

# Baking in the Desert: The Potential Personal Quarters or Kitchen at Khirbet Sufaysif, Jordan

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*Salvage excavations at the caravanserai Khirbet Sufaysif in the southern Wadi Araba, Jordan, approximately seven km outside of Petra, revealed an interior room with both internal and external ovens, a U-shaped stone enclosure and a 'bench-like' installation as well as a deliberately sealed door to an adjacent interior room. This paper seeks to present the data recovered and provide a preliminary analysis of the finds, architecture and significance of this area which may have served as a kitchen area or as personal quarters. By exploring this room and its role in the caravanserai, it is possible to begin to understand the vital position which caravan stations held along the major trade road, the Incense Route, between Petra and the Mediterranean coast at Gaza during the Nabataean and Early Roman Periods.\**

Salvage excavations were completed at the caravanserai (caravan station) Khirbet Sufaysif in 2013 under the aegis of The Bir Madhkur Project.<sup>1</sup> The Bir Madhkur Project (BMP) seeks to explore the hinterland of Petra and the southern Wadi Araba to elucidate the complex occupational history of the region with an emphasis on the Nabataean control of the area, from the late fourth century B.C.E., the Roman annexation in 106 C.E. and into the modern era.<sup>2</sup> To achieve this aim, research has centred on excavations at the fourth century C.E. Roman *quadriburgium* Bir Madhkur as well as an extensive pedestrian and aerial survey of the broader area which is currently being conducted to study the landscape and settlement patterns from the Palaeolithic to the modern period. As part of the ongoing study of the southern Wadi Araba, the caravan station at Khirbet Sufaysif was excavated to gain a more comprehensive understanding of the trade networks surrounding Petra and linking the Nabataeans to the markets of the Eastern Mediterranean, as well as to determine the potential occupation phases and time of abandonment for this particular site.

The ‘Incense Route’ passes through the Negev in Israel, with this portion having been placed on the UNESCO World Heritage List, extending into Jordan. This ancient pathway connects the Nabataean capital of Petra, and sites further east, with Gaza on the eastern Mediterranean coast (fig. 1).<sup>3</sup> Khirbet Sufaysif was the first place of refuge, and the last place of rest, outside Petra after having crossed the mountains or wadis and plateaus into the Wadi Musa. Pliny, in his *Natural History* (12.32.64-65), describes this overland route from southern Arabia to Gaza as comprised of “65 stages each with a halt for camels, and at a cost of 688 denarii for a single camel load by the time it reached the Mediterranean ports.”<sup>4</sup> Along this route, valuable goods were transported for centuries on the backs of camels led by experienced traders who were able to navigate the ever changing and always challenging desert pathways and routes.<sup>5</sup> The primary goods, which supply the modern name of the route, were frankincense and myrrh which were highly sought after in the ancient world for religious rituals and perfumes.<sup>6</sup> In

