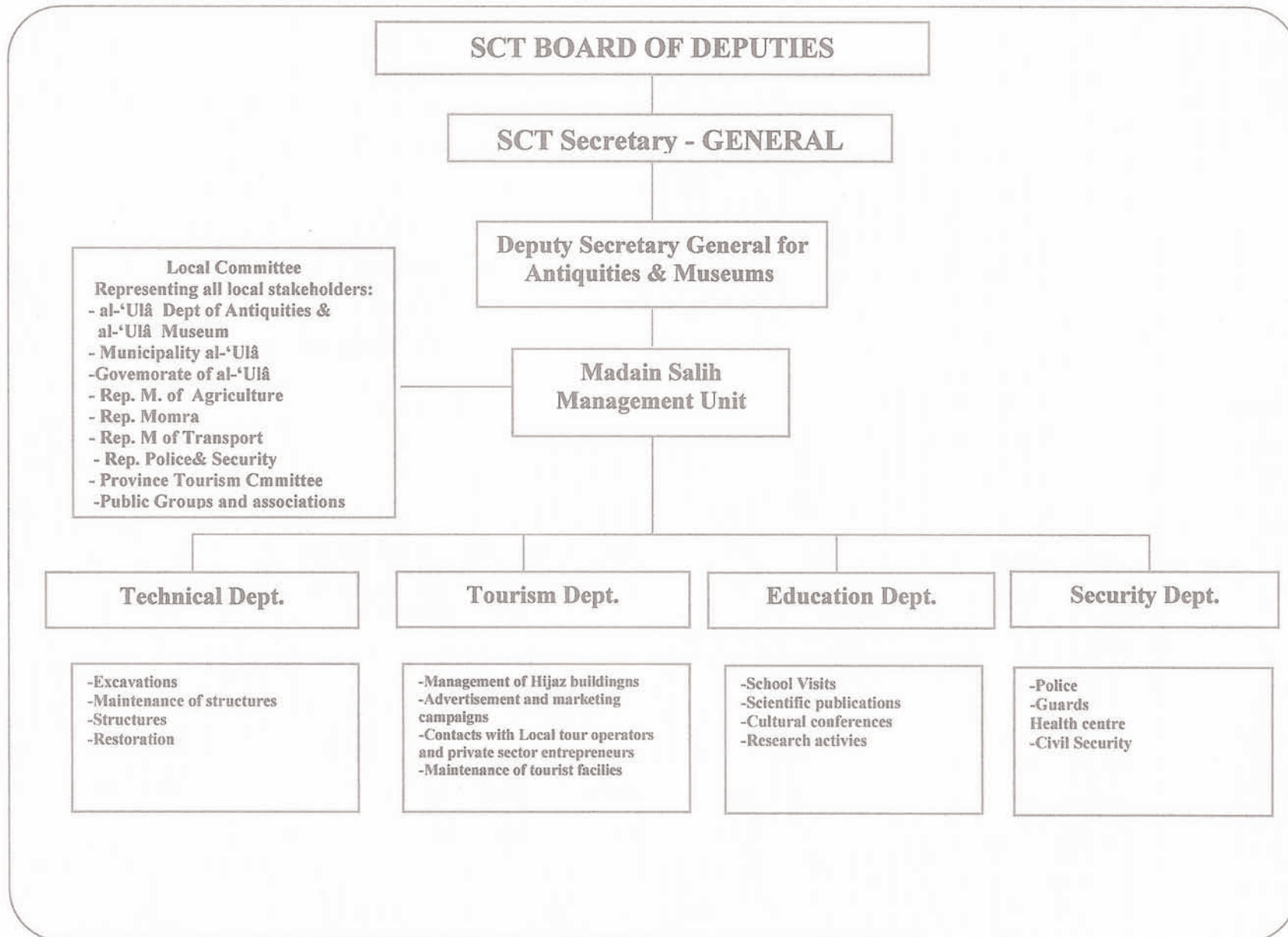
The studies put forward in the last 5 years by SCT staff, and by a number of international consultants, have defined both the objectives and the characteristics of the national tourism development. Their conclusions constitute the basis for the creation of a sound management system for *al-Hijr Archaeological Site (Madâin Sâlih)*.

A synthesis of the ongoing internal debate and a proposal for the re-organization of the local administration currently running the site is presented in the Volume II of this Nomination File.

Hereafter are presented only the new proposed organizational charts of *al-Hijr Archaeological Site (Madāin Sālih)* Unit. These charts constitute the first step of the new site management plan that will be designed and implemented in the coming years.



Pl.23: SCT/Department of Antiquities proposed organisational chart, SCT, 2006.



Pl.24: New administrative structure of Madāin Sālih Antiquities Office, SCT, 2006.

5.f Sources and Levels of Finance

The budget of the Supreme Commission for Tourism is allocated from the Ministry of Finance on a yearly basis. The SCT budget is subdivided into different sections:

- Salaries
- Operational expenses
- Maintenance and cleaning
- Projects

Since the year 2000, when SCT was created, the governmental funding of this organization has greatly augmented. The budget for the year 2003 was 84.000.000 SR (22.4million US \$) of which 26% was allocated for payroll and allowances, the one of 2006 was of 222 millions Riyals (59.2 m \$).

The creation of the SCT implied a significant shift in the approach to the cultural heritage sector. In 2003 was decided to merge the DMAM with the SCT with the intention that the merged entity would be empowered to implement a major new program of investment and development of cultural tourism based on the largely undeveloped heritage resources of the Kingdom.

Before 2003, the budget of DMAM was included in the overall budget of the Ministry of Education and was subdivided according to different criteria (Museums and schools together, for instance). It is therefore not possible to compare it directly with the present situation.

