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Rock Art in Saudi Arabia – a General Introduction and New Findings

Abstract

The deserts of Saudi Arabia are exceptionally rich in rock art, mainly in engraved petroglyphs. During the last nine millennia the desert landscapes experienced several climate fluctuations while the general trend went from a modestly moist climate to the present hyper-arid one. Human populations adapted to the corresponding changes in fauna and flora by following different types of economies; several of these changes are mirrored in rock art. A distinctive feature of Saudi Arabian rock art from the first millennium BCE onward is its close association with inscriptions written in at least 15 different scripts, of which the majority were local developments. Whereas most of these inscriptions are brief epigrams, a few of them are highly important official records that shed light on Arabia's pre-Islamic history. The author recently explored and documented Saudi Arabian rock art.

Introduction

The desert societies of Inner Arabia are often considered unchanging and timeless. However, an analysis of rock art up to ca. 9,000 years old reveals flexible adaptations in economy and social organisation to dramatic climatic and environmental changes. Some economic innovations were adopted from the Levant or Assyria; others developed within Arabia itself. The interior of Saudi Arabia is a land of sweeping deserts and unforgiving climate. In the south lies the Rub' al-Khali – the Empty Quarter – which, with its surface of ca. 650,000 km^2, is the largest pure-sand desert in the world, while the north holds the Great Nefud Desert, whose surface is ca. 104,000 km^2. Rain is minimal, with less than 100 ml falling per year, against an evaporation potential of approximately 4,500 ml per year.[1] However, as with the Sahara or the Taklamakan Deserts, earlier climatic conditions in Arabia were not as hostile to life as those prevailing today. Examining former lake sediments indicates that the Arabian Peninsula experienced several climate fluctuations. During the Chibanian and Upper Pleistocene periods, for example, lakes existed in the Nefud around 410 thousand years ago (MIS 11)[2], 320 kya (MIS 9), 200 kya (MIS 7),125 kya (MIS 5e), and 100 kya (MIS 5c).[3]

While it is difficult to imagine those lost worlds today, traces of more recent shifts can be found in the country's remarkable rock art, which illustrates the intricate relationship between human life and climate. The Great Nefud is surrounded by a belt of spectacular sandstone mountains and outcrops to the south and west; a similar landscape stretches north-westwards up to Wadi Rum in present-day Jordan. In the centre of the kingdom, south-west of its capital, al-Riyadh, the landscape is dotted with various mountain ranges and smaller deserts interspersed with oases. Whereas the Rub al-Khali Desert predominantly consists of huge sand dunes, the eastern foothills of the neighbouring Asir Mountains reach its south-western edge. All of these various sand and limestone mountain ranges, which are in parts heavily weathered, provided vast 'canvases' for creating

rock art – including inscriptions. More than 1,500 rock art and inscription sites are registered, and they form an important part of Saudi Arabia's rich cultural heritage.[4] Timewise, they stretch from the earlier Pre-Neolithic to the first centuries of the Islamic Period, sporadically even till the present. In contrast to the Sahara, the overwhelming majority of rock art in Saudi Arabia comprises petroglyphs; and only a few larger pictograph sites (rock paintings) exist, such as at Mahraga al-Agil in the Jabal al-Lawz, northern Tabuk Province, or al-Hamdha in the Asir province.

Research history

The first European traveller to take note of Arabian petroglyphs and inscriptions was probably the Finnish Orientalist and explorer George August Wallin, who visited Jubbah in 1845,[5] followed by Charles Montagu Doughty, who spent two years (1876–1878) in Arabia and explored the sites of Abu Mughair and Jubbah.[6] Following on his heels, in 1879, were Lady Anne Blunt and her husband, Wilfrid Scawen Blunt, who reached the oases of Ha'il and Jubbah, situated on the southern edge of the Great Nefud.[7] Scientific investigation of rock inscriptions began with the German epigrapher Julius Euting and the Alsacian epigrapher Charles Huber (travels in 1880, 1883–34), who was murdered while travelling.[8] In 1883–1884, Huber and Euting first journeyed together to Tayma, Khaybar, al-Ula, and Mada'in Saleh (ancient Hegra) in order to document ancient inscriptions. Then Huber intrigued against Euting with Emir Ibn Rashid, ruler of Hail, and the Emir subsequently forbade Euting the planned return to Ha'il. Euting retreated to al-Wajh and Huber continued alone towards Ha'il, during which journey he was killed.[9] As it turned out, Huber's intrigue against Euting had unwillingly saved the latter's life. Huber and Euting published numerous pre-Islamic inscriptions; but while Huber was only incidentally interested in petroglyphs, Euting paid full attention to them. In 1907, 1909, and 1910, Antonin Jaussen and Raphaël Savignac systematically studied pre-Islamic rock inscriptions at Mada'in Saleh and Tayma.[10] Forty years later, they were followed by the Belgians Gonzague Ryckmans, his son Jacques, and Philippe Lippens in 1951–1952.[11] The Ryckmans-Lippens-Expedition was guided by Harry St. John Philby Bridger, who took advantage of his position as adviser to King Abd al-Aziz ibn Saud to explore in the 1930s the deserts of central and southern Arabia. Based on 232 photographs stemming from one single site from the Ryckmans-Lippens-Expedition, Emmanuel Anati attempted to date and classify the petroglyphs according to styles and ethnic authorship.[12] Anati never visited Arabia and his interpretations are dated.[13] In 1976, the Comprehensive Archaeological Survey of Saudi Arabia began and since the 1980s, Majeed Khan conducted extensive fieldwork. Then followed the 'Palaeodeserts Project' of the Max Planck Institute and research by the Royal Commission of ALULa. Lately, Christian Robin and his team made interesting epigraphic discoveries in central and southern Saudi Arabia, while Guillaume Charloux and Maria Guagnin discovered life-size carvings of camels in the al-Jawf region.[14] Finally, Robert Bednarik and Khan conducted optical microerosion analysis on selected petroglyphs and inscriptions[15] while the team led by Mainrat Andreae, Max Planck Institute, researched the rate of desert varnish regrowth on petroglyphs.[16] Together with the Swiss artist Therese Weber and two Saudi petroglyph and desert specialists, the present author explored the rock art sites of Saudi Arabia in 2020 and 2022 for a total of three months.