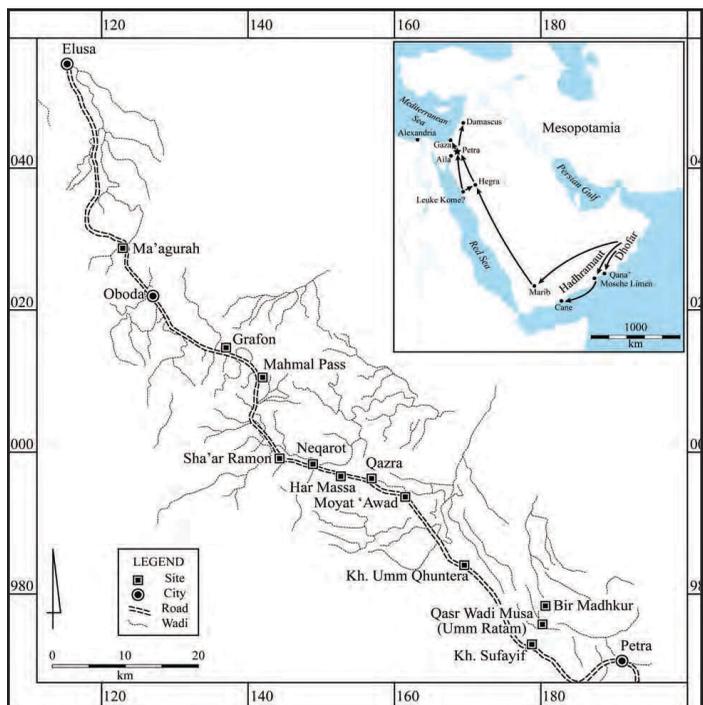


Figure 1: Petra-Gaza Incense Route showing Khirbet Sufaysif. Courtesy of the Israel Antiquities Authority.



Figure 2: Khirbet Sufaysif with room outlined. The southern wall and adjacent wadi are not shown. Courtesy of The Bir Madhkur Project.

addition, along this route traveled spices and other goods produced in the Arabian regions and further east.<sup>7</sup> Control over this valuable network was maintained through a series of caravanserais, fortresses, and towns and diligently administered by the Nabataeans whose kingdom was annexed by the Romans in the early second century C.E. Following the transfer of power, the trade route was continued and expanded upon in order to supply increased demands in the West.<sup>8</sup>

Nabataean caravanserais were constructed using a standardised plan incorporating several essential features including a food preparation and production area, chambers for sleeping and other necessities. At Khirbet Sufaysif, a potential kitchen area or personal quarters was excavated during the 2013 season in its entirety and provides important information about the layout and function of caravanserais in the region. This paper focuses on this single room of the Nabataean and Early Roman caravanserai.

#### Location and Dating of the Site

Khirbet Sufaysif is located approximately seven km NW of Petra on a level plateau overlooking the confluence of Wadi Faysif and Wadi Musa near Jebel et-Tayyiba. The site measures approximately 21 m N-S by 26 m E-W and approximately a third of the eastern side of the complex, ranging from five to ten metres, has eroded into the wadi. Figure 2 shows much of the site though several of the looted areas and the wadi collapse were not able to be included in the image. The entire site and periphery have been extensively looted, including immediately after the excavation season in 2010, shutting down excavations until 2013. During this hiatus, looting ceased and human activity at the site appears to have been minimal. Due to the continuous erosion of the eastern side of the complex, and the extensive nature of clandestine excavations, the site was excavated using rescue techniques in order to recover the maximum amount of information in as short a time as possible while preserving the integrity of the stratigraphy and site.<sup>9</sup>

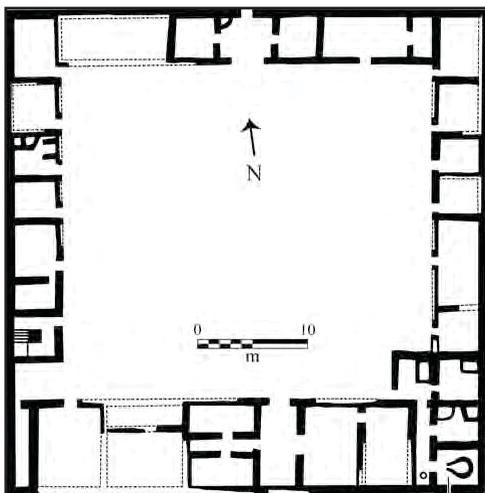


Figure 3: Nabataean caravanserai from Sha'ar Ramon in Israel. Courtesy of Israel Antiquities Authority

The pottery recovered from Khirbet Sufaysif during survey and excavations dates primarily to the Nabataean and Early Roman periods with some Late Roman/Early Byzantine sherds recovered, though the nature of occupation of the complex at this later date remains inconclusive. The Nabataean pottery includes many examples of finely painted Nabataean Fine Ware characteristic of the first century B.C.E. through second century C.E.<sup>10</sup> In addition, there were many sherds of Nabataean coarse wares which share multiple similarities with Early Roman pottery in the Jordan region. The pottery received a preliminary study in the field. Unfortunately, because of the absence of the project ceramicist a detailed analysis has not been completed at this time though is planned prior to the full publication of the site. Once this analysis has been conducted, more information about the pottery assemblage and occupational history of the site will be available.