Besides, the actual budget of the SCT/DAM is still depending on both the SCT and the Ministry of Education, with many salaries being paid by the latter. In the current phase of the implementation of the administrative reform of the Kingdom, this situation exists also in relation with other ministries, and it is still frequent that public servants continue to depend administratively from the departments they used to belong to before being attached to the SCT structure.

SCT/DAM is responsible for over 6.300 cultural heritage sites, 65 museums and many excavated sites and has a yearly budget guaranteeing their protection and maintenance.

Besides running expenses and salaries, the funds were and are allocated on a project basis according to the needs of the sites.

The yearly budget for the salaries of the personnel of al-'Ulâ is 806.000 SR that equals 215.000 US \$. The yearly budget for the salaries of the personnel of al-Hijr is 523.000 SR, some 140.000 US \$.

A comprehensive approach towards the cleaning of archaeological sites throughout the Kingdom has been studied by the Antiquities Sector. It has been decided to contract the task to the private sector. The value of the existing contract (ending in 2007) is of 4.165.200 SR per year (1.110.700 US \$) to provide 89 janitors for the country's archaeological sites (four janitors for al-Hijr Archaeological Site - Madâin Sâlih). The new contract, currently in preparation, specifies the need of 6 janitors for the site. The new contract includes the following items:

- Provision of workforce.
- Garbage collection and disposal
- Pesticides and pest control.
- Cleaning of the interior of the structures
- Landscape maintenance and gardening (if needed)
- Provision for the necessary materials.

5.g Sources of Expertise and Training in Conservation and Management Techniques

The rationale behind the creation of SCT, the Kingdom's National Tourism Administration, was the need to change and reinforce the entire sector creating new dynamics to help Saudi Antiquities to overcome their gap with the international community.

SCT is not subordinated to a ministry, but combines the functions of Ministry of Tourism and a statutory agency responsible for the development and promotion of the tourism industry. It reports directly to the prime Minister. Its status is further reinforced by the fact that its Board of Directors includes members of the Council of Ministers.

According to the studies commissioned by the SCT to analyse the situation of the cultural heritage sector in the Kingdom, the country has a shortage of technical and professional expertise on the

conservation and development of cultural heritage, particularly at the regional level, where the current staff often lacks basic scientific training.

In 2003 there were 834 employees of the DMAM including 256 “Antiquity Guards” and 125 positions in regions and provinces. DMAM existing human resources included 5 PhD holders, 14 Postgraduates and 120 Graduates, making up 30% of the staff. The remaining 70 % has lower qualifications or none. Notably, the regions are understaffed, preventing the development of synergies with MOMRA and other governmental agencies.

Indeed, apart from a core group of high-profile researchers with academic background directing the Department of Antiquities, Saudi Arabian Antiquities personnel (DMAM), has been relatively isolated from the international scene in the past, being only marginally involved in international training courses devoted to conservation and management of cultural properties.

The training and development of key staff in the SCT, particularly in terms of the management and marketing of heritage properties including museums, have been set among the major priorities of SCT programme.

The Secretary-General of the SCT, His Highness Prince Sultan Ibn Salman Ibn Abdul Aziz, conscious of the absence of familiarity with cultural heritage policies and sustainable cultural tourism within the Kingdom, has notably launched a programme of visits to European heritage cultural sites and parks designed for Saudi local administrators (at the governorate and provincial levels) with the goal to raise their awareness of the development possibilities related to the management of cultural heritage.

This kind of initiative is meant to be extended to other sectors of the administration and will be complemented by technical trainings for the Antiquity division personnel.

Employees from the Department of Antiquities and Museums participated in various conferences, meetings and workshops related to World Cultural Heritage Sites within the country and abroad in the last years:

- Regional Training Workshop on World Heritage Convention, al-Sharqa (UAE) 26/02 – 2/03 2005.
- World Heritage Meeting of Arabic Countries, organized by World Heritage Centre in cooperation with SCT of Abu Dhabi 4-8 December 2005, Abu Dhabi (UAE).
- Training on World Heritage Site Management, organized by UNINTAR/UNESCO, March 2004
- April 2005, in Japan.

Significant measures have already been taken to raise the quality of the staff in various sectors, from English and computer skills, to more technical conservation, preservation and management issues. The Antiquities and Museum section of SCT has organized various training courses for its employees in the fields of computer, English language, restoration, preservation & protection of monuments and sites, inventory & database preparation, in collaboration with local training centres and foreign institutions.

Saudi Arabian architects and engineers from SCT have taken part in the recent regional training course on management organized by ICCROM at Doha in the Arab Emirates.

Dr. Abdallah al-Saoud and Eng. Mohammed al-Hamdan of SCT were trained at ICCROM Rome, and Eng. Bandar al-Malaq from SCT/DAM will attend an ICCROM training course scheduled for October-December 2007.

The preparation of this nomination file has constituted an important opportunity to motivate the personnel of the SCT Division of Antiquities and Museums and to involve the staff in conservation and management debate at international level.

The inscription of *al-Hijr Archaeological Site (Madāin Sālih)* on the World Heritage List could play a major role for the development of the entire sector giving national and international recognition and visibility to Saudi heritage and creating new economic and cultural dynamics in the Kingdom. The inscription would notably favour exchanges of experiences and know-how with other WHL sites encouraging young and motivated employees to travel and be trained abroad.

The good knowledge of English in the country, especially among the technical community, will allow the Saudi engineers and architects to fully profit of the opportunities created by the inscription on the World Heritage List.

5.h Visitor Facilities and Statistics

The twenty Km long fence has only two gates and access is currently possible only through the South Gate.

At the time being, the visitors' facilities at *al-Hijr Archaeological Site (Mâdâin Sâlih)* are basic.

At the South Gate stand a small guard boot, a police control post, a lavatory and two small offices for the antiquities staff. Guards are protecting the site 24/24 with night shifts.

