

Carving interactions

Rock art in the nomadic landscape
of the Black Desert,
north-eastern Jordan

Nathalie Østerled Brusgaard

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For Grethe and Niels Østerled Nielsen

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Chapter 1

Introduction

Rock art both intrigues and confuses us; on the one hand, it provides a seemingly direct insight into ancient lives, but on the other, its meaning often remains elusive. Both factors have contributed to the long-time fascination among scholars and the public alike for the ancient images that can be found across the globe. Over the past decades, rock art research has developed into a professional sub-discipline of archaeology, in which substantial advancements having been made methodologically and theoretically (Conkey 2012; McDonald and Veth 2012; Whitley 2001). We are therefore continuously gaining new insights into the various ways that rock art was significant in past societies. As a result, rock art is increasingly being utilised as a source of information for a wide range of archaeological questions. It is a unique material due to it being, literally, carved in stone, revealing insights into societies and their cosmology that other, movable and more perishable materials cannot. Furthermore, due to its medium and permanence, rock art has a singular relationship with the landscape that can provide a different perspective on how past societies interacted with their environment – and with each other.

This potential has been demonstrated by a wide range of seminal works on the role of rock art and its role in the landscape in, especially, nomadic hunter-gatherer societies (e.g. Bradley 1997; Chippindale and Nash 2004a; Nash 2002). However, the rock art of nomadic (semi-)herding societies has been researched to a far lesser extent. Studies that have investigated rock art and its role in herding societies have often explained it in terms of the communication of territorial claims or mediation amidst territorial tension (Brandt and Carder 1987; Frachetti 2008a; Holl 2004). These models cite territoriality as a feature typical of herding societies, but this generalist interpretation does not elucidate the many aspects of what can be expressed in and through rock art. Nor does it take into account the complexity of – and variety in – the relationships between herding societies, the landscape, and the practice of making rock art. Few studies on herding societies have addressed rock art as a cultural practice that is interwoven with the specific facets of their culture, landscape, and time, and that must therefore be studied from the material bottom-up. Consequently, rock art remains under-utilised as a source of information about these types of societies and their very particular interaction with the domestic and wild landscape.

This book endeavours to shed light on these issues through an investigation into a rich dataset of petroglyphs from the so-called Black Desert of northern Arabia. In this basalt desert, tens of thousands of pictorial and textual engravings can be found, carved by nomadic societies inhabiting the region in the late 1st millennium BC and early 1st millennium AD. The texts are written in Safaitic, a pre-Islamic script local to the Black Desert, which stretches from southern Syria through north-eastern Jordan to northern Saudi Arabia. They include names, narratives, and ‘signatures’ of the rock art (Figure 1.1). Studies of the textual engravings have provided a wealth of information on the peoples that made these carvings, revealing that they were nomads inhabiting the basalt desert in the Late Hellenistic and Roman periods, subsisting, at least in part, on owning dromedary camels, horses, and ovicaprids (e.g. Al-Jallad 2015; Macdonald 1992b, 1993). However, many



Figure 1.1. A large Safaitic engraving in the Jebel Qurma region. The carving depicts a dromedary camel with an associated inscription in which the producer states his name and says ‘the camel is by him’ (QUR-683.35).

questions about these societies remain, in particular how they operated in and interacted with their desert landscape, what the nature of their cosmology was, and why they carved texts and depictions into the basalt rocks of the desert. Studying the rock art as a form of cultural practice opens up unique opportunities to address these questions. Furthermore, the Safaitic rock art is an exceptional dataset for furthering our understanding of the rock art of herding societies in general and their interactions with the landscape. The rich quantity of petroglyphs, the geographically distinct region, the relatively closed timespan, and the insights from the associated inscriptions all contribute to this rock art's great potential for providing a better understanding of broader questions on nomadic societies, their worldview, and their relationship with their environment.

This study therefore aims to develop a new understanding of the pictorial carvings and the people who carved them through the first-ever in-depth, systematic investigation of Safaitic rock art from the Black Desert, based on a dataset of over 4500 petroglyphs from the Jebel Qurma region in north-eastern Jordan. In this book, I discuss the content of the rock art, how it was produced and consumed by its makers and audience, and its relationship with the landscape. Through this bottom-up, material approach, I explore the cultural practice of making rock art in the desert societies and what it tells us about these societies' way of life. Through the rock art I explore their interactions with the landscape they inhabited, which I regard to include its natural and anthropogenic features, the wild and domestic fauna, and the people themselves. Subsequently, I re-examine our understanding of rock art in herding and nomadic societies and the insights it provides into how these societies perceived and related to their landscape.

1.1. Desert peoples and desert carvings

1.1.1. The Black Desert

The Black Desert is a rocky desert that is aptly named after the dark basalt rocks that cover large parts of its surface. This basalt expanse, known in Arabic as the *Harrat al-Sham*, stretches from southern Syria across north-eastern Jordan into northern Saudi Arabia (Figure 1.2). The Black Desert in Jordan comprises the basalt-covered uplands, known locally as the *harra*, which are rough and difficult to traverse, and the surrounding, more easily accessible, gravel-covered plains, the *hamad* (Figure 1.3). Both types of terrain are found in the research area of this study, the Jebel Qurma region. This region is situated in the northeast of Jordan, on the western edge of the Black Desert. It lies approximately 30 km east of the modern town and (former) oasis of Azraq.

Today the Black Desert receives on average less than 200 mm of rain annually in the north and less than 50 mm in the Jebel Qurma region and northern Saudi Arabia. There are only a few permanent water sources, such as Azraq, Nemara, and Burqu'. Wadis crisscross the desert but may remain dry for most or all of the year, depending on the rainfall. Numerous mudflats can also hold temporary or seasonal water. Temperatures can be extreme, with summer maxima reaching 46 °C and average winter minima reaching 10 °C (Al-Homoud *et al.* 1995). Despite the seemingly inhospitable environment, however, a wealth of above-ground archaeological and epigraphic remains attests to a long, yet punctuated inhabitation of the area (Akkermans *et al.* 2014; Akkermans and Brüning 2017; Huigens 2018). The rich quantity of stone-built structures, such as enclosures, cairns, and campsites, reveals long-term investments into the landscape by various societies through time (Huigens 2018; Huigens forthcoming) (Figure 1.4). Equally, the tens of thousands of pictorial and textual carvings that can be found across the Black Desert are evidence of a rich material culture from a relatively short timespan.

