KEYWORDS: *Soqotra – Parietal art – Dahaisi cave – Ancient interior population – Yemen*

THE ROCK ART OF DAHAISI CAVE, SOQOTRA, YEMEN

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Abstract. Dahaisi cave is one of only two known parietal rock art sites on Soqotra, and the first to provide evidence into the lives of the ancient indigenous inhabitants of the island. This paper presents the latest discoveries that were made during a *National Geographic*-sponsored expedition undertaken in March 2015.

Introduction

Despite more than two centuries of exploration and archaeological surveys on Soqotra, rock art remains one of the most neglected areas of study, insofar as it has been suggested that rock art had little importance for the inhabitants of the island (Jung 1996). The majority of the rock art finds on Soqotra occurred during the 19th and 20th centuries (Wellsted 1835; Bent 1900; Doe 1992). Unfortunately, other than several motifs having been copied, these rock art sites remain poorly recorded. In 2000, during the Soqotra Karst Project's investigation of Soqotra's cave systems, the first evidence for parietal art was discovered in Hoq cave on the north coast (Strauch 2012). This was followed, in 2002, by the discovery of Dahaisi cave, the first rock art site to have been found in the interior and only the second parietal rock art site to be found on Soqotra. The photographs of this expedition were passed to the author in 2014 to further his ongoing study of the rock art on Soqotra (Jansen van Rensburg and De Geest 2015; Jansen van Rensburg 2016a). This paper presents the latest discoveries that were made during a *National Geographic*-sponsored expedition undertaken in March 2015 by the author.

Background

With an area of 3650 km² the island of Soqotra is the largest of four islands that form the Soqotra Archipelago, which lies c. 80 km north-east of the Horn of Africa (Cape Guardafui) and c. 380 km south of Arabia (Ras Fartak) (Fig. 1). The island is characterised by the Ḥagher, a granite mountain range that stretches across its centre rising up to 1550 m (Miller and Morris 2004: 6). Bordering the Ḥagher is an undulating plateau of limestone that ranges in elevation from 300 m to 900 m, covering almost half of the island's surface (Beydoun and Bichan 1970: 414). Throughout this plateau the limestone has been eroded into a karstic landscape that is riddled with numerous solution caves.

Situated within the Inter-Tropical Convergence Zone, Soqotra is influenced by two distinctly different monsoon seasons, the south-west (winter) and north-

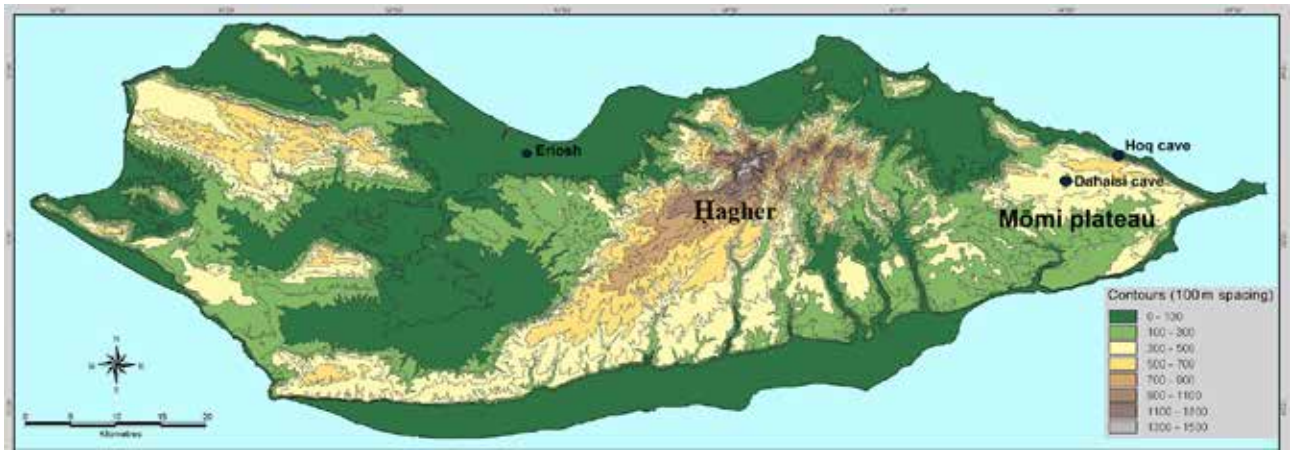

Figure 1. *A map of Soqotra showing the sites mentioned.*

east (summer) monsoon season (Fleitmann et al. 2004). During the winter monsoon, from June to September, water is particularly scarce as most available water resources dry out and life becomes extremely hard for the inhabitants (Morris 2002: 16). During the summer monsoon season, from October to April, the wet tropical monsoon winds bring high rainfall (Mies and Behyl 1996: 40). This apparent regularity of the summer rains is not a true reflection of life on the island, and it is not uncommon for the NE monsoon rains to fail. Such an event in 1844 caused a huge loss of life and the island was almost completely depopulated (Hunter and Sealy 1986: 113).