With the exception of precisely dated inscriptions, dating rock art is notoriously difficult – but in Saudi Arabia, as in the Sahara, some important motifs are known to only appear in specific time periods, so they can offer a rough indication of their age. Such temporal indicators are the extinction of certain animal species resulting from changing climatic conditions, or the beginning of the domestication of other animals. Other time-related markers are weapons, vehicles such as carts and light chariots, inscriptions and, occasionally, religious symbols. The use

Fig. 1. The main rock art sites in Saudi Arabia. Adapted from: Google Earth, Image Landsat / Copernicus; © 2020 ORION-ME.

and reuse of some rock faces as a 'canvas' for petroglyphs has created superimposed banks of imagery dating to different periods. These palimpsests make it possible to sketch a relative chronology, which may be connected with the direct dating achievable through archaeology. In terms of direct dating methods, the measurements of natural manganese (Mn) and iron (Fe) deposited as rock varnish on engraved petroglyphs compared to adjacent natural varnish showed that such results can provide quantitative age estimates for a defined group of petroglyphs, provided such rock art has been dated independently by other means such as dated inscriptions. However, as Dorothea Macholdt noted, "Mn revarnishing measurements are not generally appropriate for deriving an 'age' for an individual petroglyph."[17](fig. 1)

Climate, fauna, and rock art

As the hyperarid terminal Pleistocene ended at the beginning of the Holocene, around 10,000 BP or slightly before, climate changed and Arabia experienced a relatively moist period, mainly driven by the north-westerly extension of the Indian Ocean Monsoon (IOM).[18] This first made its mark on the south-eastern portion of the Arabian Peninsula but, after a lag of ca.1700 years, the Nefud Desert also began receiving summer monsoons, although in reduced quantity. Lakes formed, which were replenished in the winter months by rainfall delivered by Mediterranean Westerly Cyclones, and parts of the formerly desert landscape changed into steppes or, at favourable locations, savannas.[19] Big carnivores, such as lions and leopards, and large herbivores like aurochs, long horn buffalos, wild dromedaries, and kudus thrived. At the onset of this wetter period, a hunter-gatherer economy dominated. Since lakes attracted carnivores

Fig. 2. On the left, a Neolithic ithyphallic pastoralist with bovids and dogs; on the right, a hunter with his pack of hounds and two buffaloes; on the far right, a leopard. Jabal Raat, Shuwaymis.

Fig. 3. A hunter, armed with a bow and his two dogs, confront a lion. Jabal al-Manjoor, Shuwaymis.

and herbivores alike, these hunters also sought prey there. Indeed, petroglyphs are quite often located in the immediate vicinity of paleolakes or natural water sources. Following the probably earliest pre-Neolithic, that is pre-pastoralist petroglyphs at Jubbah featuring curvaceous women from the 8th millennium BCE,[20] early rock art illustrated hunting scenes, sometimes involving packs of dogs (fig. 2), as well as confrontations between humans and lions (fig. 3) which may date from the 7th millennium BCE.[21] It is noticeable that petroglyphs often occur in concentrated form at water points, while other rock surfaces remained unworked. When such water points existed on thoroughfares, one may find as off the Iron Age dated inscriptions from passing armies from the period of the Neo-Babylonians to the Christian and Jewish rulers of Himyar (Yemen), such as at the sites of al-Hayit (ancient Padakhu, alternatively ancient Yadihu),[22] Ma'sal, Murayghan, or around Bir Hima (see below).

The introduction of domestic cattle, sheep and goats from the Levant into Arabia around 6200 BCE,[23] spurred a transition to **Neolithic pastoralism**, which is mirrored in the rock art. Scenes featuring herding and domesticated animals became common, and were often positioned to overlay older hunting images. Striking similarities between the petroglyphs in the southern Nefud in the so-called 'Jubbah-style' (fig. 4) and some of those at Shuwaymis and Luwee, also called al-Hanakiya, (200 and 350 km farther south, respectively), as well as in Jordan Wadi Rum (700 km north-eastwards), suggest that the Nefud Neolithic pastoralists expanded both southwards and northwards. In the Jubbah style, humans are featured with elongated and rather slim bodies, 40–190 cm high, and with tiny heads that seem to wear a head cover; the head and cover resemble a hammer (fig. 5). The figures are often shown in motion with slightly bent knees; they have very slim arms and often hold in one hand either a

Fig. 4. A tall man depicted in 'Jubbah style' holding a boomerang. Jabal Umm Sanman, Jubbah, Great Nefud Desert.