1.1.2. Safaitic carvings and their makers

The Safaitic carvings are one type of several pre-Islamic 'Ancient North Arabian' scripts and associated rock art that existed in the late 1st millennium BC and early 1st millennium AD in Northern Arabia. The Safaitic texts and rock art are local to and concentrated in the *harra* desert. Sporadic Safaitic texts have been found in other areas of the Near East, such as Palmyra, and a few were even discovered in Pompeii (Macdonald 1993), but this script and form of rock art are intrinsically connected to the basalt desert. Other types of Ancient North Arabian scripts and rock art include Hismaic, which is localised in the Hisma desert in southern Jordan (Corbett 2010; G.M.H. King 1990) and Thamudic, which is concentrated in northern Saudi Arabia (Guagnin *et al.* 2016; Jennings *et al.* 2013). Like the rock art associated with the Safaitic inscriptions, the Hismaic and Thamudic pictorial engravings have been studied insufficiently. However, based on the known datasets, it is evident that there are similarities between the various forms of Ancient North Arabian rock art but there are also clear differences. For this reason, it is possible to study the rock art from the *harra* as a distinct cultural practice, as a *Safaitic rock art* tradition.

The Safaitic carvings are engraved into the basalt rocks of the *harra* and can be found on rocky outcrops, on and around architectural structures, and in isolated clusters (Figure 1.5). Over 40,000 inscriptions have been recorded throughout the basalt desert since their discovery in 1858 (Al-Manaser and Macdonald 2017). It is likely that almost as many rock art depictions exist, but until now the rock art was not always recorded in

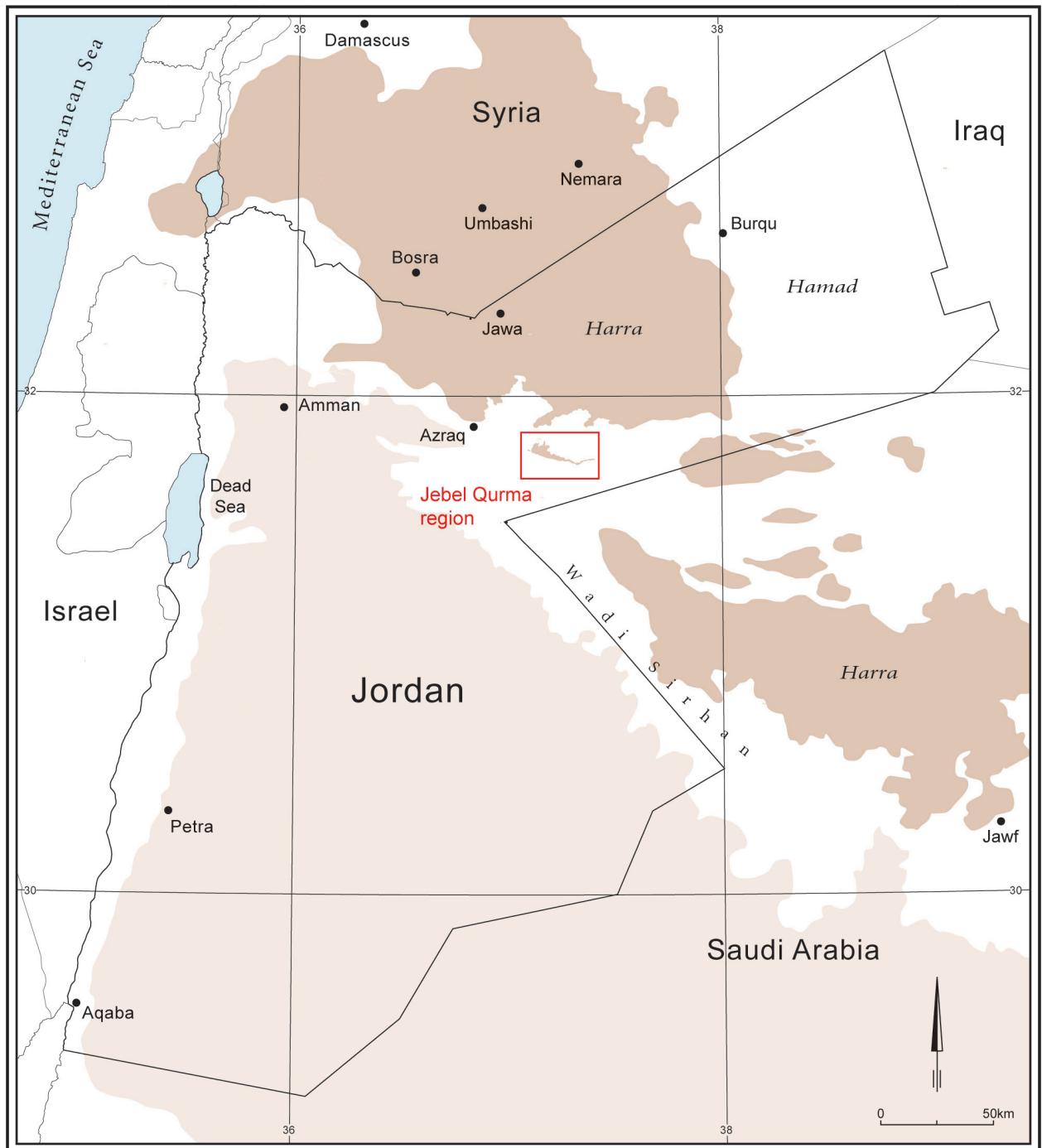


Figure 1.2. Map of Jordan showing the Black Desert, consisting of the basalt-covered uplands, the *harra*, and the low-lying plains, the *hamad*. The research area Jebel Qurma is indicated. Illustration by Mikko Kriek 2015.

the field so the exact number is unknown. The Safaitic rock art is figurative in nature, depicting domestic and wild animals, anthropomorphic figures, abstract motifs, and scenes of hunting and fighting (Figure 1.6). They are intrinsically linked to the textual engravings; a common composition is a rock art figure or scene associated with an inscription in which the author states his name and genealogy and ‘signs’ the image (Figure 1.7) (see Chapter 3). Some inscriptions refer to historical events, dates, or names, which have made it possible to situate the Safaitic carvings approximately

in the period between the 1st century BC to the 4th century AD (Al-Jallad 2015: 17). This places the production of the carvings in the Late Hellenistic and Roman period. The production of Safaitic carvings may have started earlier and ended later than what can be traced from dated inscriptions (Al-Jallad 2015: 18), but this chronology provides at least a minimum range for the period of production.

Engravings from other periods have been found in the Jebel Qurma region as well, including medieval and



Figure 1.3. a) The rolling basalt-covered uplands of the harra. b) The low-lying plains of the *hamad*.



