Signposts in the Landscape: Marks and Identity among the Negev Highland Bedouin

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Abstract

Over the course of the past millennia pastoral nomads migrated from the Arabian Peninsula and neighboring regions into the Negev desert. Particularly with the last major wave of Bedouin migration in the 18th and 19th centuries, these groups introduced the "Bedouin Phase" into the Negev rock art, a tradition that was central to the Negev Bedouin culture through the mid-late 20th century. The "Bedouin Phase" is mostly made up of combinations of abstract marks, many of which signify tribal affiliations, and a limited number of Arabic inscriptions. Frequently engraved near earlier motifs, the Bedouin tribal markings formed a link with the past while also indicating to their intended audience, landownership rights and resource-use entitlement. Rapid and broad changes took place in Bedouin society and culture as it transformed from being semi-nomadic and pastoral-based to more dependent on agriculture and finally to a broad-based wage labor economy. The article describes how the placement of rock art within the landscape and the function it played for the Bedouin in the region reflects these changes. In the absence of official documentation, the study of Bedouin rock art is of special interest since these engravings enable a fresh perspective on current-day Bedouin claims to ancestral of historical land ownership rights.

Key words: Negev Bedouin, rock art, wasm, territorial markers, idle graffiti, doodling, cultural change

Introduction

The research presented evolved from a study of Bedouin marks conducted in the course of more general research on Negev rock art. The paper considers the use of the *wasm* (plural *wusum*) tribal insignia within the Bedouin Phase of Negev rock art. Rock art serves as an umbrella term for anthropogenic marks on natural surfaces made with a number of techniques. The term *Rock Art* should not be understood literarily as the marks, even if figurative or representable, were not made as an artistic expression and indeed rock art is created for many diverse purposes. The marks made by the Bedouin fulfilled a specific communicative function within their particular cultural context. The Negev rock art may be roughly divided into five phases (Eisenberg-Degen, Nash and Schmidt 2016:162). The rock art of each phase differs

from that of the others phases mostly in the depicted subject rather than in the applied style. For example, camels were introduced in the third phase and were often pecked/engraved in the fourth phase as well. Ibex, the most popular zoomorph in Negev rock art and possibly throughout the Southern Levant (Avner *et al* 2016), was depicted in several forms in the first phases and later was repeatedly presented in more simplified linear forms. In distinction to the older phases, the Bedouin Phase, consists almost entirely of abstract marks. The paper focuses on these abstract marks by examining their origin and historical function within the Bedouin society and culture and their use and potential meaning today.

The research on Bedouin marks in the Negev rock art is based on archaeological and ethnographic data collected during fieldwork conducted in the Central Negev Highlands, Israel from 2011 to the present. The rock art data are mostly from two sites, Har Michia (Figure 1. no. 2) and Giva't HaKetovot (Figure 1, no. 1) where extensive documentation was carried out on over 6,000 elements (Eisenberg-Degen, 2012). Additional sources of data are from the En Nusra cave in Avdat (Schmidt and Eisenberg-Degen, 2015), Ramat Matred rock art site (Figure 1. no. 3), which is currently being surveyed and documented (Israel Antiquities Authority Survey permit S-642 conducted by Shapira and Eisenberg-Degen), and Mt. Kidod (Israel Antiquities Authority Survey permit S-561). Using superimposition and seriation to identify chronological trends, it is apparent that a high percentage of the abstract motifs found at these sites may be attributed to the Bedouin Phase of Negev rock art (Eisenberg-Degen and Rosen, 2013) and that many of these represent tribal markings, *wusum*. The research suggests that the placement and content of the Bedouin engravings reflect their socio-economic history, particularly regarding the change in the manner that the Bedouin earned their livelihood.

To better comprehend the role, use, and meaning of the various abstract markings within Bedouin culture, in parallel to the archaeological and rock art surveys, the authors conducted local fieldwork by discussing field observations with members of Negev Bedouin communities. These discussions assumed an ethnographic nature with both formal and informal, semi-structured interviews with men (aged 18-70) from the villages adjacent to the rock art sites. These men are citizens of Israel but reside in unauthorized, or 'unrecognized' settlements such as Abu Kaf, and al-Atrash and Wadi Aricha and Abda. The researchers similarly interviewed elder Bedouin men from the al-Azāzmeh and Janabib tribes who live in the remote Ramon region of the Central Negev and whose attitudes and lifestyle yet contain elements of their pastoral-agrarian past. Moreover, the researchers spoke

about rock art with male Bedouin informants who were employed as laborers in archaeological excavations or working on construction sites. Most of these men lived in government approved Bedouin townships in the Northern Negev including Segev Shalom, Kuseife, Hura, Tel Sheva and Rahat.