History and past expeditions

Soqotra's rich historical narrative is inextricably linked to both its strategic position at the entrance to the Red Sea, as well as the islands abundant supplies of incense, aloes and dragon's blood (Jansen van Rensburg 2016b). The earliest account of Soqotra's indigenous population was written by Ibn al-Mujāwir in the 13th century CE, who refers to two groups of people on the island, those who dwell on the plains and those who dwell in the mountains (Smith 2008: 264). This geographical division is mentioned throughout Soqotra's historical narrative and has come to represent two classes of people, namely the indigenous mountain dwellers and the foreign coastal dwellers — a social and cultural differentiation that is still recognised by the Socotri today (Morris 2002: 223). The earliest glimpse into the religious beliefs of the islanders occurs in the 6th century CE, when Cosmas Indicopleustes refers to having met Greek Christians from Soqotra in Ethiopia (McCrindle 1896: 19). While the exact date for the Christianisation of Soqotra is uncertain, according to Müller (2001: 146–147), it took place no earlier than the 4th century CE. The presence of Christians on Soqotra attracted considerable attention in Muslim and European accounts from the 6th to 18th centuries (Biedermann 2006). Notwithstanding their Christian beliefs, the Socotri were also purported to have practised litholatry, selenolatry and witchcraft, and were considered to be among the best enchanters of the world, who could change their shape at will and raise storms (Yule and Cordier 1993: 407). These accounts of witchcraft persisted through to the early 20th century, with several accounts of witches having been tried and banished from the island (Snell 1955).

Soqotra's rich historical narrative has led to a number of archaeological expeditions, particularly over the last two decades. These expeditions have located evidence related to stone tools believed to date to the Neolithic and Oldowan period (Naumkin and Sedov 1993: 537; Amirkhanov et al. 2009: 68–74); a pre-Islamic settlement dated to the c. 1st to c. 4th centuries CE (Naumkin and Sedov 1993: 605), and several structures, settlements and graves believed to date between the c. 6th to c. 10th centuries CE (Bent 1900; Shinnie 1960; Doe 1992; Naumkin 1993; Weeks et al. 2002).

Speleological explorations on Soqotra were undertaken by the Soqotra Karst Project (SKP), which mapped over 50 caves across the island (De Geest 2006). During these explorations the SKP found a series of South Arabian, Ethiopian, Greek, Palmyrene and Bactrian inscriptions, drawings and archaeological objects dated to between the c. 1st century BCE and the c. 6th century CE within Hoq cave on the north coast. This cave provided one of the richest sources of evidence for seafarers visiting Soqotra and the island's involvement in the Indian Ocean trade (Strauch 2012). Evidence for the ancient indigenous inhabitants, however, was noticeably lacking. It was not until the chance discovery and exploration of Dahaisi cave in 2002 that definitive evidence for the ancient indigenes was found. Initial findings appeared to show that the people visiting the cave had some form of complex administration that may have been tied to their syncretic religious beliefs (Jansen van Rensburg and De Geest 2015). These findings, however, were based on a series of photographs that were taken by members of the SKP and represented only a small part of the overall corpus of motifs within the cave.

Dahaisi cave

Dahaisi cave is located in the eastern interior of Soqotra on the western end of the Mōmi plateau at an altitude of 588 m above sea level. The cave lies at the base of a limestone outcrop on the north-eastern edge of a shallow valley. The outcrop within the vicinity of the cave is riddled with holes, fissures and slab-like pools that fill with water after the monsoon rains. These features are the only source of water in this area, which in spite of careful management by the inhabitants rarely supply enough water for more than a few months into the dry season (Morris 2002: 33–34). During a brief survey it was possible to locate approximately 12 linear wall alignments and several Islamic graves within the valley. The walls are believed to relate to the production of incense or aloe production during the 1st centuries BCE/CE, although this remains to be clarified (Jansen van Rensburg and Hopper 2017).