Figure 1.4. A burial cairn at the site QUR-956. In the distance several stone enclosures are visible on the leftside slope of the next hill.

modern Arabic engravings and so-called tribal marks, *wusūm*, which likely date to the 19th and 20th centuries (Berghuijs 2017). Northeast of the Jebel Qurma research area, prehistoric rock art dating to circa the 7th millennium BC has been found in the *harra* (Betts 1987), but no clear prehistoric rock art has been found in the Jebel Qurma region so far. This study focuses on the Safaitic rock art of the late 1st millennium BC to early 1st millennium AD.

Until very recently, what we know about the societies that made these carvings in the desert has been based almost entirely on evidence from the inscriptions. Some of the texts contain a so-called narrative component, in which, for example, the author states that he pastured his camels, migrated to another area, spent the winter in a particular place, or mourned the loss of a loved one (Al-Jallad 2015; Macdonald 1993). Based on these unique insights into the authors' lives, the image emerges that these peoples were nomads who moved through the desert, camping in different areas according to the seasons, and owned dromedary camels, horses and mules, and ovicaprids (Macdonald 1992b, 1993, forthcoming). They built cairns for their dead, worshipped a range of deities, and followed a zodiac calendar (Al-Jallad 2014; Macdonald 2006, 2012, 2016). There is evidence for contact between these desert peoples and the nearby Nabataean and

Roman empires (Al-Jallad 2015; Macdonald 1993, 2014). However, it is unclear whether they had any contact with or relation to the large-scale camel-based trade routes that were well-established in this period and probably passed nearby the *harra* desert (cf. Hesse 2016; Magee 2014; Seland 2015; Rosen 2008).

Almost all of the known Safaitic inscriptions were carved by men. The conventional formula of the texts is for the author to state his name and genealogy, in which the vast majority say 'By [name] son of [name]'. In the known Safaitic corpora and in other Ancient North Arabian corpora of inscriptions, there are only a few rare examples of texts signed by women (Norris 2017). Other than specific genealogies and tribes, it is unclear how the peoples who used the Safaitic script and carved the associated rock art were related to one another; there are no indications that the nomads of the *harra* were necessarily one cultural or ethnic community (Al-Jallad 2015; Macdonald 1993). The content of the inscriptions indicate that there were different tribal affiliations and that there was conflict and raiding among different social groups (Al-Jallad 2015; Della Puppa forthcoming; Macdonald 1990; Norris and Al-Manaser 2018). However, the shared use of the Safaitic script and the associated rock art, situated very locally in the Black Desert region, testifies to a distinct cultural tradition among the nomads.

The inscriptions provide a rare perspective on the lives of these desert peoples and the scholarly work on them continues to reveal new insights. However, many issues are still unresolved, including how these peoples operated in the desert landscape. The inscriptions suggest that they had dromedary camels, ovicaprids, and domestic equids. But were they nomadic pastoralists, i.e. did they have 'a way of life based predominantly in the social and economic strategies associated with a routine migratory management of domesticated herd animals' (Frachetti 2008b: 368)? Or should we perhaps consider them in terms of 'herder-gatherers', a term coined by Rosen (2002) to denote the Neolithic Near Eastern societies that adopted herding as a subsistence strategy but still practised hunting. There is increasing evidence that, since its advent, pastoralism in the Near East was not a production system that replaced hunting and gathering, but rather that herding became part of a broader subsistence strategy (Betts 2008; Makarewicz 2013, Magee 2014; Rosen 2002). Additionally, it is also important to consider that there may have been differences in production systems within the groups that used the Safaitic script (Macdonald 1993: 319). Research on the inscriptions has helped to reconstruct how the nomads migrated through the desert according to the seasons (Macdonald 1992b). However, little is known about how the nomads interacted with their landscape.

Archaeological research on the makers of the Safaitic carvings has been scarce, with the few survey and excavation projects in the Black Desert generally targeting the prehistoric societies of this region (Huigens 2018: 4). The epigraphic evidence reveals that the people carving the Safaitic rock art and texts were nomads (Huigens 2018; Macdonald 1992b, 1993) and new archaeological research in the Jebel Qurma region supports this (Huigens 2018; Huigens forthcoming). However, reconstructing their subsistence strategies and ways of life is limited by the arid conditions of the desert. Although above-ground structures are well-attested, few finds survive and organic remains are often poorly preserved (Akkermans and Brüning 2017; Huigens 2018). Recent archaeological research in the Jebel Qurma region revealed hardly any faunal remains and limited ceramic remains from the Hellenistic and Roman periods (Huigens 2018: 206). A large number of stone structures, including numerous cairns, could be dated as broadly contemporary with the Safaitic carvings (Huigens 2018: 217). It remains difficult to link any structures or burials directly to the people who made the carvings though (Huigens 2018: 209), as will be discussed in this study. However, this research has demonstrated that there have been various phases of nomadic activity in the desert since at least the Early Neolithic, whereby peoples invested long-term in their landscape through the construction of, often monumental, structures, such



Figure 1.5. An engraved panel overlooks the Wadi Rajil and its valley. The large boulder shows, among others, equids, camels, an ostrich, a carnivore, and Safaitic inscriptions. A few metres away another camel motif can be seen (QUR-683.37).

as cairns (Akkermans *et al.* 2014; Huigens 2018). Whether these were the same nomads who made the carvings remains to be shown, but it is clear that the Safaitic authors were not operating in an empty landscape.

1.1.3. Research on Safaitic rock art

The inscriptions and rock art thus remain to a very large extent the most direct, clear insight into these peoples. However, surprisingly, the rock art has been used only sparingly to supplement the information gleaned from the inscriptions. In general, it has been neglected by epigraphists and archaeologists alike. Most studies of the inscriptions include mention of the Safaitic imagery, but are limited to listing types of motifs and publishing a few tracings of figures (Figure 1.8) (e.g. Ababneh 2005; Al-Manaser 2008; Clark 1980; Oxtoby 1968). Few analytical attempts have been made at understanding the desert depictions and interpretations of their meaning have remained superficial. For example, the depiction of domestic animals, such as dromedary camels and horses, has often been interpreted as representing a claim of ownership of these animals (Clark 1980; Winnett and Harding 1978). An exception is the work of Michael Macdonald, who has endeavoured to provide frameworks for understanding and identifying some of the motifs, such as the women figures (Macdonald 2006), raiding scenes (Macdonald 1990, 2012), and the equid motifs (Macdonald forthcoming).