It should be mentioned that, at present, the female Bedouin outlook on rock art is mostly absent from the data. Women have not been integrated into the archaeological labour force and, in accordance to local Bedouin conventions pertaining to modesty and gender separation, the male ethnographer remained within the realm of his male informants. The female Bedouin perspective on rock art, landscape and territory offer a fascinating comparative topic of research. Even though the responsibility over small herds is usually under the realm of young women, much of the rock art seems to have been made by men. Based on inscriptions engraved in the Arad area (Mt. Kidod site, Judean Hills, Figure 1, no. 4), of 341 inscriptions dated to the last 30 years, only 0.02% included female names. Informants (R. Arayat and S. Al-Sarayia, interview, June 2015) noted that the female names indicate goat herders as it is not customary for females to herd camels. The male names could reflect both goat and camels herd boys or men.

Figure 1. Map of the Negev, Israel with indication of rock art sites mentioned in the article. 1, Giva't HaKetovot. 2, Har Michia. 3, Ramat Matred. 4, Mt. Kidod.

Bedouin presence in the Negev Desert

In the first half of the 18th century, when the Negev formed the southernmost reaches of the Ottoman Empire, Bedouin sub-tribal clans, known in Arabic as *hamail (hamula* in singular), migrated from the Arabian and Sinai peninsulas into the Negev Highlands (Bailey 1985; Kressel 1998; Rosen and Goodfriend 1993; Stewart 1991; 2011). Internal political struggles between the provincial armies of the Ottoman Pashas enabled the Bedouin tribes from Sinai, Jordan and the southern Hejaz to take advantage of a vacuum in local governance and move into the Negev Highlands. The pastoral based Bedouin began supplementing their income with run-off irrigation agriculture (Meir 1997). The runoff irrigation systems had lain abandoned since the Late Byzantine-Early Islamic period (7th century CE). Assisted by *fellaheen* land tenants, migrant agricultural laborers who emigrated from Egypt and Sinai, the Bedouin proved to be apt farmers as well as herders. Despite the harsh semi-arid environmental conditions and the scarcity of natural resources, particularly water, the Bedouin successfully grew and traded wheat, barley, figs, dates and raisin grapes (Ben-David 1989).

During this period the Bedouin led a mostly autonomous existence. Avoiding contact with the Ottoman administration, they abided by their own internal laws, customs and agreements in matters pertaining to the control of water sources, pasture lands, trade and travel routes in and through the Negev. With the land dually employed both for grazing and cultivation, the Negev Bedouin became more attached to the local region, formulating a sense of land-based "territoriality" (Kressel *et al.* 1991; Meir 1997, 73-105). As more Bedouin turned to agriculture as a source of livelihood, they cleared plots, restored ancient cisterns (Meriaot 2011) and dug water reservoirs (Kressel *et al.* 1991). The increased demand for land alongside the rise in trade brought about the need to more clearly define tribal land holdings by dividing them into smaller units (Meir *et al.* 1996). In the late 19th and early 20th century the various Bedouin sub-tribes feuded over control of choice land parcels for agriculture and grazing (Bailey 1978; Marx 1974: 16).

With mounting European political and commercial interests in the Suez Canal, the Ottoman government took measures to regulate Bedouin activities and property holdings (Kressel *et al.* 1991). Central in this process was the enactment of the Ottoman Land Law in 1858 that required the residents of the Negev to formally register their land holdings and pay property taxes to the government. Many Bedouin hesitated to cooperate with these regulatory demands, fearing their compliance would lead to increased taxation and potential conscription into the armed services of the Sultan (Bailey 1990; Grossman 1992, 115; Jakobowska 1992).

Towards the end of the 19th century, after making limited progress with the implementation of the Ottoman Land Law, the Ottoman authorities unilaterally appropriated what they declared to be the 'unclaimed' lands of the Negev Bedouin, terming them *Mewat. Mewat* is a category of state controlled territory located outside inhabited or farmed areas (Stewart 2011). The town of Beer-Sheva was established in 1906 to serve as a judiciary and market centre. That same year, Ottoman legal cartographers drafted a regional map designating the borders and areas of settlement of the Bedouin tribes in the Negev (Kark and Frantzman 2012; Yahel 2006). The map recognized six dominant tribes – *al-Azāzmeh, Ah'eiwat, Tarābīn, Sa'idyin, Tayaha* and *Jabarati.* The map was broadly based on internal

Bedouin land agreements that, until that era, were maintained in parallel or in place of Ottoman registration methods.

The Bedouin sense of territoriality further developed during the British mandate (1920-1948). Encouraged by colonial administrators who dug wells, the Bedouin began to settle in specific areas and took to clearing and restoring ancient wells (Meriaot 2011) and digging new water reservoirs (Kressel *et al.* 1991). The plot boundaries that were established during this period remained largely intact until 1948 when the State of Israel came into being and the Negev underwent a rapid process of nationalization that led to profound socio-demographic and juridical. In the second half of the 20th century, the Bedouin transitioned from being land holding pastoral-agrarians to settled and generally landless working-class urbanites.

In wake of the 1948 war, most of the Negev Bedouin fled from the Israeli held Negev into the neighboring Arab states (Marx 2009, 491). Taking advantage of their departure, the newly-formed Israeli government consolidated its geopolitical dominance over the region by drafting a series of laws intended to offset Bedouin migratory activities. In 1950 the government declared all land south of Beer-Sheva to be stateowned. Between 1952 and 1966, in spite of Bedouin objections, the government further restricted the movement of the Bedouin by directing them to live in administrative reserves (*sayag*) and declaring their land holdings to be State property.