#### Identification as a Caravanserai

Caravanserais of the Nabataean and Roman periods along the major trade routes in the Near East came in a variety of sizes, though they shared a number of identifying features. Nabataean caravanserais in particular were

rectangular or square in form with a large central courtyard entered through a main gateway. These faced onto the main pathway with a number of rooms around the periphery of the central court (fig. 3). There are four primary features which Yifat Thareani-Sussely has identified as essential to the identification of caravanserais along with several secondary features which help strengthen this designation. The primary features are a close proximity to a trade route, a physical separation from the local populations, the presence of space for sleeping, and food preparation and consumption areas.<sup>11</sup> In addition to these requirements, many caravanserais also had space for sheltering animals, a degree of security provided by a fortified structure or the presence of a garrison, areas for trade and display of merchandise, and a close proximity to a water system.<sup>12</sup> This final feature was essential in the desert environment found in the Wadi Araba and along the Incense Route.

At Khirbet Sufaysif, many of these features have been identified. The trade route, and modern pathway, lies immediately to the west of the site which is presumably also the direction in which the main entry faced though this has not been excavated. The occupation of the region is slowly being elucidated by the pedestrian survey conducted by The Bir Madhkur Project with many sites near the caravanserai being identified in 2013 in addition to those published in 2005.<sup>13</sup> At this time it appears that there were small settlements, including several agricultural features, in the vicinity of the station though no large scale settlement has been recorded in the immediate area. Although no distinctive sleeping areas have been uncovered, the lack of definitive spaces in the excavated areas does not negate the possibility that any of the courtyard rooms, or the courtyard itself, could have been used to house the temporary and perhaps permanent occupants which will only become clear with further excavation. The food preparation and production area, or personal quarters, may have been uncovered in its entirety and this room is the focus of this paper. In addition



Figure 4: The kitchen or private quarters at Khirbet Sufaysif. Courtesy of The Bir Madhkur Project.

to these primary features, space was provided for the accommodation of animals, within the courtyard as shown by the faunal material recovered from the site, which included a significant quantity of equine bones, as well as multiple rooms which could have functioned as areas for resting, trade or the display of merchandise.<sup>14</sup> The site lacks a fortified element though two auxiliary structures, around 6 x 6 m, were found approximately 10 m from the NW and SW corners of the complex alongside the ancient path.<sup>15</sup> The water supply may be represented by a small containment dam located to the south of the site.<sup>16</sup> Using the criteria supplied by Thareani-Sussely,<sup>17</sup> it is clear that Khirbet Sufaysif can be identified as a caravanserai closely resembling the others strung along the Petra-Gaza route and throughout the Near East.

#### The Personal Quarters/Kitchen at Khirbet Sufaysif

Two of the primary features necessary for a caravanserai are the presence of food storage and preparation facilities and areas for lodging. The room excavated at Khirbet Sufaysif measured approximately 6.0 x 3.5 m with a large central room, measuring 3.5 x 3.6 m, as well as an ancillary room, 2.74 x 2.90 m, which had been blocked off in antiquity (fig. 4). The northern wall was the exterior casement wall which was thicker, 0.44 to 1.50 m, than the interior walls which were 0.30 to 0.50 m thick. The walls were composed primarily of two

courses of semi-worked limestone blocks with rubble fill. The room was entered from a two-stone threshold from the courtyard with no door connecting to the adjacent room to the west. The floor of the room was approximately 25 cm lower than the threshold blocks with three flat single stone stairs which became increasingly narrower as they descended. The floor of the room was composed primarily of hard-packed soil which had been heavily plastered in antiquity as evidenced by the large quantity of plaster fragments recovered and still present upon the floor layers. In the western third of the room was found a flat flagstone floor with plaster remaining in between the large stones. The room was built along the northern casement wall and, including the small ancillary room, would have comprised the northeastern corner of the complex.