However, an in-depth study of all of the motifs and scenes portrayed in the rock art has not yet been carried out. Interpretations proposed so far have also been limited by the lack of complete rock art datasets; the majority of surveys carried out in the basalt desert only documented rock art if it was associated with an inscription. For this reason, in contrast to the texts, little is known about the full content of the pictorial engravings. Other questions remain about both types of carvings. Few studies have investigated the production process behind them; how were they made, using which techniques, and following which steps? And where were they produced? Contextual studies of the Safaitic engravings have been few so far and contextual information has rarely been recorded in past surveys. One idea about the landscape setting of the inscriptions has persisted. This is that they can mainly be found at and on

cairns, a claim first made by Oxtoby (1968). However, as Macdonald (1992a: 303) has pointed out, the survey from which Oxtoby's dataset originated, *Fifty Safaitic Cairns* (also published in Winnett and Harding 1978), collected inscriptions only from cairns. This is therefore a classic case of circular reasoning. Macdonald (1992a: 305) subsequently argued, based on data from the Jawa area (see Figure 1.2), that the carvings are scattered across the region and that 'they occur, in greater or lesser numbers, almost anywhere that the rock is suitable for inscribing'. However, no description of how the carvings in the Jawa area were recorded or distribution maps of their locations are included so it is not possible to evaluate this claim. Overall, therefore, research on the spatial distribution of the Safaitic carvings is lacking. Consequently, little is known about the relationship between the engravings and the landscape.

Many facets of these carvings thus remain to be explored. At the heart of these issues is the question of how we are to understand the cultural practice of making and engaging with these carvings in the desert societies. Through exploring what is depicted, how the rock art was made and engaged with, and where in the landscape it is situated, it is possible to elucidate this cultural practice. Here it must be noted that the texts and the images may not have had the same purpose. Although they are fundamentally linked to one another, what was expressed through imagery, and why, may not have been the same as what was expressed through text. It is not the aim of this study to address this question, for which an in-depth comparative study of both types of engravings is necessary. Instead, this study endeavours to investigate the *lacunae* in our knowledge of the rock art and, consequently, provide new perspectives on the



Figure 1.6. A scene showing an archer hunting or perhaps defending himself from two carnivores, presumably lions. The Safaitic inscription states "By Rāgel son of Zamhar son of 'Aus are the animals". Scale bar = 20 cm. (QUR-529.23).

ancient desert nomads. It is to be hoped that this will provide a framework for future research to compare and contrast the roles and interpretations of the two types of engravings.

1.2. Herders, hunters, and the practice of rock art

1.2.1. Introduction

In comparison to other archaeological materials, rock art is 'a more immediate record, both easier to see and harder to make sense of' (Taçon and Chippindale 1998: 2). However, the endeavour to understand it can reveal unique insights into the people who made it that other archaeological materials cannot. In the following section, I focus on a number of key theories on the role of rock art in nomadic hunting and herding societies. In particular, I discuss those which consider the implications for our understanding on how these societies interacted with their landscape and, vice versa, the implications of their mode of operation in the landscape on the role of their rock art.

1.2.2. Understanding the Safaitic carvings

The role of the different types of Arabian rock art in the ancient nomadic societies, and especially how it engaged with the landscape, has rarely been discussed by scholars. Macdonald (2010) has been one of the few to propose an interpretation of the Safaitic carvings. He argues that the carvings were a form of pastime, idle graffiti made to pass the time away while, for example, being on the lookout for enemies or watching pasturing herds (Macdonald 2010). He proposes:

'Nomadic life involves long periods of solitary idleness, guarding the herds while they pasture, keeping a lookout for game and enemies, etc. Anything that can help pass the time is welcome. Some people carved their tribal marks on the rocks; others carved drawings, often with great skill. Writing provided the perfect pastime and both men and women among the nomads seized it with great enthusiasm, covering the rocks of the Syro-Arabian deserts with scores of thousands of graffiti. The graffiti was the perfect medium for such circumstances. It could be as short or as long as the authors wanted, and since they were carving purely for their own amusement they could say whatever they liked, in whatever order new thoughts occurred to them, and it did not matter if they made mistakes. When they tired of carving their own graffiti, they could wander off and vandalize someone else's, often by subtly altering the letters to make it say something different, or by adding something rude!' (Macdonald 2010: 15)

The pastime theory is inspired by the use of script by the Tuareg peoples of north-west Africa, who carve characters 'primarily for games and puzzles, short graffiti

and brief messages' (Macdonald 2009). The pastime theory has been developed based mainly on the study of the texts and supported by only the one landscape study discussed above. Al-Jallad (2015: 3) has contrarily argued that the Safaitic inscriptions cannot be seen as 'unstructured self-expression, the outcome of boredom and knowledge of an alphabet'. He has shown that the inscriptions are highly formulaic, selective in their form and content, and clearly meant to be seen and read by others (Al-Jallad 2015). Furthermore, he points out that if the carvings were used as a way to pass the time away, we would expect a high proportion of names to repeat, but this is not the case (Al-Jallad 2015: 3).

In a study of the roughly contemporary Hismaic inscriptions and rock art from the Hisma Desert of southern Jordan, Corbett (2010) has shown that the carvings cluster in specific locations around drainage points of the wadis. Corbett (2010: 259) proposes that these were places where the nomads of the Hisma desert spent a lot of time, pasturing their herds or hunting wild animals. However, he argues that the engravings were not located here because they were places of significance; the places themselves had no influence on the texts or images (Corbett 2010: 259). It is not clear which role he instead believes the carvings had, but he does not agree that they were forms of idle graffiti (Corbett 2010: 259). Corbett (2010: 150) does propose that the dromedary camel images had a ritual function, intended as symbolic sacrifices to deities.

Similarly, Eksell (2002), focusing on the Ancient North Arabian carvings as a whole, has argued for a sacral function of the carvings, proposing that the images are forms of symbolic giving or sacrifice. She bases her conclusion on her interpretation of the formulaic content and syntax of Safaitic inscriptions. The inscriptions customarily start with 'l', the 'lām auctoris'. This is generally seen as a 'mark of authorship', usually translated as 'by' (i.e. 'By [name] is the camel') (Macdonald 2006: 294). This can be interpreted as the image is by this person (Macdonald 2006: 295). However, Eksell suggests it should be interpreted as 'for', which can denote a sacral meaning for the texts and associated image (Eksell 2002: 115–116, cf. Al-Jallad 2015: 4). However, as Macdonald (2006) and Al-Jallad (2015) have shown, the 'l' is simply an introductory particle to the phrase and its translation depends on the context. Therefore, it does not reveal anything about how to interpret the image associated with the text.