The entrance to Dahaisi cave is 5 m high and 10 m wide. Entry into the cave involves clambering down a series of large rocks and relict speleothems that appear to be related to the collapse of what was an earlier, probably larger, entrance. The main passage branches right almost immediately after entering, and one need only travel 25 m before reaching the point at which some form of artificial light is necessary, the '*limite d'éclairement*' (Rouzaud 1997: 259). It is at this point that a side passage with a vertical pit branches off to the south. The upper part of this passage forms a small chamber and the lower part a long narrow conduit dubbed the 'torture gallery', due to the difficulties cavers faced in penetrating into this restrictive space.

The main passage is approximately 2 m high and 5 m wide and extends down a gentle slope in a south-west to north-east direction. Having travelled approx-

Figure 2. *Anthropogenic modifications of speleothems.*

imately 50 m straight along the main passage it begins to curve slightly to the north. At this point the ceiling of the cave gradually begins to increase in height and a worn pathway is visible on the rock floor. Approximately 40 m from this point the passage curves sharply to the south and drops almost half a metre into a small chamber with a shallow pool of water. A section of the speleothem that grew across the entrance has been chipped away and a chunk of speleothem placed at its base, acting as a step down into the chamber. Once in this chamber it is necessary to turn sharply east and clamber up past two large speleothems. Similarly to the entrance, there are a number of speleothem fragments that have been placed on the floor to act as steps to the gap between the two speleothems. The base of both speleothems has been chipped away. Only 30–50 cm of the base of the speleothems was removed to make it level with the floor (Fig. 2).

Having passed through this narrow gap one follows a well-worn pathway that leads to the gravel floor of a large chamber. At the far end of this chamber are two enormous speleothems, one of which has collapsed in a north-easterly direction. It appears as if this is the end of the cave, yet after closer investigation it is possible to find two routes on either side of the collapsed speleothem that lead deeper into the cave. Both of these routes converge at the same place, although the northerly route is more direct. Having rounded the speleothem there is a 3 m drop down into the final chamber. Descent is made easier by a ridge formed by the overlapping rock faces and a large chunk of speleothem that lies directly beneath the point at which one clambers down. The ridge and rock face has been worn smooth by countless generations of visitors who, like us, clambered down into the chamber using this route. While there is no direct evidence to suggest that the large speleothem was pushed against the base of the wall where one clambers down, that it fell fortuitously at this point seems unlikely.

The end chamber extends for approximately 25 m in a north-easterly direction, rising up towards a narrow blocked passage where it ends. Directly north of the entrance point is a large water-filled sump that extends in a north-easterly direction under the floor of the cave, which is made up of a raised cemented-gravel conglomerate platform. The southern half of the cave extends into a small alcove. Unlike the northern half of the cave, the roof in the south is devoid of speleothems, being completely smooth and rounded with the exception of a large aven in the alcove and a smaller aven at the entrance to the alcove. During the wet season the floor in the final chamber is flooded, making it difficult and dangerous to enter (De Geest pers. comm. 2017).