Several features unique to this room suggest that the room served a particular function in contrast to the other excavated rooms of the complex which had minimal installations and features. Prior to crossing the threshold into the room, to the east, was found a large courtyard oven along the interior wall. Immediately to the west upon entering the room was built another oven which featured two half-ovoid openings with a central stone.<sup>19</sup> On the western side of the room was a flagstone floor on top of which was constructed a U-shaped installation in the southwestern corner. Against the northern wall, opposite the entrance, was a low flat installation composed of large flagstones



Figure 5: The courtyard oven (facing East). Courtesy of The Bir Madhkur Project.

and small flat-faced boulders which extended along much of the northern casement wall and eastern interior wall.

#### *Courtyard Oven*

An oven complex was found in the courtyard, adjacent to the entrance to the room (fig. 5). This feature measures 1.32 m in length, and ranges from 1.39 to 1.64 m in width with a height of 0.47 m, with the interior of the oven approximately 8 cm below the floor of the courtyard. It was composed of large semi-worked stones in two rows, with rubble fill, placed in a U-shape with the northern face being composed of the courtyard wall. The interior faces of the blocks had been worked flat and were blackened by fire. The opening of the oven faced towards the west and was enclosed by a series of three low-lying stones forming an arc around the interior. This western edge aligned directly with the eastern corner of the threshold placing this oven directly adjacent to the opening to the room. The interior faces of these stones had been worked flat and showed a high degree of burning. Within the feature was recovered a large quantity of ash as well as charcoal, animal bones, and a small quantity of cooking wares which showed signs of burning. Immediately outside the oven feature, along the low-lying western edge, was found 7 cm of ash and burnt soil. The placement of this ash layer directly in front of the threshold to

the room suggests that this may have been used after the room, or perhaps complex itself, had been abandoned, or, that little regard was paid for the deposition of the ash.<sup>20</sup> This oven feature, being placed in the publicly accessible courtyard, may have served as the, or one of the, primary cooking areas for the complex. Although its size would likely have been sufficient to produce food for a number of people, it is unclear whether it would have been able to supply the entire population which may have occupied the complex.

#### *Interior Oven*

Within the room itself, along the southern wall adjacent to the threshold and stairs, was uncovered a small oven complex (fig. 6). The installation lay 0.45 m to the east of the U-shaped installation and 0.20 m to the west of the entry and stairs making this the central feature of the room directly across from the 'bench-like' installation. The main opening of the oven was composed of three stones built against the southern wall, forming a U-shape. These stones had their interior faces worked flat and showed a high degree of burning. To the west of these stones, approximately 4 cm away, was found another stone which had been worked flat and severely burnt on one face that also was used for cooking. The reasoning for the two separated burning areas can only be speculated and is currently unclear. The soil

within the oven was found to contain a large quantity of charred cooking pot sherds and small animal bones as well as an abundance of charcoal. This feature may have been used as a ‘personal oven’, if the room is in fact living quarters, or as a small scale production area if the room had been a kitchen during antiquity.

#### *Flagstone Floor*

The flagstone flooring in the western part of the room extended approximately a third of the way into the room and ran along the base of the western interior wall, the northern casement wall and the southern courtyard wall. This area was composed of large flat stones which had been heavily plastered in antiquity as shown by the large quantities of plaster remaining between the stones and recovered from the soil layer above. The construction found in this portion of the room, in contrast to the simple plastered soil floor in the rest, indicates that the area may have served a special function in antiquity. While the functions of

this area cannot be determined at this time, the presence of a flagstone floor in only a portion of the room may indicate that this area served a separate function from the plastered dirt floor.