1.2.3. Herding and hunting landscapes

The extent to which the Black Desert societies relied on herding and/or hunting is currently difficult to reconstruct, but one key characteristic is apparent from the inscriptions and the archaeological evidence so far: a nomadic way of life. This entails mobility



Figure 1.7. A depiction of an oryx accompanied by an inscription stating 'By S²b son of Yshh is the bull'. The word 'bull' in Safaitic refers to a male animal. Two other carvers have incised their names on this panel as well (QUR-256.48).

in the landscape, which can be defined as 'the capacity and need for movement from place to place' (Wendrich and Barnard 2008: 5). Cribb (1991) has drawn a distinction between the types of mobility patterns of pastoralists versus hunter-gatherers. The movement of pastoralists is organised and determined by the needs of their herds – pasture – while hunter-gatherers exploit a wider range of resources and move to exploit them accordingly (Cribb 1991: 21). However, archaeological and ethnographic studies have since shown that this dichotomy does not hold true for most societies (Wendrich and Barnard 2008: 6). For herding societies, mobility patterns were likely also driven by 'alternative aims', such as trade, raiding, agriculture, or sale of labour (Frachetti 2008b: 370, cf. Rosen 2017: 34). Additionally, it is important to note that one of the main characteristics of herding societies is that they are highly variable (A. Smith 2005a; Frachetti 2008b; Rosen 2008, 2017). The blurring of hunting and herding strategies, such as in herder-gatherers societies, would also have entailed different mobility patterns governed by a complex set of needs and desires.

The key characteristic of a nomadic way of life would have impacted how the peoples interacted with their landscape. I consider this as the way that people engaged in meaningful ways, including socially, ritually, and economically, with their environment, which includes the natural and anthropogenic elements and the wild desert fauna, domestic animals, and the peoples themselves that make up that environment. All of these aspects are not mere features of the environment or surroundings, but part of a cultural landscape. In a study of Bronze Age herders from Central Asia, Frachetti (2008a: 24) has proposed that mobile pastoralists use and invest in

'historically meaningful places that accumulate significance through a palimpsest of interactions'. He argues that their rock art is a form of social interaction with the landscape, highlighting and marking important places (Frachetti 2008a: 136). Based on the location of rock art and burials near winter settlements, Frachetti (2008a: 158) argues that these cultural remains may have communicated ownership or control, signifying territorial boundaries and engagement in these places.

Smith (2005a, 138), investigating ancient Saharan pastoralists, proposes that the herders followed known and repeated paths and that points

along these paths become 'referents for passing on information to others and are embedded in historical narratives'. As a result, the landscape is 'a place of referents', part of the histories and beliefs of the people (A. Smith 2005a: 138, 2005b: 267). Rock art sites were one of the various, natural and cultural, types of important places that determined where these referents in the landscape were (A. Smith 2005a). These sites may have been part of the collective memory and thereby have become centres for ritual activity (A. Smith 2005a: 148). Holl (2004: 7) also sees the Saharan rock art as a way to mark social spaces in the landscape where ceremonial events occurred. He proposes that the rock paintings were made as part of initiation rites for young adults (Holl 2004: 129). Furthermore, Holl (2004: 12) argues that the rock art 'may have been produced from a cultural background of tension', a tension that exists in pastoralist societies because people need to cooperate to successfully raise livestock, but equally desire to express their individual power and status through the livestock's representation as wealth. Similarly, Brandt and Carder (1987) argue that the pastoral rock art from the Horn of Africa was a ritual event performed to reduce the tensions resulting from increases in population and competition for pasture in a changing climate. An increase in territoriality due to the need for pasture is seen by some scholars as a key characteristic of herding societies (e.g. A. Smith 2005a; Rosen 2008).

Conversely, others regard a strong notion of territoriality as a central feature of hunter-gatherer societies, setting them apart from pastoralists (Cribb 1991; Ingold 1986). It is noteworthy that hunter-gatherer rock carvings and paintings are therefore also frequently interpreted as territorial markers in the

landscape. Ingold (1986) argues that sites and paths in the landscape are important territorial places in hunter and gathering societies. Markers of boundaries function like signposts, 'comprising part of a system of practical communication rather than social control' (Ingold 1986: 157). Following on this, Bradley (1991, 1997) proposes that the prehistoric hunter-gatherer rock art of Britain functioned as markers and a form of communication. He demonstrates that the carvings are frequently found at paths and viewpoints and are often located in areas with less fertile soils (Bradley 1991, 1997). Bradley (1997: 92, 123) therefore argues that the rock art may have been used to mark places where territorial disputes could occur and, additionally, to mark 'specific thresholds on the journey across the country', the rock art determining the paths people should follow. In this way, rock art was an important way of emphasising the significance of important places in the landscape (Bradley 1997: 213). Similarly, Jones (2006: 222), in a study of the prehistoric rock art of Scotland, argues that the carvings were produced in geographically important places, ordering the landscape and highlighting 'features of past and future significance'.

In these studies of nomadic rock art, there is thus a general consensus that mobile communities often create, mark, and invest in places in the landscape and that rock art is one of the ways in which societies did this. Most of the models subsequently propose that this is a product or necessity of territorial disputes and negotiations, based on the perspective that territoriality is a key characteristic of both herding societies and of hunter-gatherer societies. While there can be strong evidence in support of interpreting rock art as territorial communication, such as for the 18th and 19th century Bedouin carvings from the Negev desert (Eisenberg-Degen *et al.* 2018), this needs to be demonstrated on a case-by-case basis. As discussed above, there is great variation within societies that practise a herding-based subsistence strategy. Interpreting their rock art therefore needs to take into account the facets of the culture, landscape, and time period of the society in question, as well as the particularities of the rock art itself. Furthermore, assuming territorial conflict to be the driving force behind communication in the landscape neglects the many other potential ways in which nomadic societies invest in and interact with their environment. Therefore, an in-depth study of the rock art record, working from the material up and exploring it as a form of cultural practice can provide significant insights into how we are to understand the rock art and, subsequently, how herding societies interacted with their landscape. In this book, I explore these issues through a study of Safaitic rock art, which dates to approximately the late 1st millennium BC to early 1st millennium AD, from the Jebel Qurma region

in the Black Desert. The Safaitic rock art is especially well-suited to investigating the above-described issues because it is a fairly 'closed' cultural and temporal set of petroglyphs. Although questions still remain about the exact chronology of the carvings and the cultural relationship between the many carvers, the timespan is short and the region small compared to that of many rock art corpora.

1.3. Producing and consuming images

1.3.1. Introduction

This book has two aims. The first is to explore the Safaitic rock art as a *cultural practice*, i.e. a way of doing within a particular cultural context that can be studied through the content of the material, the process of its production, and process of its consumption. The second aim is to subsequently uncover, through the rock art, the nature of the human-landscape interactions of the peoples who created the Safaitic engravings in the desert landscape of Jebel Qurma.