Entrance is free of charge. Access is open for Saudi visitors, while foreign visitors need to apply in advance for a permit from al-'Ulâ or Riyadh Departments of Antiquities.

The site is open every day, including 'Aid and the Month of Ramadan, from morning to sunset.

A Bilingual panel in Arabic and English at the entrance informs the visitors about the regulations inside the archaeological area, and a similar panel is to be found at the closed entrance of the internal fence isolating the still unexcavated remains of the Nabataean city from the accessible necropolis.

Visitors' statistics are collected by the entrance guards. Though extremely useful these data are incomplete and do not include the count of the number of private vehicles bringing the visitors in.

The available data concerning the number of visitors to *al-Hijr Archaeological Site* in the last ten years are presented hereafter, followed by a brief analysis.

Within the framework of the establishment of the new management system for the site, a specific attention will be dedicated to the improvement of visitors' statistics. Data concerning the visitors will be continuously processed in order to verify the impact of the policies designed for the site on its tourist frequentation. The new statistics will subdivide the visitors into a larger number of categories:

1) Saudi; 2) Foreign residents (possibly identifying their country of origin); 3) Arab and Muslim countries tourists; 4) Foreign tourists (by country and identifying tourist groups); 5) School and University students (counting both the number of classes and the number of students).

Vehicles will also be recorded (separating private cars/jeeps from busses)

A *carnet de doléance*, allowing the visitors to report eventual problems met during the visit of the site, and a questionnaire to check the "quality" of the visit experience for the tourists, in Arabic and English, will be prepared by the management team. These data, that will be regularly checked and analysed by the Management team, will allow a continuous "monitoring" of the visitors needs and expectations.



Ph.72 & 73: Entrance panels to the archaeological area, S. Ricca, 2006.



Month	1998	1999	2000	2001	2002		2003		2004		2005		2006	
					Saudi	Non Saudi	Saudi	Non Saudi	Saudi	Non Saudi	Saudi	Non Saudi	Saudi	Non Saudi
					JAN	718	1018	1260	1122	1467	852	1220	876	1193
FEB	193	332	612	491	903	263	1150	1162	992	3314	814	3501	911	3614
MAR	2316	1474	1331	1145	740	266	1071	1126	904	2219	847	1129	705	1253
APR	973	1624	2321	3068	1852	2040	936	605	1124	970	1131	894	1982	816
MAY	791	1063	1045	2196	3417	2150	4165	585	3652	620	3910	423	3072	645
JUN	272	628	917	1083	2920	1415	4053	529	3113	413	3431	402	3785	504
JUL	633	1064	1112	833	3813	748	4111	727	3059	935	3252	301	3145	406
AUG	288	286	758	547	2037	311	3416	753	2917	1201	2009	992	2109	985
SEP	276	493	596	704	402	509	812	940	442	963	317	845	504	717
OCT	3192	3496	3758	4238	3912	3133	4076	2205	4218	3340	4730	2375	4982	2470
NOV	2344	2662	2690	1104	2753	621	2608	2114	2607	1128	2901	1162	0	0
DEC	1112	2379	2570	2891	4201	1476	3210	2910	4210	2320	4650	2244	0	0
Net	13108	16519	18970	19422	28417	13784	30828	14532	28431	19633	29072	16516	22798	13801
Gross	25498	32020	36680	37722	42201		42963		48064		45588		36599	

Pl.25: Visitors to Madâin Sâlih, 1998-2006, SCT, 2006.

BRIEF ANALYSIS OF THE STATISTICAL DATA

The data concerning the number of visitors have been collected since 1998. Since 2002 the statistics count separately Saudi and Non-Saudi visitors, allowing for a sharper analysis of the tourist fluxes. Unfortunately, school students visiting the site with their classes are not counted separately and cannot be quantified. Similarly the data concerning the number of tourists coming with organized groups and the nationality of the foreign visitors is not registered.

- The total numbers are relatively significant for a country without a Cultural Tourism tradition; they range from some 13.000 in 1998 to 45.600 in 2005, showing a sharp raise in frequentation after the year 2002. The site of al-Hijr is the most visited in the whole Kingdom with some 300.000 visitors in the last 9 years.
- The regular augmentation of the number of visitors had a temporary halt in 2005 when some 3.000 less visitors came to Madâin Sâlih than the previous year. The data for 2006, though partially incomplete, seem to be similar to those of 2004.

- It is meaningful that the number of foreign visitors has not been especially affected by the overall international political situation, while, in the same period the number of foreign tourists to the kingdom has sharply declined. It seems therefore that the foreign visitors are mostly foreign residents of the Kingdom.