#### *U-Shaped Installation*

In the southwestern corner was a small installation built on top of the flagstone floor. This installation utilised the courtyard wall as its southern face and was composed of two large upright stones running to the north with a long flat stone which then extended to the west. This formed a deep U-shaped enclosure which extended 0.50 m away from the interior wall with a depth of 0.75 m (fig. 7). The functions of this installation are currently unknown, though storage for perishable foodstuffs or a water supply are possible, as this area would remain cooler and more sheltered than any other part of the room. In addition, the enclosed area would have provided privacy from the threshold and may have been used as a personal storage area, or for other personal

Figure 6 (Below): The interior oven (facing Southeast).  
Courtesy of The Bir Madhkur Project.

Figure 7 (Right): The U-shaped installation.  
Courtesy of The Bir Madhkur Project.





Figure 8: The 'bench-like' installation (facing Northwest). Courtesy of The Bir Madhkur Project.

functions, if the room had served as personal quarters. The presence of this installation on a plastered flagstone floor provides many potential functions to the room though does not aid in identifying it as personal quarters or as a kitchen area.

#### *'Bench-like' Installation*

Along the northern casement wall and the eastern interior wall, nearly to the door of the ancillary room, lay a low and flat 'bench-like' installation measuring 0.30 m high composed of two courses of large worked blocks (fig. 8). The stones along the eastern interior wall were broad and flat and only one stone deep with a depth of 0.20 m. This shallow depth implies a different function for this area of the installation in contrast to the main section. Along the northern wall, the feature was significantly deeper, nearly 1.00 m, with the large stones laid flat, similar to a flagstone floor, with two courses of stones and periphery blocks placed upright along the interior edge. In addition, there was a square worked stone, approximately 0.50 x 0.45 m with a thickness of 0.10 m, which was placed upright against the interior edge in the middle of the northern section and extended above the top surface by 0.10 m. The western edge of the installation abutted the flagstone floor which stopped at

this point and did not continue further into the room. Although the purpose of this installation is unknown, it may have served a variety of functions including as storage, with the deeper northern section employing the upright stone to hold vessels or other goods in place with access from either side, or preparation area or as a resting place.

#### *Ancillary Room*

The ancillary room was blocked off in antiquity with two large stones being placed within the doorway with their flat worked sides facing west into the main room (fig. 9). This doorway, located immediately upon entering the room to the east, shares the same plastered dirt floor as the main room and was the only entrance into this small room which composed the northeastern corner of the complex. The ancillary area, measuring 2.74 x 2.90 m, contained few artifacts or architectural features beyond a plastered floor layer. Of particular interest in this room was the recovery of a small intact beehive-shaped ceramic vessel, measuring 8.55 cm high with a circumference ranging from 4.70 to 7.85 cm, adjacent to fragments of a glass object and two worked stones within the northeastern corner of the room and complex below a portion of wall collapse. The first stone, which was round and

16.0 cm in diameter, was found adjacent to the ceramic vessel at the same level. Slightly lower and 0.15 m to the south, a rectangular stone was recovered with rounded edges, measuring 12.7 x 8.5 cm, with five vertical grooves worked into the stone and four ridges between. The relationship between these stones and the intact vessel is currently unclear. In addition, in the same corner and soil layer, was recovered a severely corroded large bronze coin, which has yet to be read and dated, as well as two fragments of a small bronze object, likely a spoon. Although the ancillary room has been entirely excavated, the reasoning for sealing the door in antiquity and the time frame within which this occurred is currently unclear and will remain so until the numismatic and ceramic evidence has been more intensively studied. The function of this room is uncertain as the nature of the architecture and the artifacts recovered therein are inconclusive. The room may have served as a small storage room for goods or foodstuffs, while serving either as a kitchen or as personal quarters. Alternatively, the room may have been the sleeping area for the occupants of the personal quarters.

The artifact assemblage from the entire room was disappointingly sparse and does not provide substantial amounts of information regarding the usage and occupation history of this room and the site as a whole. Aside from large quantities of Nabataean and Early Roman pottery and faunal bones, there were a total of eleven artifacts recovered, primarily from the ancillary room which have been discussed separately, with only three objects being found in the main room. Within this main area was found a curved bronze fragment near the surface, two small bronze coins corroded together along with a separate corroded iron piece recovered from the layer which exposed both the oven and 'bench-like' installations. The artifacts recovered add little to our understanding of this room though with proper study of the coins and ceramics, a more conclusive date for the usage of the room can be established.