Fig. 5. An 8 m wide panel with 10 pastoralists in 'Jubbah style'; one holds a bow. Luwee, al-Medinah Province.

bow or an object that was probably a boomerang or a throwing stick used in hunting. The whole surface of these early images was often deeply pecked into the stone (fig. 6), while later petroglyphs were mostly created by removing the dark brown rock surface to expose the brighter, underlying stone to form just the outlines of the figures.[24] In the south-western Nefud Desert, in Jabal al-Misma, the author's expedition discovered one Neolithic petroglyph showing an almost life-size wild dromedary (fig. 7).[25] Nearby, two huge slabs had been used as a shelter and were adorned with stylistically very similar carvings of three wild dromedaries and the probably earlier carving of an oryx. Under these four animals the outline of an even earlier animal can

Fig. 6. A Neolithic warrior in 'Jubbah style' holding a boomerang; behind him stands a woman. Talaat al-Salaby, Jabal Abu Mughair, Great Nefud Desert.

be guessed. The oldest known representations of wild camels are the 17 life-size high and low-reliefs, dated to between 5'200 and 5'600 BCE, which were discovered in 2016 in Saudi Arabia's northern region of al-Jawf.[26]

Towards the beginning of the 4th millennium BCE, drier conditions set in once more and the Jubbah style disappeared.[27] Limited winter rainfall and the retreat of the IOM led the sparse grassland to disappear and the steppes gradually regressed to deserts.[28] As a consequence, the wild savanna-adapted fauna was replaced by desert-adapted animals.[29] Humans responded by adopting two economic strategies. On the one hand, settlements harnessing artificial irrigation fed by wells flourished at the desert edges.[30] In those days, until the 1960s, the phreatic level was relatively close to the earth's surface in certain regions, and wells provided the needed water; at the wells, leather containers filled with water were pulled up by oxen, later by camels.[31]

On the other hand, pastoralism diminished and hunting regained in importance.[32] The targeted animals were wild camels, gazelles, and goats.

As the region became drier, cattle disappeared from rock art and hunting scenes became dominant once more. Overhunting of wild dromedaries probably spurred their domestication around 1100 BCE, ensuring a plentiful supply of meat and milk.[33] Approximately two centuries later, dromedaries also began to be used for transport, substantially increasing the mobility of pastoralists and merchants – but also of raiders.[34] The late Bronze Age and early Iron Age witnessed the emergence of simple carts with four-spoked wheels pulled by equids featured in rock art in plan view (e.g. at Jubbah or Abragz bin Samra south of Tayma; fig. 8) and, towards the middle of the 1st millennium BCE, of light chariots with eight or ten-spoked wheels rendered in profile similar to Neo-Assyrian, Neo-Babylonian and Egyptian images; such chariots are at al-

Fig. 7. A Neolithic petroglyph of an almost life-size wild camel in the region of Misma South, Great Nefud Desert.

Fig. 8. A two-wheeled cart pulled by two horses. Abragz bin Samra, Tayma Province.

Sinya near al-Ula, Hafirat Berd in the southern Nefud or al-'Ayrayn south of Tabuk.[35] Since nomads and caravans depended on access to water, the question of who controlled the wells, saw violence flare.[36] Horses got domesticated slightly later than dromedaries but their use became common only around 400 BCE[37]; in southern Arabia the spread of the horse was slower and its use for riding became prevalent in the first century CE.[38] This encouraged militarisation of nomadic society which is reflected in rock art, with mounted lancers and swordsmen, fighters on foot, and battle scenes becoming dominant.

Fig. 9. Two men armed with lunate pommel-handled daggers. This weapon was widespread in southern Arabia and present in rock art from ca. 1'500 BCE to 1'000 CE. Aan al-Naam South, Hima Region, Rub al-Khali.

As this brief overview reveals, the relation between climate, economy, and rock art can be divided into six periods:

- First, during the wet, early Holocene, a hunter-gatherer economy is reflected in petroglyphs featuring at Jubbah curvaceous women followed by hunting scenes.
- Second, in the era of Neolithic pastoralism (beginning in the later 7th millennium BCE) which still enjoyed a relatively humid climate, images of pastoralists and domesticated cattle, sheep and goats predominate.
- Third, in the late Neolithic and Bronze Age, a return of arid conditions led to settlements developing irrigated agriculture and to a resurgence of hunting.
- Fourth, in the Iron Age (ca. 1200–300 BCE), the domestication of dromedary and horse brought a new mobility. Rock art now featured dromedaries, horses and riders (fig. 10), as well as numerous brief inscriptions; the latter probably carved not only by literate travellers, but also by local pastoralists. Countless engraved figures were 'signed' with brief epigrams. Whereas royal proclamations were written in South Arabian Sabaic script, the epigrams occur in a multitude of North Arabian scripts such as the various Thamudic scripts, Taymanitic, Dadanitic, Hismaic, and Safaitic. In addition, there are inscriptions in Egyptian hieroglyphs, Imperial Aramaic, Nabataean, Greek, Paleo-Arabic, and Arabic scripts. Hunting scenes tend to diminish, and dromedaries become common in rock art, sometimes in a schematic style with exceedingly long necks (fig. 11).
- Fifth, in the pre-Islamic period ending in 622 CE, continued aridification led to increase in conflict. This development is mirrored in battle scenes and duels involving mounted lancers and archers, as well as infantry. Especially in the Hima region, battle scenes con-

Fig. 10. A 100 cm high horse, and a rider wearing a sword and a Phrygian cap. Iron Age, Misma South, Great Nefud Desert.

Fig. 11. A 7 m wide panel with two large dromedaries and three horses. Iron Age, al-Dogosh (Uqulqh), Great Nefud Desert.

tinued to be carved in the early Islamic period.[39]

- The sixth, contemporary phase includes Arabic inscriptions and, from the 19th century onwards, also hunters and warriors armed with guns, and finally cars and trucks.

Of course, this classification is only a rough indicator including transitional periods. Furthermore, the economic importance of a species of animal was not always mirrored accordingly in rock art. For example, sheep appear only infrequently in rock art, mainly in the region of Hima (fig. 12).

Fig. 12. A fat-tailed sheep, a broad-hipped woman, and a wasm in the shape of a cross. Iron Age, Jabal al-Kaukab, Rub al-Khali.