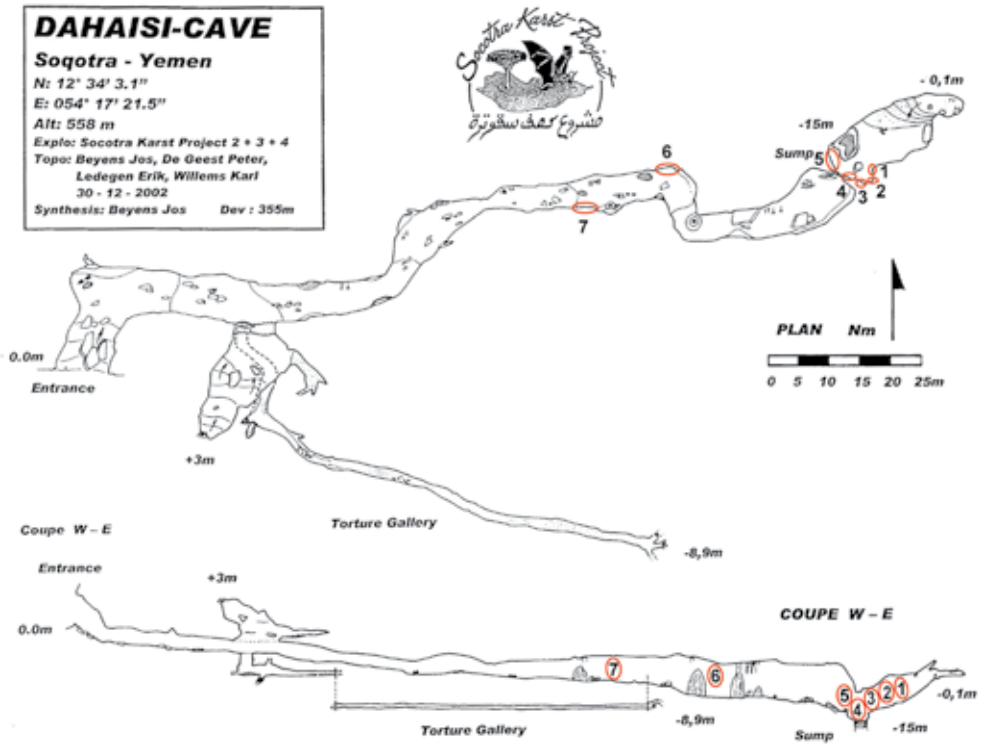

Figure 3. *Map of Dahaisi cave showing the location and numbers of the panels on which rock art was found.*

Results

The rock art identified in Dahaisi cave was, according to microscopic analysis, found to have been drawn using charcoal. Unfortunately, there was very limited material remaining and it was not possible to gather a large enough sample for dating. Initially, it had been assumed there was only one motif in the passage and approximately 30 on three panels in the final chamber (Jansen van Rensburg and De Geest

2015). A thorough investigation of the cave using infra-red photography, however, allowed us to identify significantly more rock art motifs, both in the passage and on virtually all the panels within the final chamber (Fig. 3).

The first evidence for rock art is found approximately 80 m from the entrance on Panel 7. This north-facing panel consists of one motif, which is made up of two curved intersecting lines, approximately 50 cm wide and having a line thickness of 5 mm. The thickness of the line would seem to indicate that the motif was drawn using a thin piece of charcoal, presumably from a burnt stick (Fig. 4). Panel 6 is located 15 m to the east of Panel 7 and faces in a southerly direction, almost directly opposite the point at which the passage veers to the south and enters the small chamber. Despite using infra-red photography and DStretch®, it was only possible to identify a series of horizontal lines, resembling a partial cross fourcheé (forked cross), and a rather elaborate geometric pattern consisting of a half circle that is cut in half by a line that extends downwards, where it forms part of a series of vertical lines (Fig. 5). The line thicknesses of these motifs were 5 mm, with the exception of the top of the line cutting the half circle, which seems to have been thickened using multiple strokes.

The remaining panels, numbered 1 to 5, are located in the final chamber. Panel 1, previously identified as the southern panel (Jansen van Rensburg and De Geest 2015: 421), is the first panel that is seen when entering the final chamber from the northern passage. The prominent position of this panel is also reflected in the profusion of motifs, which tend to be clustered in the upper western quadrant. Approximately 72 individual motifs have been identified on this west-facing panel, although many of these consisted of badly faded lines and partial geometric patterns (Fig. 6). The clearest representations that were identified comprised a number of different cruciform shapes, two therianthropic figures, an unidentifiable zoomorph and two images that have been interpreted as ships (Jansen van Rensburg and De Geest 2015: 421). The majority of the geometric and line motifs had an approximate line width of 5 mm, while the cruciform motifs varied from between 5–10 mm in thickness. Notable exceptions are the cruciform-shaped motifs on the upper eastern and western edge of the panel, which had a line thickness of approximately 20 mm. The line thickness of the two therianthropic figures and 'ships' varied between 20–35 mm and appeared to be the result of multiple applications of charcoal.