Figure 9: Ancillary room with blocked door (facing North). Courtesy of The Bir Madhkur Project.



### Interpretations

Detailed studies of caravanserais are lacking within Jordan and the Near East with few sites having been excavated and published comprehensively. Two sites, Sha'ar Ramon (42 x 42 m) and Moyat 'Awad (40 x 40 m), both lying within Israel along the Incense Route, are comparable to Khirbet Sufaysif.<sup>21</sup> These sites are significantly larger than the station at Khirbet Sufaysif, with distinctive kitchen and living areas that could be compared and used in a cross-analysis of the sites and their respective roles. By comparing and contrasting these larger stations to Khirbet Sufaysif, it would be possible to draw several conclusions about the function of the site and the role which it played within the caravan trade of the Nabataean and Early Roman world.

#### *The Room as a Kitchen*

The kitchens excavated at Sha'ar Ramon and Moyat 'Awad seem to be similar in size, complexity and installations. The oven at Sha'ar Ramon was built in a U-shape from clay and stones and shows a large degree of burning within the interior. This installation, which nearly filled the room, was built in the eastern section of the complex on a raised platform dating to after Roman annexation in 106 C.E. The size of the oven and the separate room in which it was situated indicates that there was a large demand at the site for providing food not only to travelers but also to support a permanent garrison.<sup>22</sup> The kitchen at Moyat 'Awad has not been studied and published in its entirety with the researchers only stating that "It is identical to the caravanserai constructed in the same period next to the Saharonim Spring on the edge of the Ramon Crater at Sha'ar Ramon."<sup>23</sup> These sites were substantially larger and could have provided travelers with more amenities than stations such as Khirbet Sufaysif and thus were supplied with more substantial kitchen areas.

The caravanserai at Khirbet Sufaysif, and in particular the potential kitchen area, is substantially smaller than the published examples at Moyat 'Awad and Sha'ar Ramon. Due to the close proximity of the site to the markets of Petra, it could be that the complex was a stopping point rather than a large-scale station, where the caravans could acquire supplies of food and water prior to, or after, crossing the hot and almost barren Wadi Araba. In addition, this site could have served to accommodate those travelers who had traversed the Wadi Musa seeking rest for the night prior to venturing up the mountain passes to the plateau of the city. As Khirbet Sufaysif was located approximately seven kilometres away from Petra, a climb which would take several hours with heavily laden camels, the traffic stopping here could have been less than at those sites further along the road and thus the complex was not required to be the same size nor as extensively equipped. There is potential that Khirbet Sufaysif was constructed as a smaller caravanserai due to its close proximity to the major city and that this pattern is repeated along the length of the Incense Route with smaller stations being placed between the larger stations, such as Sha'ar Ramon and Moyat 'Awad, though more comprehensive surveys, excavations and publication of results along this route would be necessary to test this hypothesis.

The different sizes and complexity of the cooking facilities between the caravanserais demonstrates that there was a significant difference in the function of the complexes along the trade route. Sites such as Moyat 'Awad and Sha'ar Ramon, which were more heavily settled and held a permanent garrison/staff, may have been more heavily frequented, and thus required larger and more comprehensive cooking facilities, than those similar to Khirbet Sufaysif with a smaller overall complex and potentially smaller food production areas.<sup>24</sup> The variety of caravanserais along the Incense Route remains unclear due to the lack of sites which have been excavated and published

though the diversity within the architecture, artifact assemblages and occupation histories indicates that a comparative study would be both possible and highly informative.

