

PREHISTORIC ROCK ART IN EASTERN JORDAN

Alison BETTS

Across the western side of the Syrian desert, the Badiyat al-Sham, there stretches a wide area of black, rock-strewn lava fields. These ancient basalts, the *harra*, cover an area of some 45,000 sq. km. from the southern edge of the Damascus Basin down into Saudi Arabia as far as al-Jauf on the fringes of the Nafudh desert. The northern portion of this lava belt, the Syrian sector, is dominated by the massive volcanic peak of Jebel al-Druze. Here the land is high and the western flanks of the volcano catch the rain-bearing winds and support a limited agricultural population, clustered in small villages around the slopes of the mountain. Further to the south, in the Jordanian sector, rainfall is much lower, less than 150mm per annum. Here the ground is gently undulating, and covered by an eroded pavement of large basalt cobbles, broken in places by deeply incised wadis and stretches of mudflat. The rainfall is too low and the land too poor to grow crops but the peculiarities of the area had a particular value to certain prehistoric groups.

Travellers in the area have consistently remarked on the number of long walls and strangely shaped enclosures to be found throughout this part of the *harra*. Many of these are now known to be animal traps, often referred to as "kites", because of their resemblance to a toy kite when seen from the air (Helms & Betts, 1987). These traps have a series of long walls leading up over a low rise into a narrow-necked enclosure. Animals could be driven from their grazing grounds in the wadis along the guiding walls and into the head of the trap, where hunters would lie concealed in small stone hides or behind the enclosure walls. This form of trap was in use in the *harra* as early as the 7th millennium B.C., and continued in various forms up until the late 19th century.

Exploitation of the *harra* in this way seems to have been particularly common in the Neolithic period, the 7th millennium up to perhaps the late 6th or early 5th millennium B.C., and various sites have been found which relate to this use of the area. These include flint-knapping floors, "kites" and hunting camps. One such camp has recently been excavated and has provided surprising insights into the lifestyle of these Neolithic hunters. The Neolithic site of Dhuweila lies on a low basalt ridge overlooking a series of mudflats, just north of the modern Trans-Arabian Pipeline track (Betts 1988). All along the ridge are traces of ancient "kite" walls, and the site itself lies in the middle of a complex network of "kite" systems. There have been two stages of occupation at Dhuweila. Stage 1 is dated in the late Pre-Pottery Neolithic B period. A radio-carbon date of 8190 +/- 60 bp (BM-2349) was obtained from charcoal in a hearth just above bedrock. On typological grounds Stage 2 can be dated in the Late Neolithic, probably the late 6th to 5th millennia B.C.

Prior to excavation the site consisted of an oval pile of tumbled rocks about 20 m long and 12 m wide. The loose surface rocks were cleared to reveal several substantial stone-walled structures and a series of pits and hearths. The walls of Stage 1 were solid and well built, constructed of carefully chosen basalt slabs, often selected to present a smooth surface, particularly to the interior of the building. Irregular and mostly insubstantial stone-built structures were also attached to the outer face of one of the main walls. There were numerous pits. Interior ones were mostly lined with clay, and those outside were usually ringed with a circle of stones. Some of these pits may have been used for storage, while others functioned as hearths. In the later phases of Stage 1, exterior pits were recut and stone platforms laid outside the main structures. Thick layers of occupation debris were associated with all phases in Stage 1. These were dark

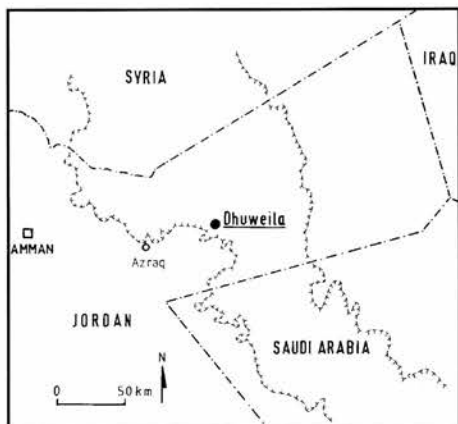


Fig. 48. Location of basalt region, Eastern Jordan.