Northern Saudi Arabia

The author's expeditions pursued two objectives. First to survey lesser-known petroglyph sites and second to search for traces of the two pre-Islamic, monotheistic religions: Judaism and Christianity. To this end, the southern part of the Great Nefud Desert and the neighbouring area in Tabuk Province were surveyed. While documenting dozens of sites the team explored three high-interest locations that are today little known, despite two of them being noted by late 19th century travellers.

The first site, **Hafirat Laqat**, is enormous and was briefly visited by Charles Huber and Julius Euting in 1884 (fig. 13).[40] It consists of a sandstone ridge approximatively 160 m long and up to 6 m high, covered on its eastern side with hundreds of petroglyphs dating from the later Bronze Age to the pre-Islamic period. There, and along a second, shorter ridge, are images of hand marks, a skeleton, countless life-size camels, a big lion, a wolf, horses, dogs and/or hyenas, ostriches, palm trees, dancing humans, and the solar deity *slm* (Şulmus) represented in petroglyphs as a bull's head seen from the front.[41] Later carvings show mounted lancers, swordsmen, and archers, as well as at least two Nabataean inscriptions and many Thamudic ones. The Nabataeans – whose capital lies at Petra in modern Jordan – expanded their political and economic zone of influence to northern Arabia, including the Nefud and Hegra, in around 50 BCE.

A very rare image of a boat is striking within a desert environment. Its style resembles ancient Egyptian representations of such craft. Indeed, as a cartouche of Pharaoh Ramses III (reigned 1192–1160 BCE) is known at Sala'u, 180 km north-west of Hafirat Laqat, there was clearly contact between Central Arabia and Egypt (fig. 14).[42] Two boulders lying 400m to the east are also emblazoned with petroglyphs.

Fig. 13. The northern half of the great ridge at Hafirat Laqat, Great Nefud Desert.

Fig. 14. Cartouche of Pharaoh Ramses III (r. 1186–1155 BCE). Al-Sala'u, Tayma Province.

Between the boulders and the ridges lies a depression possibly hinting at a former lake which would have been a gathering place for nomadic pastoralists, their herds, and wild animals. The importance of water to its human visitors is underscored by the fact that 95% of all the petroglyphs there face the depression. By contrast, the far sides of the ridges and boulders are virtually devoid of imagery. In later periods, when the domestication of camels enabled trade caravans, petroglyphs tended to appear along routes at places near wells.[43]

At Hafirat Laqat, the expedition rediscovered two swastika-style double crosses that had been mentioned by Euting (fig. 15).[44] This form was created by extending the ends of a Christian-looking cross into the shape of ibex horns and heads – an animal popular South Arabia where the ibex was one of the attributes of the moon god, Almaqah. But whereas Christian communities existed from the early 4th century CE in northern Arabia such as the Banu Taghlib, the double cross could also represent a *wasm*, a tribal mark. Nevertheless, such a swastika-like combination of cross and four ibexes remains in the author's opinion singular. The closest similar motifs are a horse-headed swastika symbol engraved on an Iron Age stone stela of north-western Mongolia[45] and a Saka bronze ornament featuring four goat heads from the end of the first millennium BCE.[46] Yet the distance between those finds and Hafirat Laqat excludes such an influence.

A second major site near a watering place is **Talaat al-Salaby** in the Jabal (mountain) Abu Mughair, 20 km north of Hafirat Laqat. It was briefly visited by Charles Montagu Doughty in 1877 and Huber in 1884.[47] The site crowns a sandstone hill, where a spring waters some two dozen palm trees overlooking a panorama of sand punctuated by basalt outcrops. In contrast to Hafirat Laqat, which lacks very early rock art, petroglyphs at Abu Mughair stretch from the Neolithic to late pre-Islamic times. They include several Neolithic hunters carved in the Jubbah style and wielding non-returning hunting boomerangs and bows (fig. 6). This style of slim figure was succeeded (or complemented) by an opposite style: callipygian – that is, shapely buttocked – men

Fig. 15. Double cross with four ibexes at Hafirat Laqat, Great Nefud Desert.

Fig. 16. Late Neolithic or early Bronze Age male and female callipygian pastoralists superimposed on an earlier long horn bull and ibexes. Talaat al-Salaby, Great Nefud Desert.

and women possibly dating from the late Neolithic (fig. 16). There were also three birthing scenes, ithyphallic hunters shooting arrows, a wild ass, a long-horn buffalo, late Bronze Age leopards, ibexes, snakes and lizards, as well as Thamudic and Nabataean inscriptions.

Unmentioned by Doughty and Huber, a ca. 40 cm tall menorah, the Jewish seven-armed candelabrum, was found (fig. 17). The menorah is surrounded by northern Thamudic epigrams, and the comparison of their respective varnish suggests that the petroglyphs might date to the middle of the 1st millennium CE. The five brief Thamudic texts close to the menorah are probably not directly related to it as they state the presence of five different persons, such as 'I am Malik bin Aslam'.[48] Another inscription under the menorah is damaged and hard to decipher. Important Jewish communities once existed in Central Arabia, with the largest ones established in the oases of Yathrib (today's Medina), Khaybar, and

Fig. 17. Menorah and Thamudic inscriptions at Talaat al-Salaby, Great Nefud Desert.