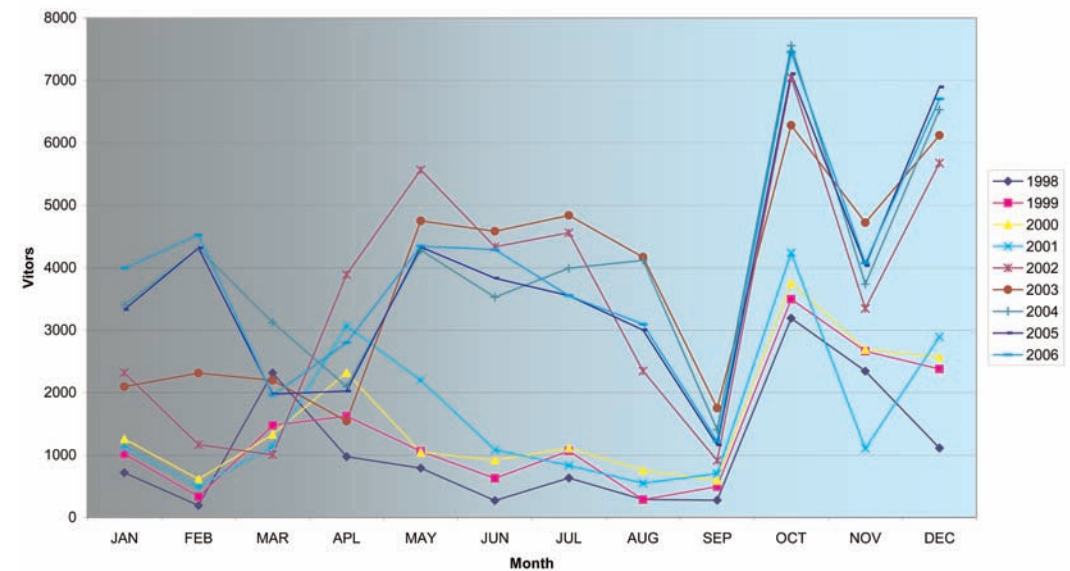
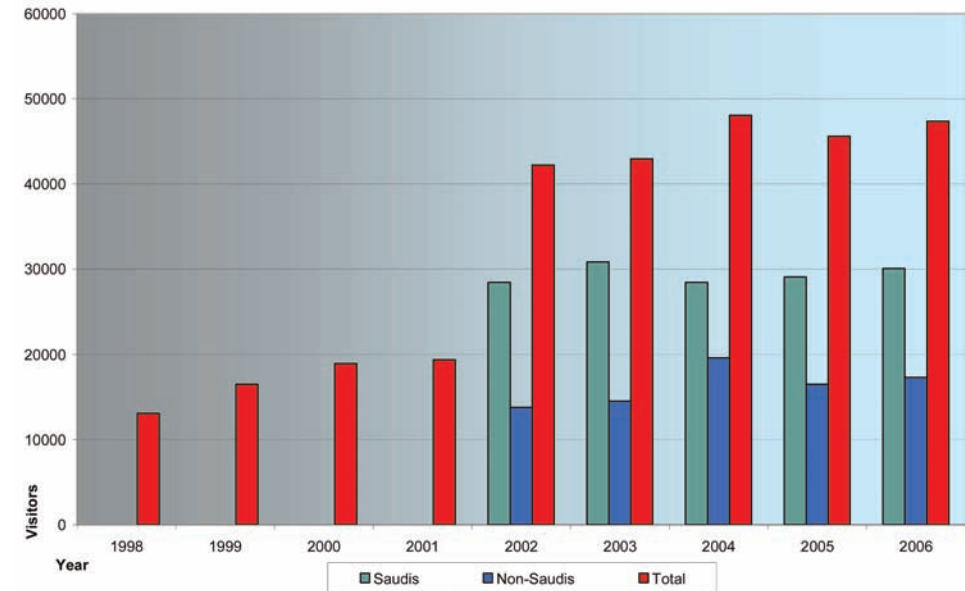
- The number of Saudi and non-Saudi visitors is almost comparable, though foreign visitors need to apply in advance for a permit to visit the site. This datum illustrates the fame of the site within the expatriate community. Absolute numbers in the last years are relatively stable for the Saudi public, around 29.000 per year, while there has been a growth of the foreign public between 2002 and 2004.

- The number of visitors varies considerably according to the months of the years. The peak season for the Saudi public being mostly concentrated in the periods May-August and October-December (with the lower presences registered in the months of February, March, April and in September), while the peak season for non-Saudis roughly corresponds with the winter/spring seasons. The two patterns might be summarized as follow: Saudis mostly visit Madâin Sâlih during their summer holidays while foreigners, who leave the Kingdom in the hot summer months, visit the site mainly during the colder months of the year.

- The large number of Saudi visitors in the summer months (and during the 'Aid holidays period) when schools are closed demonstrates the little presence of school visits and children groups even in the absence of precise data concerning school classes.

- The maximum number of visitors per month has been registered in the months of October 2004 and 2006 with some 7.500 visitors (an average of 250 visitors per day); the lowest was recorded in February 1998 with only 193 visitors (an average of less than 7 per day).

- Data concerning the hotels: though investments from the private sector have been done in the city in view of its development as tourism area, the number of visitors spending the night in al-'Ulâ is still relatively small and the overall capacity of the hotel sector still limited.



Up - Pl.26: Chart of Saudi and non-Saudi visitors, 1998-2006, SCT, 2006.

Pl.27: Monthly record of visitors to Madâin Sâlih (Saudi & non-Saudi), 1998-2006, SCT, 2006.

PRELIMINARY CONSIDERATION ABOUT EXPECTED TOURIST FLUXES FOLLOWING THE INSCRIPTION ON THE WORLD HERITAGE LIST

SCT estimates for the tourism fluxes at al-Hijr in the coming years foresee a significant augmentation of the total number of visitors.

If we assume that (according to a pattern frequently verified on other World Heritage sites) following the inscription on World Heritage List, and the launch of national and international marketing campaigns for the site of al-Hijr, the number of visitors might double in the coming 5-7 years, it will reach some 100.000 visitors per year (compared to the 46-48.000 in 2004-5) in 2012-15.

Most likely, the distribution of these visitors throughout the year will not change and we might therefore expect a peak season, during the month of October, where some 15.000 visitors (i.e. 500 visitors per day) visit Madâin Sâlih.

These numbers can be accommodated relatively easily by the site without major risks for the integrity and the conservation of the remains.