Beginning in 1968 with the founding of the Bedouin town of Tel-Sheva, the Israeli government initiated the relocation of the Bedouin into pre-planned municipalities situated in the outer confines of the Northern and Eastern Beer-Sheva Basin. Nearly half of the Bedouin population refused to relocate to the towns (Marx 2009; Abu-Saad 2008). Instead, representatives from the different hamail remained on tracts of land that, in accordance with their tradition, belonged to them through ancestral inheritance.

In time, the dissenting occupants (estimated today at roughly 110,000) erected settlements on or near their plots. The resulting semi-permanent encampments expanded into villages, townships and small towns many of which are still considered unauthorized by the Israeli authorities. They are therefore "unrecognized" in terms of entitlement to basic government-supported infrastructure and services (Figure 2) (Begin 2013; Rudnitzky 2012). The transition, especially among the Bedouin of the Northern Negev, from being quasi-autonomous desert dwellers to sedentary tax paying citizens, effectively ended many of their customary activities. These included, for the purposes of this paper, semi-nomadic herding and runoff irrigation farming, subsistence patterns that engaged the functional use of rock engravings as a means of communicating family/tribal land ownership rights across a shared landscape.

Figure 2. Illegal/unrecognized Bedouin village near the Tziporim junction in the Negev Highlands (Image: J. Schmidt)

There are more than ten-thousand Bedouin land claims in the Negev. At the heart of the matter is a discrepancy of interpretation over the accepted protocol for imparting land between family and/or hamail members and the subsequent status of its occupiers. The formerly illiterate Bedouin tribespeople adhered to, and continue to employ,oral traditionals and internal recognition of physical markings to define the boundaries of their land parcels. The boundaries of land ownership were usually defined according to objects located in the landscape such as natural markers and/or predetermined man-made signs. This method of communication, through direct application of the landscape, stands in contrast to the complex procedures required in Israel today to register land holdings within the current judiciary and bureaucratic systems.

Without admissible documentary evidence as determined by the Israeli state, the Bedouin land claims have had little-to-no success within the national courts. Bedouins living in unrecognized villages are denied licenses for building any sort of permanent housing. All forms of housing (except for tents) are considered illegal and are subject to heavy fines and demolition proceedings. In some cases entire villages have been destroyed with citizens suffering severe casualties (Abu-Saad 2008). In other instances, the State has exchanged land and money for permanent land agreements with certain Bedouin families (interview with officials from Authority for the Settlement and Development of the Bedouin in the Negev, May/November 2016). Although the Bedouin have lived in the region longer than any of the other local communities, these situations of permanent land agreements are rare.

Landscape, territory and boundaries as perceived by pastoral-agriculturalists

Having briefly discussed the historical and present circumstances involved in the settlement dynamic of the Negev Bedouin, the article now focuses on the landscape of the *Nomadic round*. Culture and economics are interwoven within the societal makeup of a given people. Many aspects of daily life are

reflected through both the material and spiritual realms and life experiences. The distinct manner that a community views the world is symbolically incorporated into their daily tasks and are mirrored within their life-worlds, for example, their accepted systems of political organization, standards of conduct, modes of music, art and communication, ritualized rites of passage, manner of burial and perceptions of space, time, honor and death (Bailey 1982; Galilee, *et al.* 2013:75-56; Turner 1974; Zerubavel 2003). Similarly, the spatial perception of a person, their concept of geography and territory, results from their cultural conditioning (Meir, *et al.* 1996), what in phenomenological terms is known as their *being-in-the-world* (e.g. Merleau-Ponty, 1981), and is a key factor to understanding rock art distribution within a given landscape (Bradley 1994).

The most distinct changes in landscape use and its cultural implications are those noted between nomads and sedentary communities. These differences are particularly notable when semi-nomads are forced to permanently settle. Although most nomadic pastoral peoples possess elaborate systems of property ownership and strong ties to their extensive territories (Gilbert 2007), the Bedouin societies in the Negev were not recognized as defining themselves within the context of their land holdings (Meir 1996). The Bedouin sense of territoriality, that is, their need to 'control' specific areas or dominate particular natural resources seems to have occurred gradually in the negev as a response to changing economic opportunities..

At one time, each tribal unit had a particular *Dira*. Dira may be defined in a number of ways but essentially the dira was the geographic, spatial sphere of Bedouin life. The dira included migration routes, wells and cisterns. Natural resources such as water and pasture lands were perceived as God given and the dira was divided according to drainage basins into lands intended for farming and land for pasture that were accessed, managed and shared at various levels of tribal and subtribal agreements (Yiftachel *et al* 2016). In their present-day sedentary state and in the context of lack of recognition by the Israeli state , the dira system has mostly lost its functional meaning within Bedouin culture.