Tayma. The Jewish community of Tayma, located 90 km north-west of Abu Mughair, existed from the 1st century CE until at least the later 12th century, when the Jewish traveller Benjamin of Tudela visited Tayma in around 1170.[49]

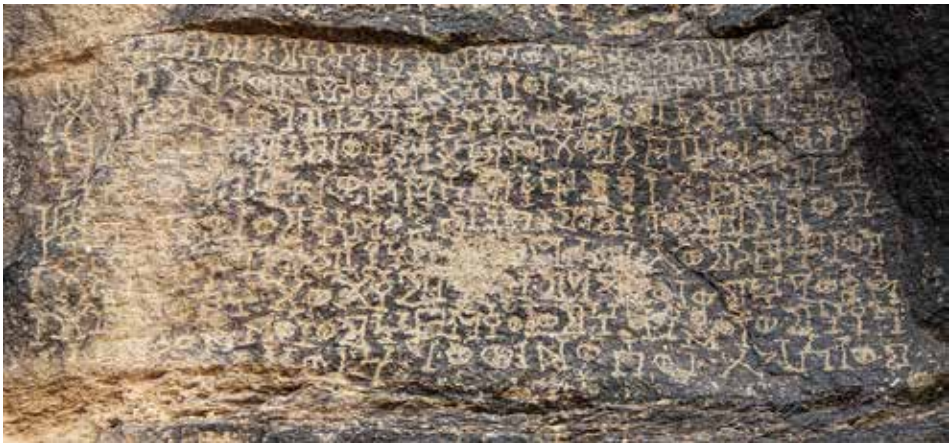
Further north-west, in the province of Tabuk, on a south-eastern foot of the 2580 m high Jabal al-Lauz, lies the little known site called **al-'Agal al Mahruq**, which means 'the burnt calf'.[50] Within the shelter of a huge boulder, there are paintings of a dark red bull, an 80 cm long bright red bull with large horns in the shape of a lyre, a long animal (possibly a large cat), two small goats, and a 33 cm tall human painted in a strong red colour. In another tiny shelter, there are three to four gazelles painted in black.

Central Saudi Arabia

The site of al-Usba, near the village of **Musaqirah**, stands 110 km south-west of al-Riyadh; it is an isolated outcrop of sandstone with a dark brown, yet fragile varnish. The major concentration of petroglyphs is on the northern side near the top of the ca. 15 m high hill, on a surface measuring 6.5 m x 3.5 m. Its petroglyphs offer a cross section through virtually all periods of rock art ranging from the Neolithic to the late pre-Islamic period. In chronological order, there are: aurochs whose bodies are rendered in profile, but whose huge thrusting horns are seen from above; cattle; lions; a mother ostrich with her chicks; gazelles; oryxes; wolves; hunting scenes with archers; ibexes; two men dancing with raised arms; a dancing skeleton; handprints; a palm tree; small armed ithyphallic men; camels – some of them carrying a *haudah* (a seat, usually fitted with a canopy and railing, placed on the back of a camel or an elephant); horses; and a horseman swinging a sword. Finally, there are several *wusum* tribal marks. They were used not only to mark cattle, but also to signal the property of a site such as a well. In rock art, they also appear on the chest of armed men (fig. 25).

One hundred kilometres further west, at **Ma'sal al-Jumh**, stand three highly important Himyar Sabaic rock inscriptions from the 5th and 6th centuries CE. The site was first explored by the Philby-Rickmans-Lippens-Expedition in 1951–1952.[51] The ancient South Arabian script, Sabaic (also called *Musnad*), was used from the 10th century BCE until the 7th century CE. The first inscription, designated 'Ryckmans Ry 509', was inscribed by the Himyar king, Abîkarib As'ad (r. ca. 390–420 CE), and his son, Hassân Yuha'min (r. 420–448) (fig.

Fig. 18. Inscription Ry 509 commissioned by the Himyar king, Abîkarib As'ad (r. ca. 390–420 CE), and his son, Hassân Yuha'min (r. 420–448). Measures 153 x 65 cm. Ma'sal al-Jumh.



18).[52] The neighbouring inscription, Ry 510, was commissioned by the Himyar ruler, Ma'dîkarib Ya'fur (r. 517/18–522 CE), who was murdered by his successor, the Jewish Yusuf As'ar Yath'ar aka Dhû Nuwâs (r. 522–527/30). Next to the inscription, a man wearing a loincloth and holding a lance is engraved, and an epigram identifies him as Thamîm dhu Hadeyat, secretary to the Himyar commander, Sharah'il Yaqbul dhu-Yazan. The same Thamîm is twice portrayed and named hundreds of kilometres further south in Hima and al-Kaukab (see below).[53] Clearly, Thamîm served both Himyar rulers, the Christian Ma'dîkarib Ya'fur and the Jewish Dhû Nuwâs. Himyar had united the various South Arabian kingdoms at the end of the 3rd century CE. Since it controlled the production of incense in Hadramawt and Dhofar, it wanted to expand its control to the major trade routes leading to its clients in Mesopotamia and Rome; this implied the conquest of central and eastern Arabia. Both inscriptions celebrate the annexation of Central Arabia by Himyar with the support of its vassal, Kinda, and a military expedition to southern Mesopotamia beyond the Lower Euphrates to subjugate Arab tribes. The third inscription (discovered in 2008) stands on the same boulder 28m south of Ry 510, and is dated to 474–475 CE.[54] It describes a Himyar military expedition by King Shurihbi'îl Yakkuf (a son of the above mentioned Hassân Yuha'min) and his sons, Abîshammar Nawf and Lahay'at Yanûf, into eastern Najd and further to conquer the capital of the Kingdom of Tanûkh in the region of al-Hîra, on the right bank of the Lower Euphrates.