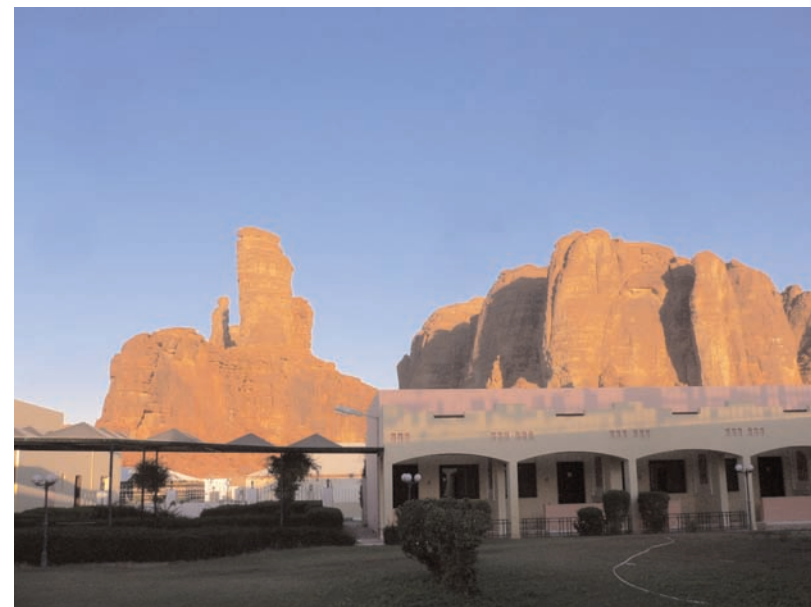
The new tourist facilities to be designed at the Hijâz Railway Station buildings should be planned to cope with a 500 visitors/per day average expected rate and should be capable to receive some 2.000/2.500 visitors in peak week-end days or holidays period.

HOTELS STATISTICS

At the time being there are two hotels opened at al-'Ulâ, with a third one currently being built near the old city. They are 4-star hotels belonging to local private entrepreneurs or to a small Saudi chain. Madâin Sâlih Hotel has 50 rooms and 16 suites (approximately 132 beds); Arac Hotel al-'Ulâ has 42 rooms and 4 suites (92 beds). The third hotel, currently under construction is planned to be larger and to have some 100 rooms. Besides the hotels, there are also apartment accommodations available for tourists in al-'Ulâ.

Occupancy rates at the hotels are currently rather low according to the owners, though, unfortunately, there are no specific statistics available because occupancy rate is calculated by SCT for the whole Medina Province without detail for al-'Ulâ.

The only existing data concern the Arac Hotel in the year 2001, when only 3033 people slept at the hotel: 1599 Saudis and 1434 foreigners. Their distribution throughout the year confirms the assumptions made from the visitors statistics, and notably that Saudi visitors concentrate mostly in the summer months and foreigners in winter.



Ph.74: Arac hotel, al-'Ulâ, S. Ricca, 2006.

5.i Policies and Programmes Related to the Presentation and Promotion of the Property

The studies launched by the Supreme Commission for Tourism since the year 2000 have identified in the site of Madâin Sâlih, and in the whole al-'Ulâ region, a major attraction pole for the development of national, regional and international tourism.

The concern of SCT for the establishment of a sustainable development have led to the elaboration of detailed studies focusing on the protection and management of the site of Madâin Sâlih, the most known and visited national cultural site of the Kingdom.

These studies have defined two immediate priorities:

- The nomination of the site for WHL status (meant to boost the country's awareness of its unique and rich heritage);
- The launch of an international campaign of archaeological research on the site in cooperation with the French CNRS (starting in 2001 and renewed in 2005).

In parallel, a number of plans for the development of the al-'Ulâ region are under review from the Saudi authorities. These include notably:

- The creation of a new airport at al-'Ulâ;
- The creation of a visitor's centre and tourist facilities and museums within the Hijâz Railways Station buildings at Madâin Sâlih, etc;
- The partial re-creation of a section of the Hijâz Railway.

The new General Administration of Antiquities within the SCT structure is in charge of the conservation of the site and of the harmonization of the tourist approach with the overarching conservation and preservation needs.

REALIZED PROGRAMS AND PROJECTS

Since its registration as an Antiquity Site, a number of projects, studies and development plans took place at al-Hijr. Hereafter are listed the major interventions carried out by the DMAM and later by the SCT since 1972:

In 1978, The DMAM asked the French National Geographic Institute (IGN) to realize an aerial survey of the site and a photogrammetric survey of the tombs (see Vol.II, section 6). This operation led to establish a new inventory of the tombs and sites at Madāin Sālih.

Between 1403 and 1415 (1982 and 1994) the buildings of the Hijâz Railway station and the nearby ottoman fortress were restored.

In 1405 (1984) was built the Museum of the nearby city of al-'Ulâ whose interior layout was designed in 1411 (1990) and renewed in 1418 (1997).

In 1990, a metal fence circling the whole site was erected. The fence, a two-meter high metal grill, runs for some 20 Km and was extended, in 1994, to include also the Hijâz Railway Station complex.

In 1994 a number of interventions were executed by the DMAM at al-Hijr Archaeological Site to facilitate the visit:

- The tombs were cleaned and some 20 metal staircases were built;
- A system of panels and numbers to identify each tomb has been created. The panels bear Arabic and English texts translating the original inscriptions and briefly present the main tombs;
- Concrete paths made of prefab concrete slabs, 1.5 m wide, directly laying on the sandy ground were placed in front of the tombs to avoid walking in the sand;
- Panels in Plexiglas to protect the inscriptions carved on the tombs façades were placed in front of each inscription;
- In 1424 (2003), a plan for the lighting the Hijâz Station area was implemented by the Supreme Commission for Tourism.

PLANS IN-THE-MAKING

The definition of the new tourist circuits inside the site is currently studied by the SCT. The Ministry of Transport will finance the proposed plan for the road within the site that will be prepared and implemented already during the year 2007. The major elements of this plan concern:

- The definition of the most suitable circuit for the internal road;

- The definition of a suitable technical solution to achieve a sufficiently stabilized road surface avoiding the use of asphalt that would spoil the natural environment of the site;
- The definition of suitable areas for small parking areas in the vicinity of the major necropolises;
- The location and the design of restrooms within the site.