When the Bedouin of the Negev were primarily pastoralists their perspective of a given territory assumed a social rather than spatial nature. With agriculture becoming more central to their livelihoods, the notion of the dira transformed into a more well-defined domain. Grazing lands were less likely to be considered communal and the status of the tribe as a single entity, began to diminish. As more Bedouin began working in agriculture, the tribal dira was parcelled into plots. The demand for land drove the need to better define property rights, especially in the more arid regions where resources were scarce. By the early-mid 19th c., the dira came to be a spatial designation defined by fixed geographic boundaries. Meir, *et al.* (1996) divides the evolution of the dira into four stages: 1) The dira was roughly the equivalent of the distance from the water source to the summer grazing areas. The wells on route remained under tribal possession; 2) Resulting from both pastoral and agricultural demands on the land, plots were divided among extended families based on watershed patterns and wadi courses. The dira, that was once tribal, came to represent the greater territory of an extended family or a group of hamail, termed *rubah*. New or restored wells and reservoirs became private property; 3) In time, more formal means of land classification and possessing developed including the use of *rujum*, man- made rock piles; 4) This was followed by the construction of structures and facilities that were related to dry farming cultivation, including storage structures for crops and fodder. This period also saw the erection of cemeteries in fixed locations and burial tombs of prominent historical figures.

The location of the cemetery helped establish tribal territory by acting as a physical declaration of ownership and property entitlement (Galilee, *et al.* 2013, 75-76; see the 1975 Western Sahara Case in Gilbert 2007; Rosen *et al.* 2007). Three Bedouin cemeteries set around Be'er Hafir, a well in the western part of the Negev Highlands, demonstrate this pattern. The geographic relationship between the three cemeteries is such that each cemetery defines a precise area of ownership (Kressel *et al.* 2014). Ownership of the cemeteries was transmitted orally and occasionally reinforced by the use of Bedouin tribal *wusum* insignia thay were found engraved on some of the head-stones (see below, Figure 3; Galilee *et al.* 2013)

Figure 3. *Wasm* engraved on the headstone of a grave, Bedouin Cemetery near Ezuz, Negev Highlands (Image: D. Eisenberg-Degen)

Examining cross-cultural patterns, attitudes and behaviour of pastoral nomads in Mediterranean societies, researchers found that some communities alter the landscape. For example, pastoralists may construct corrals, clear pastures or build permanent structures such as fences, cairns, storage facilities excavated wells (Chang and Koster 1986; Schneider 1971), burial structures and rock engravings (Bradley 2009). The Negev Bedouin rarely dug wells instead they refurbished and then maintained existing wells, terraced run-

off irrigation systems, dams and cisterns. These systems remained partially intact from at least the Byzantine era.

Rock art researchers in Jordan (Corbett 2011) and Saudi Arabia (Khan 2000:25) noted that many rock art markings are clustered within close proximity to the drainage points, dry river beds, wells, springs, lakes or seasonal ponds. In the Negev, numerous marks were engraved near cisterns, such as those from the Byzantine township of Rehovot Ba-Negev. These concentrations may be due to the collective land ownership and the manner in which certain individual hamail made use of available resources.

In contrast to pastoralists, whose cosmology reflects the utilization patterns of the resources in a given area, agriculturists use a defined landscape. The agrarian cosmology constructs rather than utilizes preexisting natural elements. Agriculturalists attempt to disconnect the natural features harnessing the natural features of a given landscape to create a secondary or supplemental environment (Ingold 1987:154; 1988:50). To this effect, prehistoric farmers defined territories by enclosing them (Fowler 1983) and clearing specific plots of land (Ingold 1987:153).

In the absence of firm physical borders (e.g., fencing), agro-oriented Bedouin landownership agreements were generally acknowledged in the field by prearranged natural indicators or markers. The most visible of these "landscape anchors" (Meraoit 2011) are the numerous man-made rock piles (*rujum*) that indicate adjoining family plots and other land holdings. These markers were used to define physical borders and were normally employed over relatively short stretches of landscape (Galilee *et al.* 2013). In this context, the rock piles were typically composed of small rocks and set along hilltop ridges, sometimes engraved with a *wasm* (Kressel *et al.* 1991). Other landscape anchors used to denote plot divisions included prominent mountains, ridges and rifts, dry riverbeds, trees and rocks and/or man-made markers and, occasionally, rock art (Meir, *et al.* 1996; Lancaster and Lancaster 2011).

The Bedouin Phase of Negev rock art and Wusum

The Bedouin Phase of Negev rock art is the final phase of the sequence that spans over roughly six millennia. The Bedouin Phase is associated with the most recent influx of tribal groups into the central Negev in the early 18th and 19th centuries (Bailey 1980; Eisenberg-Degen and Rosen 2013). Although some zoomorphs and anthropomorphic elements can be attributed to the Bedouin Phase, the majority of engravings of the Bedouin Phase is non-figurative. The nonrepresentational makeup of the Bedouin Phase

of Negev rock art is apparently rooted in the aniconic nature of their religious belief systems and customs. The official religion of the Negev Bedouin is Islam though they have maintained several pre-Islamic belief systems (Abu-Rabia 2005; Bailey 1982; Boneh, 1987). They possess an informal attitude toward the observance of certain religious practices generally undertaken by devout Muslims. Some Bedouins have claimed that the nomadism itself is incompatible with the life of a truly observant Muslim, as opportunities for schooling, learning the Qur'an and ritual ablution are difficult within their domestic circumstances. While Bedouin religion does not strictly forbid the depiction of figurative iconography, it may be that the aniconic nature of the Bedouin Phase is shaped by the functional role of the marks rather than for their potential for aesthetic or spiritual value.