Southern Saudi Arabia

The exceptional role of Arabian rock inscriptions is underscored by the three Himyar inscriptions at the site of **Murayghan**, 530 km south of Ma'sal. The first, Ry 506, was discovered at the mouth of the wadi (valley) by the Philby-Ryckmans-Lippens-Expedition in 1951–1952.[55] It is dated to 552 CE and proclaims the victorious fourth military campaign of the Christian King Abraha of Himyar and Najran against the Central Arabian tribe of Ma'add and King Amr bin Mudhdhirān (r. 554–569) of al-Hira, son of King Mundhir III.[56] The third, 518 cm long inscription (discovered in 2009) located 700 m north-east of Ry 506, consists of four lines; it records one of the first three military expeditions of King Abraha to Central Arabia between ca. 535 and 552 CE. The text begins with a 23.5 cm high Syriac cross and continues with *mlkn 'brh*, 'King Abraha'. Highly relevant are the mentions of the subjugation of *M'dm* (Central Arabia), *Hgrm* (Hagar, today's al-Hufuf), *Ht* (Khatt in Ras al-Khaimah), *Tym* (Tayma), *Ytrb* (Yatrib, that is, Medina), and *Gzm* (north-western Arabia between Tabuk and Aqaba). This means that during the 530s–550s, virtually all of Arabia had to recognise the supremacy of the Christian King Abraha of Himyar.[57] As at other larger rock art sites, wells and valleys with permanent or ephemeral water had become parts of caravan tracks.

Sixty kilometres south-west of Murayghan stands the best-preserved site of rock paintings: **al-Hamdha**. It is a ca. 80 m long, concave granite boulder. Approximately 8 m above the ground, there is a ca. 18 m long panel with several red pictographs dating from the Neolithic (fig. 19). They represent, among other things: a large aurochs or buffalo of the Jubbah-type in bright red with huge horns seen from above; cows; a reddish camel painted over a geometric pattern consisting of five double hexagons arranged vertically; further camels; a man with enormous hands; a kind of chess board; a tiny, 10 cm high foot soldier holding shield and sword; a tall adorant; wave patterns and further hexagonal patterns; a Himaic (South Thamudic F) epigram; and black *wusum*.

The 8 km-long **Wadi al-Khayyur** is located 50 km north-east of al-Hamdha and, in March 2022, revealed what are probably so far undocumented monumental petroglyphs. Within an area of 1 km^2, nine more than life-size armed male figures of high quality are engraved; the three largest are 320 cm tall, the smallest 200 cm (fig. 20). There are also five 100–140 cm tall warriors

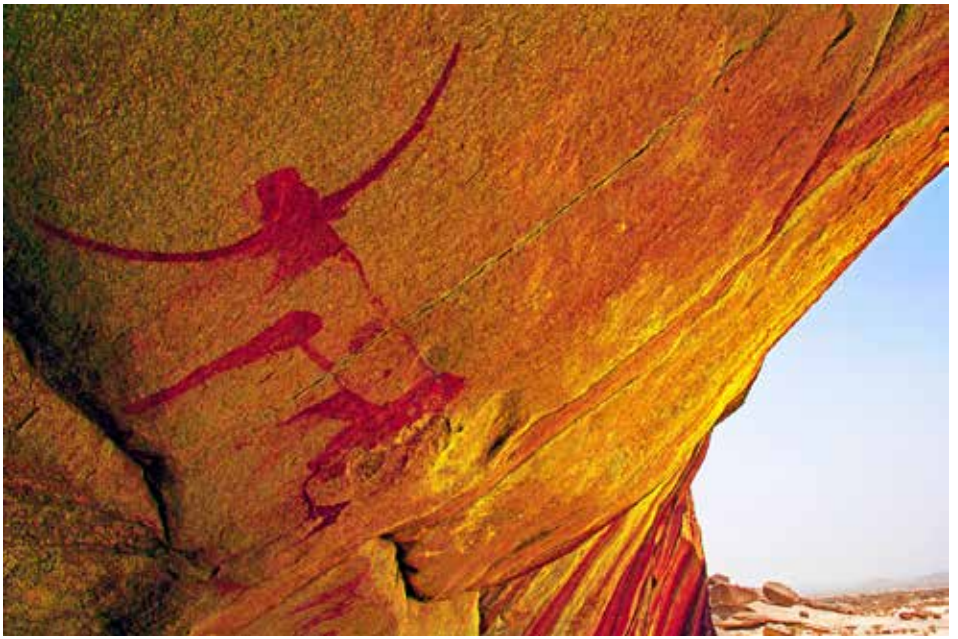


Fig. 19. A 110 cm long aurochs or buffalo in 'Jubbah style'. Neolithic period, al-Hamdha, Asir Province. Image slightly enhanced with DStretch.

Fig. 20. Four armed men, dating from the late pre-Islamic period, superimposed on Iron Age petroglyphs. The tallest figure is 320 cm high. Al-Khayyur site 6, Asir Province.

from the same period. The giants were partly superimposed over petroglyphs of mounted lancers, felines, ostriches, hunting scenes, ibexes, and brief Thamudic inscriptions. Later Arabic inscriptions have been added. The men carry a straight sword and a curved dagger; one holds a shield, and all have a rod-shaped, ultra-slim head and long hair curving outwards. Similar, but smaller, figures are known in the Jabal al-Qahra of the Hima region.[58] Based on the shape of the swords, the overlaid smaller figures, and Thamudic inscriptions, these monumental petroglyphs can be dated to the later pre-Islamic period, around 500–600 CE.