Fig. 49. Eastern Jordan. "Kits" walls in the harra.



and ashy, and contained large quantities of bone, chipped stone and basalt pebbles.

When the site was re-occupied in Stage 2, much of the original structures must still have been standing, as whole sections of wall have been incorporated into the buildings of the new stage. The main building uncovered was a stone structure over eight metres long, lying parallel to the crest of the ridge. It was entered at the eastern end by a narrow paved corridor and some stone steps leading down into the interior, which was cleaned out almost to bedrock, leaving some traces of the original Stage 1 occupation debris sealed below the lowest floor. This floor was made of large, flat basalt slabs, one of which had been used as a grinding stone. The grinding stone was roughly circular and had a central hollow. Basalt rubbers, flint tools and miscellaneous occupation debris were found on the floor, which was in turn sealed by a second and more extensive flagstone floor. Later and less clearly defined phases could be distinguished in the uppermost levels.

Finds from the site included large amounts of bone, chipped stone, a number of basalt rubbers and grinding stones, some shells and stone beads. The later levels (Stage 2) produced a limestone animal figurine, some fragments of fabric-impressed plaster and a few coarse-ware sherds. In both stages the flint tools show that hunting was an important activity. There are large numbers of arrowheads, together with burins, scrapers and finely worked knives. Sickle blades are rare.

One of the most interesting aspects of the excavations was the discovery of a series of carvings, finely incised on a number of rocks within and around the site. Those carved on rocks in stratified contexts were, with one exception, associated with Stage 1,

the Pre-Pottery Neolithic B period. Carvings were also found on loose rocks and bedrock outcrops around the site, and at several other similar sites nearby.

Most of the carvings are of animals, usually quadrupeds, shown in profile. Some have short, upright or curving horns and a short tail. A few lack horns, but have a series of short, oblique lines along the crest of the neck, perhaps representing a mane. The animals are shown singly or in groups, sometimes overcutting each other. The majority face to the right. Most are standing or running, some are looking back over their shoulder, and one or two appear to be grazing. Two carvings may show females suckling their young. Two carvings of human figures were also found, one in a stratified context at Dhuweila and the other on a large stone beside a similar site, Abu Masiade al-Gharbi. The Dhuweila carving shows three figures, and part of a fourth. They are presented face on, and appear to be wearing costumes and head-dresses, and carrying sticks or perhaps weapons. The Abu Masiade al-Gharbi carving shows two figures, again wearing some kind of costume, loose trousers gathered at the waist and cut off or gathered again at the knee. They are also carrying sticks or weapons. A third category of carvings consists of a number of abstract motifs. Two carvings show animals above or beside a pair of parallel wavy lines. There are also criss-cross lines forming net-like patterns, normally not in conjunction with animals. Both of these designs are ambiguous. It is possible that they represent some natural feature such as a wadi, or perhaps "kite" walls. There is also a third and particularly distinctive group, of which there are three examples, one including animals. In each case, specially shaped rocks have been selected. These are large, flat slabs, roughly triangular in plan, and averaging 60 x 40 cm. across. Around some or all of the edges have been cut a series of short, straight incisions. These cuts are fairly regularly spaced, with larger gaps at intervals. No specific pattern can be detected in their length or distribution.

Carving techniques are simple. Most of the designs are outlined with fine semi-continuous scratched lines. In some cases detail has been added by light, even pecking, particularly on the bodies of the animals. The anthropomorphic figures from Dhuweila were created by heavily pecked outlines, with detail and contrast provided by lighter pecking around the bodies and heads. It is possible that the final result was based on an incised outline or preparatory cartoon.