Panel 2 lies adjacent to Panel 1 in a small alcove, whose roof forms a large aven. The six very faded motifs identified on this west-facing panel consist of three cruciform shapes, a square geometric pattern, a

Figure 4. *Panel 6.*

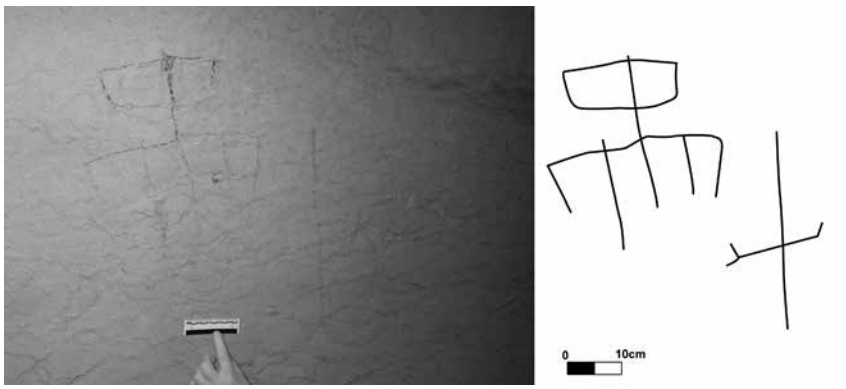

Figure 5. *Panel 7.*

Figure 6. *Panel 1 showing the motifs.*

Figure 7. *Panel 2 showing the motifs.*

Figure 8. *Panel 3 showing the motifs.*

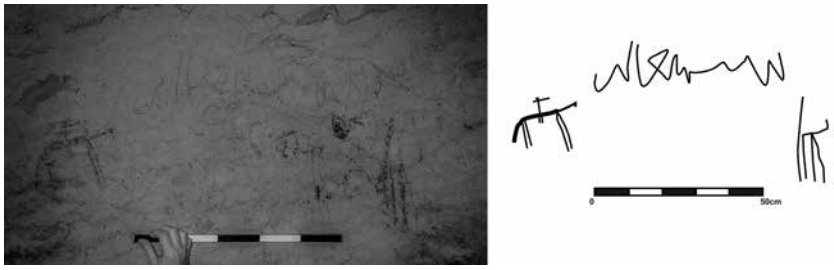

Figure 9. *Panel 4 showing the motifs.*

Y-shape and a single faded line (Fig. 7). These all had a line thickness of 5 mm. Panel 3, previously identified as the eastern panel (Jansen van Rensburg and De Geest 2015: 422), faces in a north-easterly direction. The 12 motifs on this panel include a possible ship, similar to that found on Panel 1, a series of lines and geometric patterns and an image of what was interpreted as an animal with rider (Fig. 8).

Panel 4 is located immediately to the right of the entrance of the final chamber. Of the approximately 10 motifs on this north-facing panel it was only possible to identify an 'animal with rider', a series of geometric patterns and lines, and a badly faded Arabic inscription (Fig. 9).

Panel 5, previously identified as the western panel, is the largest panel of rock art in the entire chamber. Measuring over 5 m in height and 3 m in width, this easterly-facing panel lies directly above the water-filled sump. Initially several indistinct geometric designs that included rectangles, undulating lines and circles were recorded along the base and part-way up the centre of this panel (Jansen van Rensburg and De Geest 2015: 423–424). However, with infra-red photography we were able to record an additional 24 different types and sizes of cruciform motifs, an Arabic script, 7 geometric patterns and a large number of seemingly arbitrary lines and curves (Fig. 10). Unfortunately, many of the motifs were so badly faded that, other than being able to determine that there were traces of motifs present, it was not possible to clearly establish whether they formed distinct geometric patterns or were simply lines.

Discussion

A detailed analysis of the motifs suggests that there were at least four phases of activity within Dahaisi cave. This sequence and its interpretation, however, is as much reliant on the ethnographic and historical record as it is on the superimposition and style of the motifs. The first phase is characterised by a series of narrow, faint geometric patterns and lines that are believed to be representations of a series of enigmatic walls that criss-cross the island's interior (Jansen van Rensburg and De Geest 2015: 425). Whilst there is not a definite date for the construction of the walls it is likely that they were in