This study is based on a dataset of rock art from the Jebel Qurma region in north-eastern Jordan (Figure 1.2). Annual fieldwork has been carried out in this region since 2012 by the *Jebel Qurma Archaeological Landscape Project*, consisting of intensive surveys and excavations of the archaeological and epigraphic remains from the Palaeolithic up until the very recent past (cf. Akkermans *et al.* 2014; Akkermans and Brüning 2017; Huigens 2018). From 2014-2018, the spin-off project *Landscape of Survival* researched the inhabitation of this region in the 1st millennium BC to the 1st millennium AD, when a marked peak in human activity occurred. This book is based on research carried out by the author within this project, which also included a study of the Safaitic inscriptions (Della Puppa forthcoming) and of the artefacts and stone-built features (Huigens 2018; Huigens forthcoming).

The rock art was documented during surveys that were carried out during five fieldwork campaigns between 2012 and 2016. During these surveys a total of 241 sites with rock art were recorded, where altogether 2264 engraved boulders were found. In 2017 and 2018 the *Jebel Qurma Archaeological Landscape Project* focused more intensively on excavations; during this process, approximately 180 additional carvings were found, the majority of which are inscriptions, but due to time constraints these are not included in this study. The archaeological background for this study was carried out by Huigens (2018) and is also based on the results of the 2012 - 2016 fieldwork campaigns. The high resolution of data, rich dataset, and combination with the archaeological and epigraphic studies makes this a unique study for Safaitic rock art and Arabian rock art in general.

This study takes an archaeological, material approach to the rock art, investigating the content, production, and consumption of rock art. Two, often intertwined, developments in the rock art discourse are central to this and therefore warrant some discussion before I elucidate my approach. The first is the study of rock art in the landscape and the second is the ‘material turn’ in rock art research.

1.3.2. Landscapes of rock art

In his seminal work on the landscape and rock art of Atlantic Europe, Bradley (1997: 213) stated that ‘it is because rock art is such an obvious way of assigning special significance to a place that it is best studied as part of landscape archaeology’. Bradley was one of several scholars who, towards the end of the previous millennium and start of the new, argued for and demonstrated the importance of studying rock art in its spatial context. This development witnessed a number of influential monographs and edited volumes on the topic (e.g. Bradley 1997; Chippindale and Nash 2004a; Nash and Chippindale 2002; Tilley 2004) and the study of landscape has become inextricable from the study of rock art.

While the context of any archaeological material is crucial to its study, rock art is unique due to it being, generally, fixed in place. As such, ‘insecurity in time is compensated for by security in place...This gives a secure starting-point for one theme to rock-art research’ (Chippindale and Nash 2004b: 7). Rock art’s permanence in place means it is possible for the archaeologist to ‘experience’ it in its original setting

(Byrne 2013: 63), to consider how it was once connected to the landscape, and to explore how the landscape might have affected the nature and significance of the ancient images.

Bradley (2002, 2009) has shown that the significance of ‘where’ can also provide insights into the question of ‘who?’. He has argued that examining where in the landscape the rock art was ‘displayed’ can inform us about who the rock art was intended for (Bradley 2009: 45). For open-air rock art sites, one can question what their accessibility is; are they near paths or settlements or are they in hard to reach locations such as on cliffs or in the mountains (Bradley 2009: 46)? It thus entails considering accessibility and visibility of the rock art sites and the rock art itself. Additionally, one can consider how the landscape setting might have influenced how the art was viewed (cf. Morphy, 2010: 284). ‘Rock art is...consumed as a very particular and emplaced form of material culture, influenced not only by a person’s visual knowledge (or lack of) but also all the senses stimulated by its particular locale and setting in the wider landscape’ (Byrne 2013: 63).

In recent years, there has been increasing emphasis on the study of the different scales of landscape at which the rock art might have been meaningful. For example, Chippindale (2004) defines four scales on which we can observe and compare rock art: the millimetre scale (individual peck marks), the centimetre scale (the figures and motifs), the metre scale (the panel and the relationship between figures), and the kilometre scale (the position of the panel in the landscape). Similarly, Gjerde (2010a, 2010b) defines two scales of perception

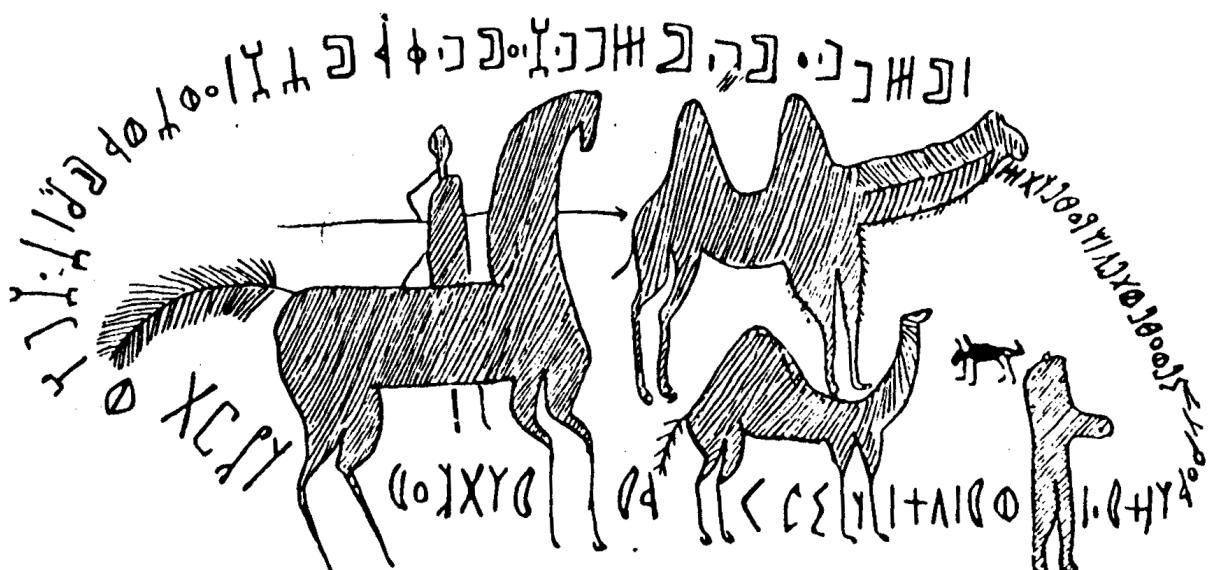


Figure 1.8. A tracing of a Safaitic rock art scene from southern Syria (LP 325). It was discovered and first documented at the beginning of the 20th century. This scene is often reproduced in publications, but, like most reproductions of the rock art, always as a tracing. (Image: Macdonald (1990, fig. 1), original tracing by Littmann (1943)).

of rock art: micro-landscapes, which include the figures, the panel, and the interaction between them, and macro-landscapes, which places the rock art in the wider landscape on site, regional, and interregional level.