All the carvings are on basalt. The weathered surface of the basalt boulders is covered by a thin black patina. Scratching or pecking this surface exposes the unweathered rock in its natural state. This is whitish-grey in colour, and stands out in considerable contrast to the darker background. As the exposed surface weathers, it gra-

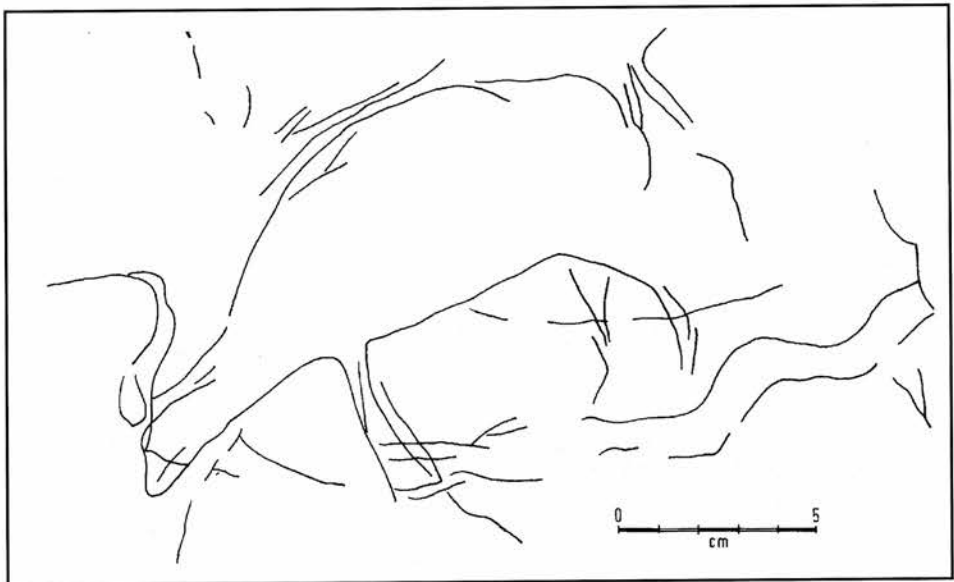


Fig. 50. Eastern Jordan. Rock carving showing gazelle grazing.