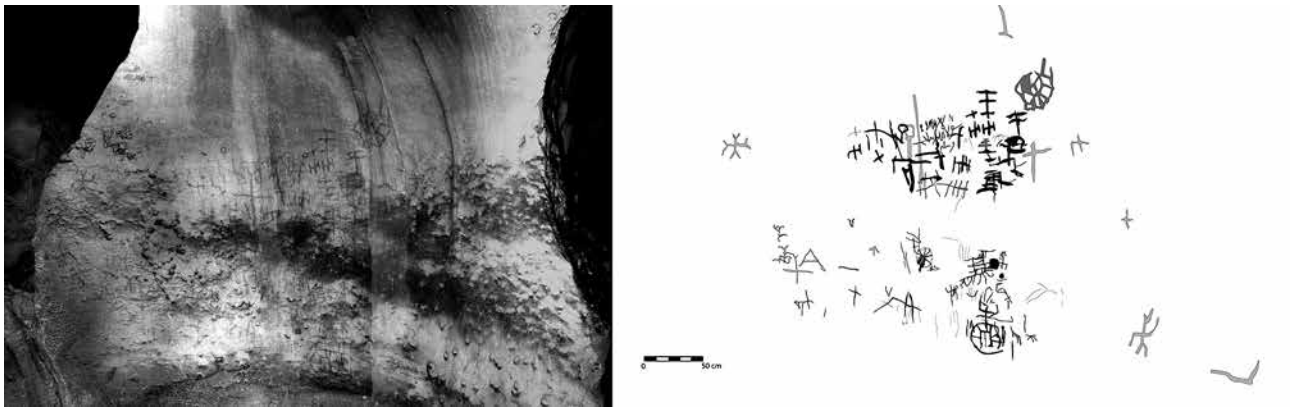

Figure 10. *Panel 5 showing the motifs.*

existence from at least the 1st century BCE (Jansen van Rensburg and Hopper 2017: 136). It is also possible that some of these geometric lines and motifs could be *wusum*, traditional markers used to identify tribal groups, delineate boundaries and mark property. This is reinforced by the similarities with camel brands that were recorded by Bent (1900: 449) in Arabia, and several motifs recorded at the petroglyph site of Eriosh on the north coast, dated to arguably the 1st millennium BCE (Doe 1992: 43–56; Naumkin and Sedov 1993: 582). Notwithstanding these interpretations, it is possible that some of these lines are little more than the result of random scratchings.

Phase two is represented by a series of thicker geometric lines, circular shapes and representations of therianthropic figures, 'riders' and 'vessels'. These motifs occur only in the final chamber, with the majority being found on Panel 1. The interpretation of the 'riders' by Jansen van Rensburg and De Geest (2015: 423) is problematic in that pack animals do not naturally occur on the island. While it could be argued that they represent the dwarfish Soqotran shorthorn cattle believed to have been introduced by Arab traders in the 7th century (Gwynne 1967: 40), they could not have been ridden. Moreover, the earliest known record for the dromedary on Soqotra is in the 19th century (Wellsted 1835). Instead the author would argue that these motifs are similar to the therianthropic 'antlered people' that were identified. This would certainly fit with the historical and ethnographic accounts of sorcery that were recorded, in which therianthropy was widely reported (Hirth and Rockhill 1911: 130–132; Botting 1958: 203–204; Naumkin 1993: 315–323). The imagery of 'vessels' is particularly interesting in that the motifs bear some resemblance to the drawing of a ship in Hoq cave, which has been compared with Indian sea-going vessels from the 2nd century CE onwards (Strauch 2012: 101, 364). Whilst the meaning of these portrayals of ships is unclear, from the historical and later ethnographic accounts we learn that vessels played an important role in the lives of the inhabitants, bringing both traders and invaders. Indeed, several accounts attest to the inhabitants trading with arriving vessels or fleeing to the safety of the mountains to avoid persecution during Mahri, Omani and Portuguese attempts at subjugation (Brásio 1943; Tibbetts 1981; Serjeant 1963). Thus, it would appear that the vessels portrayed could be representative of a significant event, or the dangers/opportunities that these vessels presented. Providing a *terminus ante quem* for this phase is problematic: while it would seem possible that the motifs may date from the 2nd century CE, the way in which they have been executed is similar to some of the cruciform motifs of phase three.

Phase three is made up of a wide variety of cruciform motifs that have been drawn in varying thicknesses throughout the cave, although the greatest concentrations are found on the upper part of Panel 5. The predominant form is the cross fourcheé, after which there are crosses with two or three traverse beams, the cross potent, the equilateral or Greek cross, the Latin cross and a cross with crossed beams. While it is tempting to assign all of these cruciform motifs to the well documented presence of Christianity on the island, believed to date from the 4th century CE (Müller 2001; Biedermann 2006), there are a number of concerns. Firstly, the similarities of several cruciform motifs with the camel brands recorded by Bent (1900: 449) would seem to indicate that the cruciform motifs with multiple crossbeams are probably *wusum* that, when looking at the similarities with the motifs in phase one, would suggest they have been in use for a considerable period of time. Secondly, in numerous historical accounts the inhabitants are said to have practised various forms of witchcraft, despite professing to be Christian and revering the cross (Snell 1955; Yule and Cordier 1993: 407; Smith 2008: 264). Thus it could be argued that the cruciform shape had already formed part of an earlier pagan belief. Nevertheless, due to the well documented presence of Christianity on Soqotra it is highly probable that some of these cruciform motifs are related to the arrival of Christianity on the island, allowing for a *terminus post quem* of approximately the 4th century CE.