In parallel, studies and projects are also focusing on:

- The definition of the programme for the re-use of the 16 buildings of the Hijāz railway (cf. Vol. II Management Plan section 5);
- The design of the Visitors' Centre and of the other planned activities in the Hijāz railway buildings.

Private sector is expected to play a major role in the tourist development of the site. Private entrepreneurs will be allowed to propose guided tours of the site and to develop special facilities for the visitors (road-trains, horse and camel rides etc.). The *bazaar* and the restaurant will also be run by the private sector. The role of the SCT will be to facilitate their activities by the preparation of carefully designed contracts and sets of rules capable to guarantee the respect of al-Hijr heritage and to control and direct the overall tourist development.

LONG-TERM DEVELOPMENT PLANS UNDER REVIEW

SCT and the local authorities have been considering a number of long-term plans and projects for the region. Some of these have already reached the implementation phase; others are still at the level of feasibility studies.

- The upgrading of an existing airstrip south of al-'Ulâ city, and its transformation into a regional airport connected with the national air routes, is currently under

Pl.28: Al-Hijr Archaeological Site (Madāin Sālih) internal road network, SCT, 2006.



way. This project, that was previously postponed, is now reaching its final stage and the opening of al-'Ulâ Airport is foreseen for 2008. The airport is meant to play a major role in the development of tourism in the region.

- The creation of a new sewerage system for al-'Ulâ area draining used waters in the Wādī Hamra area, some 25 km south of al-'Ulâ, has reached the implementation phase. The new sewerage system will greatly improve the overall ecological equilibrium of al-Qura valley.

- The re-creation of a small section of the Hijâz Railway linking al-'Ulâ with its new airport in the South and with al-Hijr in the north has made the object of a detailed study. The discussion of this plan has currently been postponed until the completion of al-'Ulâ airport. During the preparation of the feasibility study of the project, special attention will be paid to the impact the rebuilt railroad might have on the archaeological remains of the site (notably on the "residential area").

Saudi authorities are particularly interested in the revitalization and tourist development of the remains of the Hijâz railway in the region of al-'Ulâ. Indeed, beside the unique remains of the Nabataean civilization, the remains of the early 20th century railroad constitute another important heritage asset of the site. Historic railways are increasingly becoming a tourist attraction. For many years, the famous Orient Express, immortalised by Agatha Christie, has been running exclusive packages with various itineraries across Europe. In Britain the railway heritage is well preserved, much of it supported by railway enthusiasts. In India the railway heritage is also well preserved and is being adapted for tourism purposes. The famous Darjeeling Himalayan railway has now been designated a World Heritage Site, while the railway museum is one of the major museums open to visitors in Delhi.

The Hijâz Railway played a prominent role in the early 20th century history of this area and is associated with a sense of adventure, especially the exploits of T. E. Laurence. It was the first railway ever developed in the Kingdom, and it represents a popular form of technology of the early 20th century of much potential interest to Saudis and foreign visitors.

- Saudi central government has also been considering the possibility to create a National Cultural Heritage Park in the region of al-'Ulâ within which the Archaeological Site of al-Hijr would be included. Such a park, focusing on the extraordinary cultural and natural sites of the al-Qura valley and the zone of al-'Ulâ oasis, would constitute the perfect institutional cadre for the site of al-Hijr, as it would guarantee the link between a World Heritage property and the other archaeological and natural sites in its vicinity that constitute an essential element of national Cultural Heritage. However, at the time being, its realization seems too complex to

implement. It is hoped that the new status as World Heritage Site of al-Hijr might have a positive impact on the launch of such a comprehensive and ambitious plan.

5.j Staffing Levels (professional, technical, maintenance)

The Antiquities Office at al-'Ulâ is responsible of all the registered sites of the region, and is in charge of the security and guarding of *al-Hijr Archaeological Site (Madâin Sâlih)*

The al-'Ulâ department has a staff comprising the Director of the Museum (B.Sc in Archaeology & Museum studies), an administration assistant (High-School diploma) and 19 guards that are sometimes working also at al-Hijr.

The yearly budget for the salaries of the personnel is 806.000 SR that equals 215.000 US \$.

It is under consideration to increase the number of employees including architectural engineer, archaeologists, antiquities supervisors and restoration experts.

Madâin Sâlih section comprises a director of the site (with B.Sc in archaeology), one administrative assistant (high-school diploma) and 16 guards with three vehicles.

The yearly budget for the salaries of the personnel is 523.000 SR, some 140.000 US \$.

Ph.75: *Madâin Sâlih landscape (detail)*, from Babelli, 2006, p.196.



| CHAPTERS SIX - SEVEN - EIGHT |
MONITORING
/ DOCUMENTATION
/ CONTACTS

6.a Key Indicators for Measuring State of Conservation

At the time being there isn't any formalized system concerning the monitoring of the site; maintenance and protection being guaranteed by the continuous presence of the guards and the site director at al-Hijr.

The site is regularly visited by the SCT responsible staff from Riyadh and the site guards regularly report to SCT headquarters, through the existing administrative chain, any noticeable change in the state of conservation of the site and all main events concerning the site.

Three major elements have concurred to the remarkable preservation of *al-Hijr Archaeological Site (Madâin Sâlih)*:

- The monuments are not masonry structures, but, being carved into the rocky outcrops, they are actually part of the landscape itself;
- The area is fenced off, rather isolated and further protected by the religious traditions;
- There is still a relatively limited amount of visitors.

In the last years, the attention of the SCT has concentrated on this site focusing on its possible transformation into a major national and international venue. Visits from high-level personnel from Riyadh have therefore been more frequent contributing to the technical monitoring of the site.