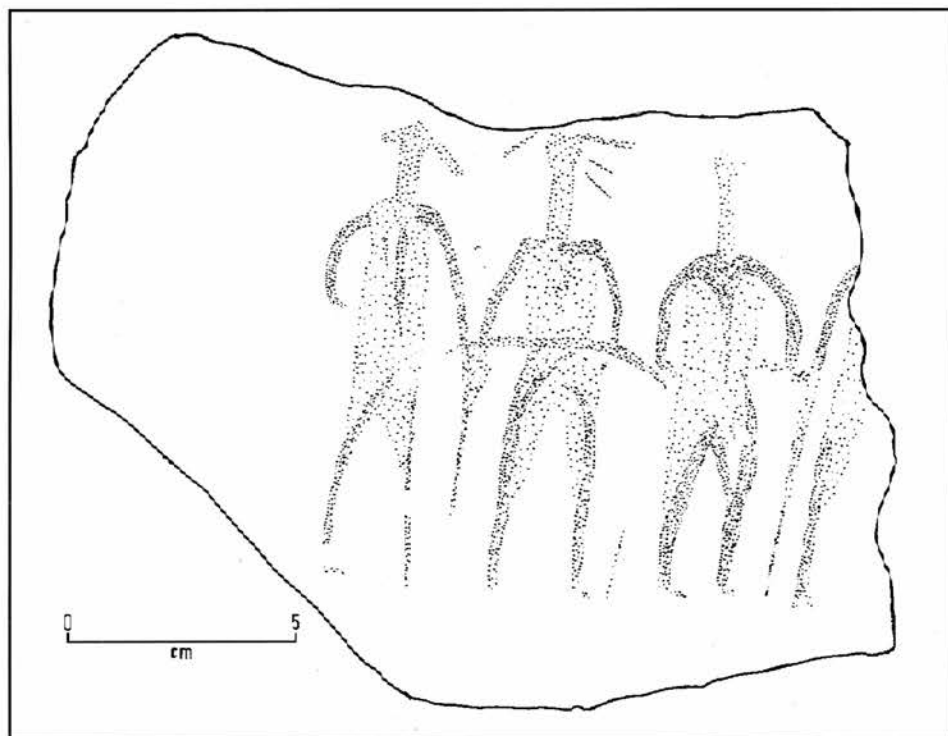


Fig. 51. Eastern Jordan. Rock carving showing prehistoric hunters.



Fig. 52. Dhuweila, Eastern Jordan. Lower levels of Stage 1, showing external pits and hearths.

dualy darkens through yellow into reddish-orange until it returns to the colour of the surrounding rock. Most of the carvings have reverted almost totally to weathered black and are only visible in oblique light.

A cautious approach must be taken towards speculation on the significance of the carvings. Faunal remains recovered from the excavations at Dhuweila show that the most common prey of the Neolithic hunters was gazelle. Other animals include equid (wild ass) and small game. It is likely that most of the carvings were intended to represent gazelle. Those without horns, but with what appear to be short manes, might be equids. The motives behind the production of these representations could be very simple, or perhaps quite complex. At a very basic level, they might be drawings of the animals with which the hunters were most familiar and were created as a simple pastime. They might be the result of wishful thinking - the hunter was bored or hungry and hoped that some animals would finally appear. At a slightly deeper level, this wish could be extended to hunting magic, representation of an animal to bring it into being. There is also a possibility that the carvings show not the animals themselves but "nature spirits" in the form of animals. The human figures might simply represent the hunters themselves but they too could have a more complex significance.

Likewise the abstract motifs might be stylized depictions of everyday objects: wadis, walls, enclosures and so on. Alternatively they could have a symbolic meaning which can not be determined on the basis of available evidence.

It is interesting to note that unlike many examples of "hunter rock art", there are no hunting scenes. Animal and human representations are always shown separately, and there are no clear examples of injured or dead beasts. There are also hints that the carvings were only significant at creation, or shortly after. Those found in stratified contexts are all on rocks placed in structures without regard for the design. In most cases the carving was on the side of, or underneath the rock when it was laid in place. One such rock, used to line a firepit, had a carving upside down facing the fire, and another covered by the adjacent stone of the pit lining. Of over a hundred carved rocks recorded from the Dhuweila area, nine were in stratified deposits. Two formed part of the stone surround of fire-pits, and in each case the design was partly exposed to the heat. Both stones are badly fire-damaged. Three carved stones were incorporated into external pavements, all with part of the design covered by adjacent rocks. Three more were built into walls, again with all or part of the design concealed, and one was used as a packing stone supporting an upright slab, used as a room divider in the Late Neolithic structure. All except the packing stone came from Stage 1 and were sealed by occupation debris of the same period.