While macro-landscapes of rock art have been studied intensively over the past two decades, micro-landscapes (and the connection between the two) are now receiving an increasing amount of attention. Numerous cases from open-air rock art sites in Europe are demonstrating how the surface of the rock panel has been used in the carving to represent elements of the physical environment and enhance the image (Bradley 1997; Gjerde 2010a; Helskog 2004; Nash 2002, 2017). For example, Gjerde (2010a) has shown that, at the site Nämforsen in Sweden, a large boat carving is located on the place on the panel where the water runs after a rainfall and, at the site Leiknes in Norway, two swan figures have been carved above a quartz vein in the rock, as if representing swans sitting on the water. These cases demonstrate how ancient artists sometimes replicated macro-landscapes in the micro-landscape of the rock art (cf. Nash 2002: 192). Investigating rock art at different scales opens up new possibilities to explore the different ways in which the images interacted with and were significant in the landscape. Simultaneously, the advancements that have been made in the use of GIS applications for landscape archaeology allow for the study of rock art on different scales using formal methodologies.

1.3.3. 'Rock' art versus rock 'art'

The investigation of rock art in the landscape is one way in which researchers have been attempting to move beyond a purely iconographic approach to rock art. In the last decade, especially, various scholars have been advocating a shift from the focus on the visual image to a focus on the medium on which the image is portrayed and the relationship between the medium and the image (e.g. Boivin 2008; Fahlander 2013; Lødøen 2010). This shift in focus has been inspired by the material turn in archaeology, which signalled a movement towards the study and understanding of 'the physicality of things', the physical properties and effects of materials and objects (Hicks 2010: 74). In rock art research, this has inspired scholars to recognise and stress the importance of the material – the rock – above or as well as the image – the art. This entails considering the various material affordances of rock, as Fahlander (2012: 100) has illustrated in the case of petroglyphs:

'To begin with, it is a hard material, which means that it takes time to peck images into stone. This implies that images are not randomly scribbled down, but that

the size, depth, level of detail and style are carefully considered. A second aspect is the static nature and immovability of the rock, which together with its material qualities suggests a sense of endurance and promise of eternity. Thirdly, by being a resilient matter it may to a certain extent prohibit intentional or unintentional destruction.'

In this vein, it can thus be argued that the production of rock art is not just the production of an image, but an interaction with the rock. This interaction may have been of great significance, constituting a particular cultural practice, or 'social action' (Cornell and Ling 2010, Lødøen 2010). Some scholars have consequently theorised that the practice of producing carvings may have been as or even more important than the final image itself (e.g. Herva and Ikäheimo 2002, Bradley 2009, Fahlander 2012). The rock can be seen as a fundamental part of this process; it is not just an empty canvas on which art is created, but a meaningful component (Boivin 2008, Lødøen 2010, Nash 2017). This is demonstrated by, for example, the creation of rock art micro-landscapes, like in the example of the boat carving described above.

Studying rock art from this perspective is an aspect of what some researchers have termed a 'non-representational approach' (Back Danielsson *et al.* 2012, Fahlander 2012, 2013). This entails moving away from trying to 'decode' or 'unveil' the meaning of the image (Fahlander 2012, 100). Instead, it places the emphasis, on the one hand, on the meaningful practice of producing rock art (e.g. Lødøen 2010, Fahlander 2012), as outlined above. On the other, it entails considering the effect of images after production; their effect on people and their effect on the production of new images (Back Danielsson *et al.* 2012, Fahlander 2012). This perspective has been influenced by Gell's seminal work *Art and Agency* (1998) in which he regards art as having (secondary) agency, proposing that it is 'as a system of action, intended to change the world rather than encode symbolic propositions about it' (Gell 1998, 6). Gell's theory of agency has since been criticised in varying degrees (e.g. Layton 2003, Morphy 2009) and it has its flaws and contradictions that had Gell lived, various critics agree, he would have revised (Morphy 2009, 5). Regardless, Gell's theory has been influential for rock art research because of his emphasis on the power and effects of imagery (Fahlander 2012, 98). As summed up by Back Danielsson *et al.* (2012, 5): 'The pictorial...can have social implications beyond the intentions and ideas of producer and the consumer in a similar way to that of a certain object... The power of images not only lies in what it might represent or symbolise, but also in the way they interfere and are integrated in social life.'

1.3.4. Approaching rock art

These developments in the rock art discourse have in common that they have endeavoured to steer research away from the traditional iconographic perspective in which the study of rock art focuses on the depictions and their meaning. Instead, they pursue aspects central to the study of other archaeological materials: where is the material found and what are the processes that occurred before, during, and after conception and creation. The importance of the images themselves is not lost in these approaches, but it is recognised that rock art's significance may lie in more than just what it depicts. Similar approaches have been advocated in other disciplines dealing with visual materials, such as art history and visual culture studies. For example, Rose (2007) has proposed a methodology for studying visual culture based on examining the sites where images acquire meaning. Rose (2007: 13) argues that the meaning of an image is made at three sites: 1) the site(s) of production – how an image is made; 2) the site(s) of the image itself – what the image looks like; and 3) the site(s) where the image is seen by various audiences – how the image is seen. Although the material turn in rock art research has seen a shift away from the focus on the image, Rose's methodologies show the importance of also giving this due attention as *one* of the ways in which visual materials gain meaning. Rose (2007: 39) warns that 'visual images do not exist in a vacuum, and looking at them for "what they are" neglects the ways in which they are produced and interpreted through particular social practices'. However, she argues that it is a useful method if combined with other methods that also take these elements into consideration (Rose 2007: 57).

It is interesting to note that the three sites of meaning outlined by Rose (2007) are almost always the same place in the case of rock art. It is one of the few archaeological materials that tend to remain *in situ* and whereby the site of production, the image, and later 'viewing' is the same. For this reason, a tripartite approach is especially well-suited for rock art studies. However, it is noteworthy that few studies have combined the investigation of petroglyphs' or pictographs' content, production, and consumption. Most studies focus on one or two of these aspects. This study instead takes a holistic approach, investigating the content of the Jebel Qurma images and how and where the rock art was produced and consumed. In this way, it is possible to understand the rock art as a form of cultural practice, a way of doing things within a particular cultural context. This recognises that the significance and role of visual materials can be acquired, formed, and altered during different processes, including production, consumption, and the content.