The Bedouin phase, with repeated engraving of abstract elements, stands in contrast to the pre-existing Negev rock art phases. The preceding phases include motifs such as riders on donkey, horse and camelback, combat and hunting scenes, anthropomorphs with upraised arms, and numerous depictions of ibex. The abstract motifs of the Bedouin Phase likewise differs from the abstract marks incorporated in older engraving phases. For example, Early Islamic inscriptions are at times accompanied by pentagrams and a subdivided square interpreted as a gaming board (Amitai-Preiss 1997; Bell 1969:57; Nevo 1985: 5-9), motifs that are absent from the Bedouin rock art repertoire. The motifs used in the Bedouin Phase are relatively more simplified; mostly composed of single or multiple linear marks.

The rock art sites of Har Michia, Giva't HaKetovot and Ramat Matred contain high volume of engravings from the Bedouin Phase. Over 150 different abstract motif types have been noted (Figures 4 and 5). A comparative study of the abstract marks documented at the three sites found some marks to be site specific (Eisenberg-Degen 2012: 206) and appear to signify the tribal affiliations of the different inhabitants.

Figure 4. Table of Abstract marks from Negev Rock Art Sites.

Figure 5. *Wusum* from the Ezuz Cemetery and the number that these *wusum* were documented at the nearby Giva't HaKetovot rock art site.

The markings may be distinguished according to their complexity level and engraving phase, factors which separate them into two main chronologies (1) Roman-Byzantine period (roughly from the 1st c. BC- mid 7th c. AD (2) the Bedouin Phase, roughly dated to the 19th through the late 20th century. The abstract marks from the Roman-Byzantine period are constructed from more complex forms than those attributed to the Bedouin Phase. The abstract marks from the Roman-Byzantine period, are of a more curvilinear form and are part of a larger petroglyph repertoire that includes anthropomorphs, pack animals, and other zoomorphs. The repertoire of the Bedouin Phase is limited mostly to linear forms.

Merging historical sources with ethnographic data help identify some of the abstract motifs of the Bedouin Phase as *wusum*, tribal insignia. Some *wusum* were recognized as belonging to tribal units that still reside in the region, such as the *Janabib* and *al-Azāzma*. Other, older abstract elements may be markings of tribes who no longer reside in the region such as those documented and traced in Saudi Arabia (Khan 2000:105) and recognized in Upper Egypt (Winkler 1938:11). In the Negev, these marks may represent Bedouin tribes who passed through the area over the past two centuries on their way to and from neighbouring regions, or they may reflect the movement of earlier, ancient tribes who frequented the region during the Roman-Early Islamic periods (Garf 1978; Rubin 1991) or even earlier (Isaac 1992).

Wusum often act as signatures and are used by Bedouin to signify ownership over animate objects, such as to brand camels and other livestock. *Wusum* may be drawn in the sand or constructed from stones or sticks, painted or engraved near or on wells, ruins, existing structures and prominent rock outcropping incorporated into storage bags or more recently, used to decorate tent dividers (Hilden 1991). These symbols were also employed to designate territorial boundaries, sign documents, mark graves and camp sites (Bates 1915; Bent and Bent 1900:369; Conder 1883; Field 1931; Hilden 2010:49-53; Khan 2000; Wendrich 2008). The wusum engraved within the Bedouin phase, served to transmit information to various Bedouin audiences who weren't always present in the field at the same time. The *wusum* related to the usage of natural resources such as pasture lands and watering holes (Wendrich 2008).

Constructed almost entirely from abstract marks, wusum may consist of a single shape or a combination of geometric forms. Each has a name which at times denotes its form such as "hump of a camel", "beak of a flying bird", "pillar", "comb". It is still unclear why these specific shapes, objects and animal parts were chosen to represent their particular tribal units. It may be that the wusum were simply named after familiar objects. At the same time, other marks bear names seemingly unrelated to their form. It seems

that the shape of the Bedouin tribal markings do not contain a particularly deep or significant meaning or are in any way related to mythical tales or historical accounts (Khan 2000, 17-20).

It is still unclear what size group a *wasm* reflects. While visiting the Arabia Peninsula in the beginning of the 20th century, anthropologist van Gennep (1902) wrote that it is uncertain whether the marks he saw were made by tribes, clans, paternal family members or individuals. Dickson (1951), who recorded tribal markings in the early 20th century in Kuwait, found that all the tribes he encountered except `Awazim have:

...dozens and dozens of different brands in accordance with the number of sections and subsections into which they are divided, or the number of shaikhs who think they ought to have their own special distinguishing marks for their camels (1951: 420).