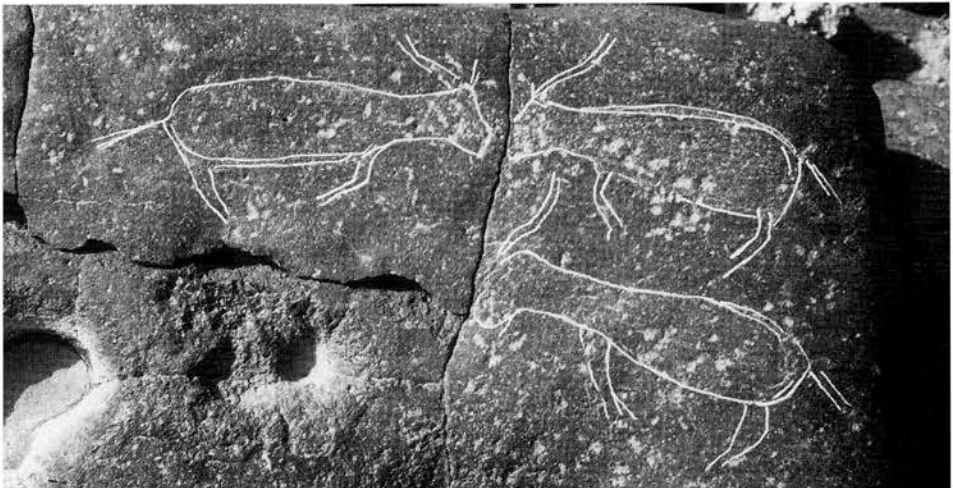


Fig. 53. Dhuweila, Eastern Jordan. Rock carving on bedrock outcrop (carvings have been outlined for photographic purposes).

Evidence from excavation at the site of Dhuweila suggests that in the later Neolithic periods, the *harra* was used extensively by mobile hunting bands who had developed sophisticated techniques to trap large herds of animals. The "kite" systems are associated with both stages of occupation at the site. Pre-Pottery Neolithic B arrowheads have been found around several "kite" enclosures in the Dhuweila area and elsewhere in the *harra*. There are also several similar hunting camps, most built onto "kite" walls, with flint scatters and carvings which parallel those of Stage 1 at Dhuweila. In Stage 2 at the site, a "kite" wall is built directly into structures of a late occupation phase. The content of the carvings obviously relates, whether superficially or symbolically, to the main preoccupation of the inhabitants of the site, that is to hunting. It is extremely important for the study of Arabian rock art that such carvings are here associated with a dated archaeological assemblage, in a site which has provided detailed evidence regarding the lifestyle and subsistence strategies of its occupants. It has long been assumed that some of the vast corpus of Arabian rock art must date in the prehistoric periods (see especially Anati, 1968), but until now it has been impossible to find clear proof of this. Yet the evidence from Dhuweila still can not provide a simple key to the dating of rock art from elsewhere in North Arabia. Although the subject matter is broadly comparable to rock art from other areas, carvings from Dhuweila and elsewhere in the *harra* have a distinctive style which can not yet be closely paralleled outside the basalt region.

Acknowledgements

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Riassunto:

Il sito neolitico di Dhuweila è un basso promontorio di basalto dell'*harra*, una vasta area del deserto occidentale siriano. Lo Stadio I è datato del Neolitico Pre-Ceramico - Periodo B; lo Stadio II del Tardo Neolitico. Incisioni rupestri associate allo Stadio I sono state trovate dentro ed attorno al sito. La maggior parte rappresenta quadrupedi, alcuni con corna brevi, antropomorfi e segni astratti. Non ci sono scene di caccia. Sembra che le incisioni fossero significative al momento della loro creazione, o poco dopo.

Summary:

The Neolithic site of Dhuweila lies on a low ridge belonging to the harra, a wide area of basalt on the western side of the Syrian desert. Stage 1 is dated in the late Pre-Pottery Neolithic B period; Stage 2 in the Late Neolithic. A number of engraved rocks associated with Stage 1 were found within and around the site. Most depict quadrupeds, some with short horns, anthropomorphs and abstract signs but hunting scenes are missing. There are hints that the carvings were significant at the moment of creation or shortly after.

Résumé:

Le site néolithique de Dhuweila se trouve sur un promontoire peu élevé faisant partie de la *harra*, vaste zone de basalte dans la partie occidentale du désert syrien. Le stade I est daté du Néolithique pré-céramique période B, le stade II du Néolithique tardif. Des gravures rupestres associées au stade I ont été trouvées dans le périmètre du site et aux alentours. La plupart représente des quadrupèdes - certain avec de courtes cornes, des anthropomorphes et des signes abstraits. Il n'y a pas de scènes de chasse. Il semble que ces gravures aient été significatives au moment de leur création ou peu après.