Furthermore, the regular monitoring of the Saudi antiquities has been doubled by the serious and comprehensive study carried out by the French CNRS mission that has worked, in collaboration with the DMAM, at Madâin Sâlih since 2001.

The analyses and surveys they have carried out in the last 5 years, concern all the aspects of the site, from landscape to rock-carving technology, from satellite analysis to the census of the inscriptions. The mission has assembled an extraordinarily complete and comprehensive documentation that can be used as reference for regular monitoring in the future.

The complete inventory and the mapping of all the archaeological and epigraphic remains in Madâin Sâlih, elaborated by the Madâin Sâlih Archaeological Project, have permitted to update previous inventories, and to detail the pathology of the monuments identifying the characteristics and the origin of the deteriorations affecting the monuments.

The new management unit will define a standardized system of monitoring that will give the site director a complete understanding of the state of conservation of the ruins. This monitoring system will allow identifying problematic areas, foreseeing and planning the following steps and verifying the impact of the maintenance and conservation works that have been carried out in the past or are currently being implemented.

Within the framework of the preparation of the site “risk maps” – one of the first priorities of the new management unit (cf. Volume II Management Plan) – a scientific monitoring and follow up mechanism will be set up. The new system will be based upon regular (yearly) reports and extraordinary reports in case of calamity or localized collapses/events.

The reports will include the following elements:

- Basic data (name of site, date of report, name of the responsible of the report, date of the site visit, etc.);
- List of the bodies to which copy of the report has been sent;
- Overall comprehensive assessment of the conditions of the site presenting in few lines the major problems faced;
- A precise description – organized in hierarchic way from the main to the minor issue – of the alterations and events affecting the conservation of the site;
- Photographs presenting the damages;
- A draft conservation plan identifying the needed “urgent” interventions, the medium and long-term interventions, identifying the skills and the technical qualifications necessary for its implementation.

In order to produce these documents, the definition of key-indicators of the conservation state of the property will help achieving a scientific approach to site conservation and allow an immediate, almost automatic, verification of the conservation and maintenance needs.

Three different indicators have been selected:

- The most important documents to rely upon for the assessment of the state of the monuments are, and will be, photographs. Colour, black and white and multi-spectral photographs are a non-destructive methods (unlike the intrusive collection of stone samples, for instance) of utmost value in assessing the damage the façades suffer from weathering or from vandalism. The new studies carried out by the Madāin Sālih Archaeological Project between 2001 and 2005, are meant to update and complete the 1914 publication by Jausen & Savignac, and allow



Tomb IG 17 - **Ph.77**: 1910, from Jausen - Savignac. **Ph.78**: 2005, G. Ferrandis for MSAP. **Ph.79**: 1978, IGN survey 1978. **Ph.80**: 1978, photogrammetric drawing IGN 1978.

therefore a punctual comparison with the situation at the beginning of the 20th century and the precise identification of the alterations that occurred during the last 100 years. Indeed, comparison with the earlier photographs can lead to an estimate of the rate of decay of the monuments. Complete sets of images from three distinct periods are available (1907-1910 from Jaussen & Savignac; 1978-1979 from IGN photographic and photogrammetric survey, 2001-2005 Madâin Sâlih Archaeological Project survey). New comprehensive photographic campaigns, covering the whole area and reproducing the views of the earlier photos, should be done at regular intervals, possibly every 5 years.

- The acquisition and analysis of the most suitable satellite views of the site and the surrounding areas should be done on regular basis (likely every 1-2 years) to verify the evolution of the agricultural and urban settlements south and north of the site and verify the effectiveness of the policies foreseen by the Management Plan to contain and direct local development.

- The presentation, on a large-scale map, to the public of the regular maintenance work and the punctual consolidation and restoration works carried out by the new Management Unit and by the SCT – regularly updated on a yearly basis – might also act as a sort of key indicator of the state of conservation of the site. The diminution of “hot spots” on this “risk-map”, following the site authority’s intervention, will prove the effectiveness of the actions implemented by SCT/DAM and in the meantime materialize for the visitors the concern of the Saudi government for the conservation of its rich heritage.

Indicator	Periodicity	Location of Records
Photographs of the tomb façades	5/10 years	Double copy to be kept both at Riyadh headquarters and at al-Hijr Site Management office
Satellite view of the area surrounding the protected perimeter	1/2 years	Double copy to be kept both at Riyadh headquarters and at al-Hijr Site Management office
Site ‘Risk-Map’	Yearly	The document should be shown on the site. A copy will be kept in SCT headquarters, Riyadh.

Pl.29: Monitoring key indicators according to the UNESCO format, SCT, 2007.

6.b Administrative Arrangements for Monitoring Property

Currently, the site is managed according to the structure presented in chapter 5.e. The administrative system of the SCT/DAM foresees the regular allocation of funds for paying staff salaries and running costs and the possibility to ask, on a yearly basis, for extraordinary funds to implement specific projects.

As shown in the previous paragraph, there is not yet an administrative structure charged with the regular scientific monitoring of the property. The monitoring of the site is guaranteed by the continuous presence of guards on site. This arrangement permits an effective control of the external causes of damage (vandalism, calamities, etc.) affecting the site, but does not tackle the issue of the natural decay and of the scientific maintenance of the monuments.

The new scheme proposed for the management of the site will introduce a new administrative structure in charge of the World Heritage Listed property and directly reporting to the Deputy Secretary-general for Antiquities. The new structure will be in charge of the regular monitoring based upon the scientific and administrative criteria outlined in the previous paragraph (6.a).

Notably, it will produce a yearly report, integrating the data provided by the bodies forming the Local Committee, to present a complete overview of the evolution of the site from the conservation point of view, but also from the tourism development perspective.