When questioned within the context of our ethnography, most informants said that an individual does not change their *wasm* even when the size of a given group grows to reach several thousand members. One informant explained that to differentiate between ones property and that of another from the same tribe, one would add an additional marking. This may take form, for example, as a cut to the ear or a second branding on a different part of the animal (interview, March 2017). The combination of the two marks narrow the ownership down from the tribal collective to the individual. Yet, as Dickson notes, at times individuals may choose a new mark to serve as their *wasm*. In a different interview a member of the el-Asam family told of a man who decided to change his marking (interview, March 2016). Currently, this man uses a mark that looks like the number 7 as his *wasm* rather than his traditional family mark.

Wusum and idle graffiti as territorial boundary markers

Many of the Bedouin Phase abstract markings are engraved in a simple form, not emphasized in their placement, size or thickness of engraved line suggesting a sort of 'idle' or ' casual' graffiti. By definition, graffiti or doodling is imagery resulting from idle unconscious scribbling (Hodgson 2008:51). Rock art may be identified as idle graffiti based on ethnology (Dematté 2004), imagery, skill (Taçon 2008) and placement of the art within the landscape. Hodgson (2008:51) defines doodling more as "an untidy business with less

attention to the precise location of angles, involving much overlap and disregard for the overall gestalt". According to this description, many of the abstract elements, including the *wusum* from the Bedouin Phase, could be designated as doodling. One may argue that the graffiti engraved by shepherds do not hold any in-depth meanings, although we suggest otherwise.

Shepherds may pass the long hours spent with their flocks by, for instance, spinning wool, carving a piece of wood or bone, playing the flute or idly drawing graffiti in the sand or on nearby rock surfaces. Sandstone and limestone are easily marked with the use of a sharp-edged rock or metal tool. R. Arayat, a young Bedouin working at an archaeological excavation at Mt. Kidod rock art site (March 2015) saw inscriptions scattered around the excavation site and was quick to add his own name. Arayat used a metal tool and scratched his name in Arabic into two rock surfaces. When asked why he did it, he explained that the crack in one rock resembled a letter in his name and therefore he decided to add a few more letters to complete its entire spelling. This took place over a time span of only a few minutes. Limestone that has developed a patina crust is not as easily marked. Likewise, creating a more detailed petroglyph with precise percussion is time-consuming and demands more concentration and physical strength.

Doodling as a past time has been documented among shepherds in Iran (Watson 1979, 203), Mongolia (Demattè 2004) and attested to by several local Bedouin informants. This activity can be carried out throughout the course of the day, especially in the more fertile pasture lands where shepherds may sit for long periods while the flocks graze nearby. Popular rest areas for shepherds in the Negev include ridgetops, preferably with a gently sloping drainage basin running to the wadi below. Rock outcroppings with a dark desert rock varnish or patina, are often found along the plateau and upper parts of the hill slopes, offering rock canvasses to mark. Numerous *wusum* are found on panels placed in such locations and lend them the appearance of being idle graffiti. While some *wusum* may have found their way into the landscape in this fashion, it appears that others were purposefully engraved as signs of ownership.

The recognition of the rock art as so-called idle graffiti in no way renders it meaningless, on the contrary, it lends the markings a context. Although the basic repertoire of this graffiti may be similar to entoptic designs, such as grids, and series of short lines or dots, graffiti also reflects its inscriber (Battles 2004). Doodling reflects an internal state of being, the structuring of the human visual system and/or the current situation incorporating external stimuli (Watson 2008). Thus, the act of engraving might start as a way to

pass the time, yet, over time, the very same markings may develop into a meaningful image (Faulstich 2008) and, in doing so, reflects the cultural setting and origin of the mark maker (Watson 2008).

Many dark-faced, patina covered outcrops bearing marks likely left by Bedouin shepherds are strategically located in the Negev landscape. The vantage points from the panels offer a view of the terrain below including the wadi courses and the adjoining run-off irrigation terraced field systems, some of which are still worked to this day. In such cases, the distribution pattern of the wusum fits both with the seasonal movements of the shepherds and the toiling of the farmers. Hence, the abstract marks seem to be the mixed result of idle graffiti and intentionally engraved ownership marks pertaining to the adjacent fields. Some *wusum* were randomly engraved by Bedouin shepherds, others were intentionally positioned by Bedouin farmers.

As the Bedouin economy came to be based on both forms of production, the farmer and shepherd, may have been the same person, or from the same extended family. Hence, there are several instances in which the specific placement of *wusum* in the landscape suggests ownership or control over a certain wadi courses, sets of terraces, paths or structures. For example, the Giva't HaKetovot rock art site is a small hill situated between two large dry riverbeds. It is easily reached by following a well-travelled path. Two *wusum* are engraved on stones set on either side of this path and thus appear to fulfil a declarative function. Figure 6 present a second example from Giva't HaKetovot where a *wasm* is engraved on a rock placed directly over the ruins of an ancient dwelling. This panel is visible from the hilltop as well as from the lower path which leads to the ruin.