In contrast to north-western Saudi Arabia, the region of **Hima** on the south-western fringe of the Rub al-Khali Desert has no pre-Neolithic or Neolithic rock art and only few from the Bronze Age. Most of the petroglyphs date from the Iron Age, the pre-Islamic and the Islamic periods.[59] In Hima, especially in the areas of **Jabal al-Kaukab** and **Jabal al-Qahra**, one finds man y duel and battle scenes between groups of light cavalry armed with long lances, flails, swords, sabres and, occasionally, bows. The lances often have discs fixed behind the iron point. These stop the lances from passing too far through the body of a slain enemy or horse, which would prevent them from being retrieved. The horses are rendered in gallop with the legs stretched forwards and backwards respectively, looking like an arch. The riders are mostly mounted on horses, less often on camels (fig. 21). Still in the early 20th century, tribal armies would ride on camels and only mount horses just before joining battle.[60] Small dots surrounding body and horse suggest scale armour, which was used in the Sasanian Iranian Empire (224–651 CE). Occasionally, newer carvings featuring warriors armed with rifles are added. These numerous battle scenes indicate the war-like character of the pre-Islamic society in which tribes and clans would fight one another. It was Prophet Mohammed who brought these permanent tribal wars to an end and channelled the bellicose energies of the Arabs into a united war effort of conquest and conversion to Islam.

Fig. 21. Bedouin horsemen attacking with long lances. The discs affixed behind the iron tip prevent the lance from over-penetrating the body of the slain enemy, thus allowing it to be retrieved. There are at least two different engraving layers. On the left of the upper slab, a recent carving features a warrior on foot firing a rifle. Fardat Sheyban, Rub' al-Khali.

Fig. 22. Four female figures representing deities or 'cheerleaders' encouraging the warriors of their clan in battle. Iron Age, Tha'er site 4, Jabal al-Qahra, Rub al-Khali.

It is striking that in many battle scenes, standing women figure with hands raised to the sky and long plaited hair; they seem connected to the battles (fig. 22). One interpretation identifies these lightly dressed or even naked women as the evening star Venus, whom the Arabs call Alilat[61] according to Herodotus (Histories, I.131) – respectively, the pre-Islamic goddess of love and war, Al-Lat, one of the three daughters of Allah. Another interpretation advanced by R. Dussaud and Ryckmans equates this female figure with the stellar deity, Rdw (Rouda), of Nabataean origin. Both interpretations are unlikely since both goddesses were mainly popular in northern Arabia and Syria. As suggested by Michael Macdonald,[62] the solution may be found in the testimonials of the British captain Gerard Leachman[63] from 1910 and the German traveller Carl Schmidt aka Carl Raswan from 1928. They reported that beautiful girls would ride with the warriors into battle, wear their long hair loose, and show their bare breasts while exhorting their tribesmen to courage and valour. Briefly, these girls acted like military cheerleaders.[64] Next to these alleged 'cheerleaders', one also finds other female figures such as birthing women in Saudi Arabia's southern rock art – whereas petroglyphs of females are less frequent in the north.

Two other interesting figures unique for this southern region are specific armed warrior engravings. One figure holds in his right hand an object that looks like a slightly curved, narrow ladder or a small club with two short decorative horizontal lines; it is the symbol of the South Arabian moon god, Almaqah (fig. 23).[65] These petroglyphs do not represent Almaqah himself, but possibly guards or warriors in his service. The other typical figure is notably featured at **Wadi al-Naqha**: he is a tall warrior adorned with a feather headdress. He wears chest armour and a lunate pommel-handled dagger in his belt. In his left hand he holds two spears and, in his right, one spear. Each of his sandals has a thorn at its back; he probably wears spurs, which suggests that he is a dismounted horseman (fig. 24). To his right a kneeling female musician plays an 80 cm high lyre or kithara and next to her stands a 136 cm tall woman with rather short, braided hair. She wears two torcs, and to her left features a crescent moon. Perhaps she represents the moon goddess, Maqha.

Both pre-Islamic monotheistic religions also spread into the south of the peninsula.

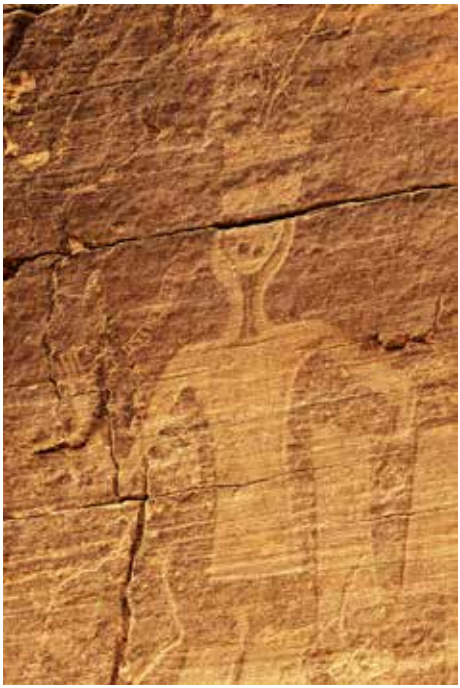


Fig. 23. A tall warrior holds a spear and a shield in his left hand, and a kind of ladder in his right hand – the symbol of the moon god, Almaqah. Aan al-Naam, Nefud al-Musamma, Rub al-Khali.

When the Byzantine bishop, Theophilus Indus, introduced Christianity in ca. 354 CE to the Himyaritic Kingdom (which existed ca.110 BCE–527/30 CE), in what is now central Yemen, he found there an established Jewish community.[66] As Himyar extended over the entire southern half of present Saudi Arabia, rock art related to Judaism and Christianity can be expected. Indeed, a couple of engravings featuring the Star of David, formed by two equilateral triangles, exist in the Hima and al-Kaukab regions, suggesting the former presence of small Jewish communities. More often encountered are Himyarite inscriptions beginning with a cross at their right side. Of course, a cross was not always used as a Christian symbol; it could be a tribal mark (fig. 25) or the Thamudic letter 'ta'. An obvious Christian context is found at the northern end of a ca. 40 m long, concave boulder called **Gar**

Fig. 24. A standing warrior (right) holding three spears, with a lunate pommel-handled dagger in his belt; a female musician playing a kithara (middle); and possibly a moon goddess (left). Later Iron Age. Wadi al-Naqha, Rub' al-Khali.