Phase four is composed of two Arabic *shahada* (testimony to faith) inscriptions and several *wusum*, which overlie earlier motifs. The first, much clearer *shahada*, overlies a series of crosses on Panel 5, while

the second, much fainter inscription was written on the upper right-hand side of Panel 4. A similar *shahada* inscription was found at the entrance of Hoq cave near a pool of water. While it was not possible to date this inscription, according to Strauch (2012: 31) it belonged to a 'more ancient period'. The arrival of Islam to Soqotra is challenging to date, although it is clear that a Muslim presence on the island extends back to the first Oman Imamate, from at least 750 CE (Wilkinson 1988: 135). Islam was unlikely to have been fully integrated, however, until sometime after the 15th century CE, by which time Soqotra was under the political control of the Mahra Sultanate. That this phase can be attributed to a contemporary period is unlikely in that not only are the inscriptions poorly preserved, but locally there has been a long-standing aversion to entering deep caves. That aversion relates to the folkloric belief that these caves are inhabited by enormous snakes believed to be capable of killing a man (Morris 2002: 214). Consequently, it is likely that this phase of the rock art can be attributed to sometime after the arrival of Islam in the 8th century CE.

Despite not being able to define an absolute date for the rock art within Dahaisi cave it is clear that these four phases of activity are reflective of the long-term importance of the cave for the inhabitants of the island's interior; an importance that persisted up until the recent past. Further evidence for the long-term use of Dahaisi is clearly seen in several areas where the rock has been worn smooth by countless numbers of visitors to the cave, notably along the main passage and at the rock face leading into the final chamber. The purpose of the anthropogenic modifications made to the speleothems, however, is not clear. That they occur at a point at which the passage of the cave changes direction and drops into a shallow pool, and that they are in the vicinity of rock art would indicate that they could be related to a network of movement through the cave (Pastoors and Weniger 2011: 384). However, as there is only one passage to follow to the terminus of Dahaisi cave it would, with a torch, be virtually impossible to get lost in the passage. Moreover, the modifications are not completely necessary, as traversing the 30–50 cm step of speleothem that had been removed, or clambering across a muddy pool would not have constituted any great difficulty. The author would argue, therefore, that these modifications were done to mark this area within the cave as a point from which one would pass into a sacred zone that culminated at the water-filled sump in the final chamber. Indeed, the appropriation of the water-filled sump appears to have taken place over the course of several centuries and remained an important focal point for the indigenous inhabitants. That water has played such an important role for the inhabitants is unsurprising as their very survival would have depended — and continues to do so — on the capricious monsoon rains. The fact that the majority of the rock art surrounds the sump would certainly appear to reinforce this interpretation.

Conclusion

The discovery and subsequent mapping of the rock art and anthropogenic modifications within Dahaisi cave has allowed us a unique glimpse into the hitherto poorly known ancient inhabitants of Soqotra's interior. Situated deep within the arid eastern interior of the island, this cave clearly functioned as an important nodal point within the landscape from at least the 1st century BCE. A function that, with the profusion of motifs surrounding a water-filled sump, would indicate that this was related to the presence of water within the cave. This interpretation is reinforced by the anthropogenic modifications and well-worn pathway that leads to the water-filled sump in the final chamber. The anthropogenic modifications together with the rock art midway through the cave also appear to indicate that it was deemed necessary to delineate a point within the cave. A point at which, due to the shallow pool of water, is likely to have held some importance.

The four stylistic phases of rock art that have been identified within the Dahaisi corpus provide the basis from which it may be possible to begin to define a relative date for similar rock art motifs found in other parts of the island. This is especially important in that previous studies have either sought to assign dates to rock art by association with monuments in the vicinity, or by arbitrarily assigning cruciform motifs to the Christian period (Naumkin 1993: 582). Further comparison with other rock art sites on Soqotra will undoubtedly help in defining a temporal framework from which it will be possible to finally begin to understand the changing socio-religious ideologies and rock art traditions of Soqotra's ancient inhabitants.

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