Figure 6. Wasm placed so as to be seen when overlooking an ancient dwelling from Giva't HaKetovot. The wasm consisting of 4 parallel lines, attributed to the Adulam tribe, is engraved on a dark stone at the centre, bottom part of the frame (Image: D. Eisenberg-Degen).

Some wusum at the Ramat Matred rock art site (Figure 1, No. 3) seem to have been intentionally engraved on specific panels which overlook agricultural plots (Figure 7). While the pastoral and/or agricultural setting in which these marks were made, as idle graffiti and/or as premeditated ownership marks remains unclear, the message communicated through the rock art is forthright: "I am present and this is my land". Even if not all of the Bedouin *wusum* were initially intended to be used as signs of land ownership, effectively this is what they turned out to be since, adhering to tribal bylaws, Bedouin shepherds would only graze within their specific tribal pasture lands (or with specific permission to graze in another's lands), where they would engrave their own tribal marking. For the Bedouin, who until recently were predominantly illiterate, strategically placed rock engravings in the form of distinctive *wusum* facilitated communication, by enabling their engravers to express entitlement over territorial resources. Akin to traditional forms of animal branding, tattooing or contemporary graffiti tagging, *wusum* conveyed nuanced "discourse messages" that signified to other Bedouin audiences land entitlement and property ownership (Tobin 1995, 7; Haines 2012; Hilden 1991).

For the traditional Bedouin the *wusum* denote the presence of a given shepherd within a certain field or area. The marks constituted a valid and relevant tool of communication. One informant explained that for the Bedouin familiar with the desert environment, *wusum* act like "signs on a gatepost". That is, *wusum* conveyed the protocols for the use of a specific locality or resource (Interview with I. of the Kashchar tribe, October 2015). Another informant, Muhamad, reiterated this explaining that "*wusum* can be placed on camels, on herds or on anything that belongs to us, our family, although not on people. If a *wasm* is placed near a well, that is a sign for all the other people who come to the well, to know that unless they are watering their horses, [if they want to use more water] they must ask permission from the family in charge" (Interview, April 2014).

Figure 7. Panel with *Wusum* of the Adulam tribe overlooking terraced wadi, Ramat Matred, Negev Highlands (Image: I. Shapira/D. Eisenberg-Degen)

The intended message of engraved markings are rarely straightforward. The frequency with which a mark is engraved and its distribution over the landscape are contributing factors to understanding its meaning. When a message consists of limited information repeated many times, then the message is simpler and easier to decipher. In a like manner, when the rock art repertoire comprises few marks repeated many times, the marks may be identified as an ownership marker (Hartley and Wolley Vawser 1998). A clear example of this is the door-shaped *wasm* of the al-'Azāzma tribal confederation that was documented 102 times within the Har Michia landscape (Eisenberg-Degen 2012, 236) where it was sometimes found engraved several times on a single panel (Figure 8).

Wusum location must be considered when deciphering their intended message. Placement within a panel may also express a bond between members of a social group (Khan 2000, 20). Thus, when

sets of engraved tribal marks are placed adjacent or overlapping with one another, the spatial distribution of tribal marks and their relationship to other marks seems to express the nature of their relationship to one another. That is, two tribal marks engraved at the same site or even on the same stone may express peaceful relations between tribes (van Gennep 1902: Khan 2000:20), or, they may perhaps be used to identify the boundary between two tribal groups. *Wusum* may also be used for self-promotion and provide their signified communities with a psychological edge over its opponents. This notion was indicated by an informant who claimed that sometime "a small tribe can extensively mark large areas in order to appear larger in number than they really are in fact and so be taken more seriously by their rivals" (November 2015).

Figure 8. Panel with *wusum* repeatedly engraved, Har Michia rock art site (Image: D. Eisenberg-Degen).

Despite appearing as random marks, *wusum* are nuanced and not only do they relay a message of ownership, but their placement alongside previous markings suggests an affinity with earlier engravings and markings left behind by previous inhabitants of the region. For this reason, Bedouin engravers appear to have purposefully avoided distorting or superimposing pre-existing images even as the presence of their markings inherently adds new meaning to the original messages contained in the marks. One Bedouin elder told us: "As people who live in desert, we must be careful not to disturb or disrespect what came before us. This rule ensures that the desert remains preserved for the future generations" (Conversation with S. Sadan, February 2016). At present, no categorical distinction may be made between the markings of the shepherd versus that of the farmer, both consisting of the same motifs and signifying affiliation.

Concluding remarks: Interpreting Negev Bedouin tribal markings within a contemporary context

Wusum are deeply ingrained in the rock art traditions of the Negev and other areas of the Middle East, with dozens of types and regional variations appearing throughout its deserts. Some panels feature overlapping *wusum* of different engraving phases, suggesting the presence of several tribes in the region over successive historical periods. Other *wusum* are found side-by-side on rock art panels and are attributed to the Bedouin Phase of Negev rock art. These panels (documented at cemeteries as well as rock art sites) present different *wusum* of the same engraving phase, reflect various tribal communities or sub-tribal units who were present in this part of the Negev over the same time frame. Identifying the

tribes affiliated with the documented *wusum* establishes a connection and a documentary artefact that may offer greater validity to the veracity of Bedouin land claims.