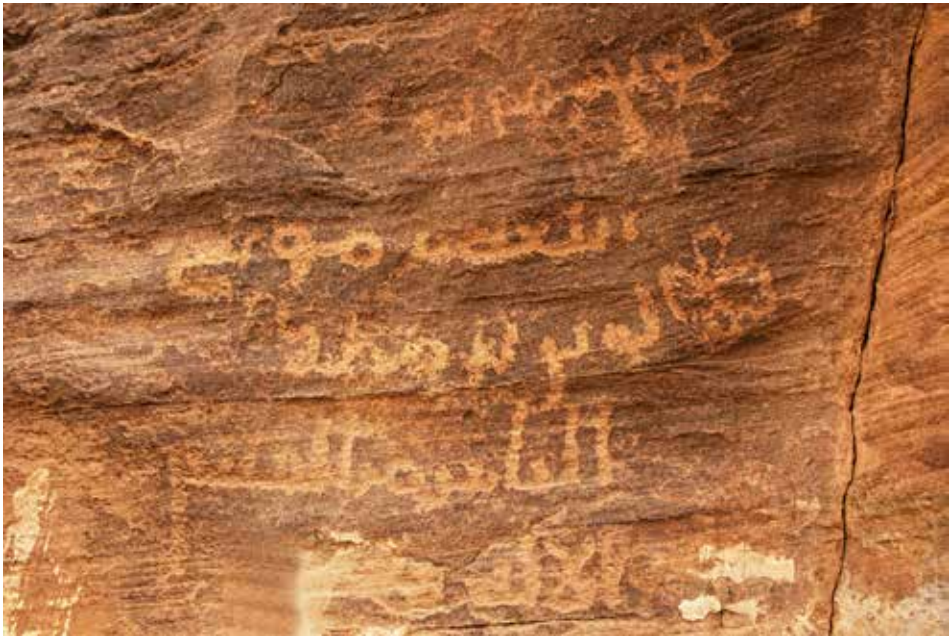
Fig. 25. Male figure holding a bow and two arrows. The cross on his chest is a wasm indicating his tribal allegiance. The Thamudic inscription next to his right elbow names him hmlt, Hamlit. Jabal al-Qahra, Rub al-Khali.

Fig. 26. Inscription Ja 1028 at Bir Hima, dated 523 CE, reports a campaign of the Himyar king, Dhû Nuwâs. Rub al-Khali.

al-Sidiri. There, two Maltese crosses are carved next to three names: the two upper ones read 'Sajm' and 'Saadi'; and the lower one 'SML', which is most probably 'Samuel'. Clearly, the region of Hima had Christian communities in the 1st millennium CE. The trading city of Najran, located 90 km south of Hima at today's border with Yemen, had a significant Christian community around the middle of the 1st millennium.[67] About 20 km south of Gar al-Sidiri, at Bir Hima, whose name means 'Well of Hima', there is the famous Himyaritic royal rock inscription, 4.05 m long and 1.24 m high, numbered 'Ja 1028' in *musnad* script and dated to 523 CE. It proclaims the victories that the Jewish King Yousuf Assar Yathar (alias Dhû Nuwâs) achieved in his campaign against rebellious regions, including Najran[68] (fig. 26). He conquered and destroyed the Christian city at the beginning of 524. Next to the proclamation there is the engraving 'Ja 1030', which depicts a man armed with a sword; he is Thamîm dhu Hadeyat, secretary of commander Sharah'il Yaqbul and the author of the inscription.[69] The same Thamîm is featured and mentioned at Ma'sal, near Ry 509, and most probably also as Thauba-El in nearby al-Kaukab. Two similar inscriptions are located 2 km farther south, and at Aan Halkan West, 32 km north-east of Bir Hima.

Only 5 km further south-east, at the Christian **necropolis of Hima**, there is a group of 16 Christian inscriptions in either *musnad* or paleo-Arabic script; all of them have an engraved cross. Inscription 1 is a funerary stela measuring 115 x 72 cm; its epigram reads *'Tawbān Mālik, in the month of burak 364'*.[70] The South Arabian date of *burak* 364 corresponds to February–March 470 CE, which makes this paleo-Arabic epigram the oldest known Arabic inscription. The date of 470 CE falls in the period of the first Christian persecution in the Najran region. Tawbān, the son of Mālik, was probably a Christian martyr and the place was venerated as a martyrion since his name is

Fig. 27. Christian epigram no. 8 at the necropolis of Hima, which says: Thawbān (son of) Marthad / Rabī'a (son of) Musa (Moses) / Cross / Thawbān (son of) Marthad / Eliah (son of) 'Imru' al-Qays (son of) Taym / (may be protected by) 'l-'Ih (al-alāh). Source: Robin, 'Inscriptions antique', (2014), p. 1099-1102.



engraved in eight neighbouring inscriptions. Based on an analysis of the names, mainly priests were buried here.[71] Inscription 8 (fig. 27) indicates that the Christians from Najran called God *'al-alāh'* – which corresponds to the Syriac term *Alāhā*.[72] This term was not used by the Himyarite Christians further south – they named God *Rahmānān*, the 'well-meaning'.[73]

A very surprising Christian symbol was discovered by the author in **Wadi al-Naqha**: namely, what looks like a crucifix overlaid on the recurved horns of an ibex (fig. 28). The 15 cm high crucified body and drooping head are easily recognisable; much later, another cross was carved over the bottom portion of the image. This unique find, and other surprising results from the author's two surveys, illustrate that there are still important new discoveries or rediscoveries to be made in Saudi Arabia's deserts.

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Notes

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