6.c Results of Previous Reporting Exercises

Following the 1996 visit of the M. Federico Mayor, UNESCO Director-General, to Riyadh, UNESCO has pledged to support the Kingdom of Saudi Arabia in its efforts to prepare the nomination files for the inscription of the Kingdom's natural and cultural sites on the World Heritage List.

A series of international missions relating to the potential for inscription on the World Heritage List of the site of al-Hijr have taken place.

In 1998, a report was produced by two French experts: Mr. Jean-Marie Dentzer and M. Jean-Pierre Braun. This report focused not only on the site of al-Hijr, but also on the Old City of al-'Ulâ and the other major archaeological sites of al-Qura valley.

In the following years following the creation of the Supreme Commission for Tourism, a series of technical reports dealing with the site of al-Hijr have been prepared by international consultants. Notably, in 2002, SCT with the assistance of Ernst & Young PLC, UK, prepared a five-year Action Plan for the Sustainable Tourism Development Plan of the Kingdom of Saudi Arabia. The output 2.06 of this plan is a draft Management Plan for al-'Ulâ and al-Wajah Area, analysing the tourist potential of the site of Madâin Sâlih.

These reports have permitted to focus the attention on the site of al-Hijr alone in view of the complexity of the rehabilitation of al-'Ulâ old city and the difficulties related to the preparation of a comprehensive management plan for the whole area.

Following the recent meeting of M. Koichiro Matura, Director-General of UNESCO with His Highness Prince Sultan Bin Salman, Secretary-General of SCT, in Riyadh on 30/4/2006, the process of preparation of the nomination File has been accelerated.

This nomination file closely follows the recent submission of the Saudi Arabian Tentative List to the World Heritage Centre in October, 2006, listing three sites among whom *al-Hijr Archaeological Site (Madâin Sâlih)*.

7.a Photographs, Slides, Image Inventory and Authorization Table and other Audiovisual Materials

The original list of the digital photographs (in jpeg format) signed by the author, and the authorization for the non-exclusive cession of rights in favour of UNESCO/World Heritage Centre, according to the requirements of the World Heritage Operational Guidelines, are joined to the two volumes of the Nomination File.

The digital files are joined in the attached "Photo" CD.

Copy of the original documents signed by the photographer, and a visual index of the 19 images, are presented in the following pages.

The titles of the 19 photos of Mr. Mohammed Babelli included in this file refer to the owner's classification.

List of Images © Mohammed Babelli

- 1 Al-Hijr Archaeological Site (Madâin Sâlih), Area C Necropolis
- 2 Al-Hijr Archaeological Site (Madâin Sâlih), Al-Khuraymât Area
- 3 Al-Hijr Archaeological Site (Madâin Sâlih), Al-Khuraymât Area
- 4 Al-Hijr Archaeological Site (Madâin Sâlih), Al-Khuraymât Area
- 5 Al-Hijr Archaeological Site (Madâin Sâlih), Jabal Ithlib Landscape
- 6 Al-Hijr Archaeological Site (Madâin Sâlih), Landscape
- 7 Al-Hijr Archaeological Site (Madâin Sâlih), Landscape
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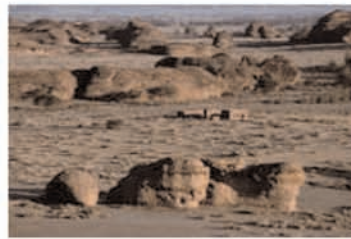
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Pl.30: Visual index of M. Babelli pictures attached to the Nomination File, SCT, 2007.

7.b Texts Relating to Protective Designation, Copies of Property Management Plans or Documented Management Systems and Extracts of Other Plans Relevant to the Property

See documents presented in Volume II: Management Plan of the Nomination File for *al-Hijr Archaeological Site (Madâin Sâlih)*.

7.c Form and Date of the Most Recent Records or Inventory of the Property

The Saudi Arabian Department of Antiquities & Museums within the Supreme Commission for Tourism keeps an updated inventory of the archaeological and monumental sites of the Kingdom protected by the Law of Antiquities.

The inventory, listing more than 6.000 archaeological sites, is regularly updated and published by Department of Antiquities & Museums. The last edition dates from 2006.

Al-Hijr Archaeological Site (Madâin Sâlih) has been registered in two phases with the code numbers 1392/3/4/5/6/7/8 at first, and with code numbers 1426/7/8/9/30 in a second stage, in 1978.

The mechanism of registration and the whole Antiquities Inventory is currently being updated and reformed to comply with modern international standards and to become an effective tool for the protection and management of the country's rich Cultural Heritage. All sites and all data concerning them are going to be integrated in a geographically referenced system (G.I.S.).

Besides the official record the Madâin Sâlih Archaeological Project, in collaboration with the DMAM, has prepared a new and complete inventory including all monument and inscription within the area delimited by the protective fence. This inventory will be published by the MSAP in the coming years and copy will be held at the SCT headquarters in Riyadh.

7.d Address where Inventory, Records and Archives are Held

All documents, records and archives concerning *al-Hijr Archaeological Site (Madâin Sâlih)* are kept in the premises of the Supreme Commission for Tourism in Riyadh.

Supreme Commission for Tourism
Kingdom of Saudi Arabia
Riyadh, Diplomatic Quarter - 11586
P.O. Box 66680

Once established, the new site management unit of *al-Hijr Archaeological Site (Madâin Sâlih)* will conserve copy of all the documents concerning the property.

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8.b Official Local Institution/Agency

The Local Agency from which depends the office at *al-Hijr Archaeological Site (Madâin Sâlih)* is the al-'Ulâ local office of the Department of Antiquities of the Supreme Commission for Tourism located within the premises of al-'Ulâ Museum.

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9. Signature on Behalf of the State Party



Prof. Dr. Ali al-Ghabban,
Supreme Commission for Tourism
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