1.3.5. Producing and consuming images

The rock art content forms an important basis for the understanding of ancient petroglyphs. What kind of representations were being produced and why? And what is not depicted? Can we detect the intentions behind their conception? Subsequently, the image forces one to consider what its effect might have been on viewers and whether consumers interacted with particular types of images. The content can thus also play an important role in the processes of production and consumption. Indeed, 'the capacity of human beings to create representations that take into account the ways they will be interpreted and the effect they will have in context is what makes art a powerful resource for action' (Morphy 2010: 283). Exploring content is especially important for understanding rock art corpora that have not been studied thoroughly yet. In the case of the Black Desert rock art, of which little is known, an understanding of the content provides a foundation for further analysis. The content will therefore be investigated through a study of the motifs and scenes that are depicted in the Jebel Qurma rock art. In particular, what selection is visible in what is and is not depicted and how does this relate to the environment and world of the carvers? These questions form the focus of Chapter 4, which follows after a brief overview of the topography, environment, and archaeology of the research area (Chapter 2) and a description of the methodology used in this study (Chapter 3). A list of the rock art motifs, their description, and examples can be found in the identification manual in Appendix C.

Subsequently, investigating the production of the images and their consumption can elucidate how and at which stages the carvings acquired meaning, who made and used the rock art and on which occasions, and how these processes were intertwined with the landscape. Production and consumption can be investigated through their *traces* in the rock art and through the *places* where these processes occurred. The traces of production and consumption are the subject of Chapter 5. The traces of production can be detected in the techniques used and the *chaîne opératoire* of carving. Additionally, it entails a study of the form, or style, of the carvings, which can be seen as linked to the socio-cultural ideas behind the production process (cf. Domingo Sanz 2009). Studying these traces in the rock art can elucidate how and at which stages the carvings acquired meaning and what the purpose of their creation might have been. Additionally, it can provide insights into who made the rock art and on which occasions.

Consumption is a well-researched concept in material culture studies but has not been employed often as a term in rock art research (but see Byrne 2013; Lewis-

Williams 1995). As a broad definition, it is ‘a material social practice involving the *utilization* of objects’ (Dietler 2010: 209, original emphasis). In the study of rock art, the notion of utilisation is complex because the way that rock art is used is dissimilar to many other types of material culture. Rock art can be viewed, modified, superimposed, destroyed, or ignored. In this sense, the term consumption for this process and the term consumers for the people involved are perhaps imperfect. Other studies that have looked at consumption have used the term ‘the audience’ (e.g. Bradley 2002; Bradley 2009; Purcell 2002). However, as is implied by the term, the audience is often studied as passive viewers of the rock art rather than people who may actively engage with the rock art in a wide range of ways. Perhaps, as a result, rock art research has tended to focus on one or more of the aspects of consumption or on the consumers themselves. For this reason, instead, I use the term ‘consumers’ and ‘consumption’ to more fully capture the range of interactions that can occur between people and rock art after it has been created.

The modification of images, superimposition of new images on top of older ones, duplication or purposeful accumulation of figures, or the destruction or effacing of images can all be seen as direct traces of positive or negative interactions with rock art. Additionally, it can be valuable to consider which choices are being made in consumption, i.e. what was not ‘consumed’? (cf. Dietler 2010). Which images were ignored or left alone? Through studying the traces of these interactions, it may be possible to discover who the consumers of the rock art were, how they interacted with the carvings, when people ‘consumed’ the carvings, and what kind of processes the rock art underwent in its meaning and significance during consumption. Although it may not be possible to determine this meaning, it may be possible to understand how, when, and to whom the images were meaningful (cf. Bradley 2009: 47).

Subsequently, studying the places of production and consumption through the rock art’s location in the landscape can provide further insights into these two processes. What does the location in which the carvings were ‘placed’ say about the production process, the intentions behind it, and the people producing them? And what do the locations reveal about who interacted with the rock art and in what way? Examining where in the landscape the rock art was ‘displayed’ can inform us about who the rock art was intended for (Bradley 2009: 45). On the contrary, it can also reveal whether the rock art was actually produced to be seen by others and, if seen by others, how its situation in the landscape could have influenced how the art was viewed. Both production and consumption can be investigated at micro and macro-levels of the landscape. These questions form the focus of Chapter 6. In the final

chapter of this book, Chapter 7, I discuss how, based on the content, production and consumption, we can understand Safaitic rock art as a cultural practice in the nomadic societies that carved it and what this reveals about how the nomads interacted with the desert landscape around them.

1.4. A note on terms and references

This study recognises how problematic the term *rock art* is, as many others have already done (Bradley 1997, Whitley 2001). The word ‘art’ suggests an aesthetic component, akin to the definition of art in the Western world. However, like other scholars, I choose to employ the term *rock art* as a technical term, conscious of its background and limitations (cf. Bradley 1997; Lewis-Williams 2004; Whitley 2001). In this study, *rock art*, *petroglyph(s)*, and *pictorial engravings* will be used interchangeably to denote carved images, while *inscriptions*, *texts*, and *textual engravings* will be used to refer to the carved writings. The terms *engravings* and *carvings* will be used interchangeably to denote images and inscriptions collectively. Furthermore, in this study, I follow the conventional terminology of rock art research as set out by the *International Federation of Rock Art Organisations* (IFRAO) in its glossary (IFRAO 2018), which was created to standardise terminology across disciplines and countries. A list of the main rock art terms used in this dissertation and their definitions can be found in Appendix A.

This book uses the conventional style when referring to Safaitic inscriptions: the siglum of the edition of the inscription and its identification number, for example, WH 1516 (Winnett and Harding 1978, inscription number 1516). The siglum and identification number of the inscription are stated in a footnote and the references for all sigla can be found in Appendix B. All inscriptions were accessed and can be accessed by the reader through *The Online Corpus of the Inscriptions of Ancient North Arabia* (OCIANA).¹ All inscriptions and petroglyphs from Jebel Qurma will be referred to using the siglum ‘QUR-’ and their identification number.

1.5. A note on the figures

All photo credits, unless otherwise stated, are ‘Jebel Qurma Archaeological Landscape Project’. All tracings were made by the author. Each figure caption includes the reference to the identification number of the site and rock panel. All scaled photos include a 5 cm scale bar unless otherwise stated.

¹ <http://krc.orient.ox.ac.uk/ociana/index.php>.