The settling of the Bedouin in the Negev and the shift from a differentiated income source (herding/farming) to a broad-based, urbanized labor economy altered the Bedouin relationship with their traditional material culture and caused a profound loss of ancestral knowledge among subsequent generations. Increased urbanization meant that fewer households owned herds. Thus, the need to establish livestock ownership via animal branding or grazing rights and resource usage through rock art insignia declined. Some of our Bedouin informants, mainly elder tribesmen yet living in the Negev Highlands, were familiar with their tribal *wasm*, (Interviews held in 2014-2016). Though few could remember or recognize the *wusum* of other tribes. There is a high likelihood that this aspect of Bedouin culture may, in the not-too-distant future, altogether disappear.

The advancement of this phenomenon of loss of knowledge is evident in the large Bedouin towns in the vicinity of Beer-Sheva, but it has also taken its toll on the more traditionalized residents of the peripheral and/or unrecognized villages and townships. To the contemporary Bedouin male, faced with ongoing and insoluble challenges in his attempts to secure some means of official settlement with the national authorities, Bedouin folkways rooted to a former era are fast becoming extraneous to his current-life reality. This notion was clarified in the response of a middle-aged informant who resides in an unrecognized village in the remote Negev Highlands. When shown color photographs of some of the *wusum* located in the vicinity of his village he responded: "We've gone through 500 years of advancement in less than 50 years, how do you expect me to remember what [wusum] symbols my great grandfather used to mark his land?" (Interview, August 2015). The study of Bedouin rock art, therefore, particularly aspects of its spatial, social and historical dimensions, offers a unique opportunity to gain insights into the fast vanishing mechanisms of communication and traditional forms of landscape usage formally practiced by Negev Bedouin.

Research into the historical presence of the Bedouin tribes in the Negev is complex as the interpretation of the findings are laden with potential political implications. Until quite recently, the Bedouin were an illiterate society and therefore did not maintain a written history or a unified narrative. The relatively little information available to researchers with regard to the historical presence of the Bedouin in the Negev generally follow the often negative view of the nomad in Western thought. Misguided by western thinking, over the centuries many saw the nomadic populations as barbaric and hostile versus the later civilized agriculturalist. Bedouin were described and referred to either from the administrative perspective or from the perspective of wayfarers, pilgrims and travellers. These include personalized reports of crossing the deserts of what is now southern Israel. These narratives were consistently underscored with threats of being robbed, raped, kidnapped, tortured or murdered by roaming gangs of lawless Bedouin (Burckhardt 1831; Conder 1879, 290; Eisenstein 1926; Hasselquist 1866; Sharon 1975).

Historical data regarding Bedouin daily life prior to their urbanization process is fragmentary. Systematic anthropological study of Negev Bedouin lifestyles and traditions only took firm root in the 1960s with the settling of the Bedouin. Much of this research centred on how Bedouin social, economic and cultural life was adapting to the changes and challenges faced in the new urban settings. An accepted narrative of Bedouin history was pieced together by scholars and combined archaeological data with archival Ottoman, British and Israeli legal documents and the ethnographic documentation of Bedouin oral traditions from the beginning of the 20th century (Abu-Rabi'a 2001; Al-Aref 1937; Bailey 1978, 1980, 1985, 1990; Ben-David 1993; Ben-David and Orion 1998; Marx and Shmueli 1984; Meir 1997; Sharon 1988). A recurring common denominator among these sources is the centrality of land ownership within the culture and lives of the 19th and 20th century pastoral-cultivator Negev Bedouin. Rock art was not considered an especially important feature of Bedouin culture.

The nuanced placement of the Bedouin tribal marks served – and continues to serve as a means of expression among the Bedouin. Similar to the urban graffiti tagging methods, *wusum* announced to non-present audiences the ownership status of a certain geographic setting. The meanings contained in the *wusum* could only be interpreted by 'readers' sharing the same cultural inheritance, social background and living at a given time within the same geographic region. For instance, when speaking with Ahmed, a young Bedouin informant living in Tel Sheva, about which *wusum*, he drew a T shape. Yet, Ahmed was unable to identify to which family or group the *wasm* belonged. After being asked on how he knew it was a *wasm*, Ahmed simply replied that "he just knew it was" (Interview, June 2016). More research can aid in further comprehending the repeated uses of various tribal markings, or the precise length of time each *wasm* was actively used in the region and what factors led them to remain pertinent or lose their

standing. A better understanding of the *wusum* motifs engraved on Negev rocks art panels could have a bearing on Bedouin land ownership claims by helping to establish the presence of a specific tribe in a particular place. Since individual t hamail have been consistently linked to extended family sub-tribal clan confederations, despite their diversity, the body of Bedouin-made marks found within the Negev landscape forms an invariably cohesive semiotic system of signs whose insightful interpretation may provide empirical verification for the contested Bedouin land claims. This research, represents a tentative beginning to further analyses of the relevancy of Bedouin rock engravings within complex current-day socio-political realities and conditions.

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