#### *The Room as Personal Quarters*

As personal quarters, the room would have been well equipped not only with an oven, which could have been used for food production as well as heating, but also a variety of installations and features which could have served multiple purposes. The ancillary room may have been used as an extension of the main area in order either to store goods or perhaps to serve as a sleeping chamber. The presence of a number of coins, the intact ceramic vessel and the two worked stones may support both of these hypotheses for this room and does not provide conclusive evidence. The reasoning behind sealing off the ancillary room may have been a result of changing architectural or social dynamics within the complex that necessitated this action though this may never be determined conclusively. The main area of the room would have provided ample space for sleeping, whether on the 'bench-like' feature, the flagstone flooring or the plastered dirt floor itself as well as areas for cooking and the storage of goods. If this room did in fact serve as personal quarters within the complex, it may have been the chambers of the overseer, or other permanent resident, of the complex with the ancillary room used as the sleeping chambers and the main area being used as the more 'public' area where food production, eating and other activities could have taken place. At Sha'ar Ramon there is also mentioned to be a "commander's quarters" though little else is stated about this important area of the complex.<sup>25</sup>

There is currently no publication of the more private areas of caravanserais within the Near East which would enable a more complete analysis to be conducted. Due to the potential difficulties in identifying these areas, and the differences between permanent quarters, sleeping areas and rest areas being

significantly obscured, these rooms have not received a thorough analysis or publication. Due to these restrictions, it is not possible at this time to compare the potential personal quarters excavated at Khirbet Sufaysif to other examples from caravanserais during the Nabataean and Early Roman periods.

#### Conclusions

The room excavated at Khirbet Sufaysif displays some of the ambiguity found within caravanserais where definite identification of rooms as either public or private, and their precise role within the complex, is not always possible. The lack of definitive ceramic and artifactual evidence from this room furthers this complication and does not provide conclusive evidence either way. The quantities of cooking wares and animal remains are likely more indicative of smaller scale production and consumption, such as may be associated with a personal area with its own oven, though the presence of the larger oven immediately outside the room was almost certainly for more public usage. The presence of the sealed ancillary room, and the reasoning behind its closure, indicate that the complex went through significant changes during its occupation and one such change in this area may have been from public to private or vice versa. Although the positive identification of this room is not possible without further excavation at Khirbet Sufaysif, it does provide important information about the functions and roles of caravanserais in the Near East in particular along the Nabataean and Roman Incense Route.

The presence of caravanserais such as Khirbet Sufaysif as well as those at Moyat 'Awad and Sha'ar Ramon reveals significant details about the trade networks of the Nabataeans and Romans in the Near East. Not only do they clearly indicate where the primary routes were located, but they also demonstrate the methods used in controlling and securing these trade routes. The desire, and perhaps necessity, of constructing large complexes, at times heavily

fortified and supplied, near to significant water sources and roadways demonstrates the fairly strict control which the Nabataeans and their successors sought to impose. The value, quantity and quality of the goods brought through Khirbet Sufaysif and the Wadi Araba can only be speculated, though its close proximity to the Nabataean capital as well as the Red Sea, and the presence of caravanserais stretching along the Incense Route and other desert pathways, indicates that it was substantial enough to necessitate their presence. These complexes were able to provide security, food and water for the camel caravans carrying goods from the Red Sea and, by connection, the Indian Ocean trade network, which were bound for internal consumption and Eastern Mediterranean markets. In addition, as can be shown at Khirbet Sufaysif, they could have provided not only living quarters and cooking areas for the residents of the caravanserai but also quarters for travelers and traders.

The social dynamics within these caravanserais have long been lost from the Incense Route though continued excavations and publication of sites such as Khirbet Sufaysif can provide valuable information for the identification, study and understanding of the functions, roles and history of the caravanserais of the Nabataean and Roman Near East. Without further publication of caravanserais within Jordan and the Near East it is impossible at this time to provide comprehensive information regarding their usages, history and roles. The author hopes that this preliminary publication of the findings at Khirbet Sufaysif, and subsequent publications, will provide a starting point from which to study the caravanserais along the Incense Route and throughout the Near East.

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Endnotes:

- 1 Smith 2005a.
- 2 Corbett 2012, 209.
- 3 Erickson-Gini and Israel 2013, 24.
- 4 Pliny in Graf and Sidebotham 2003, 67.
- 5 Smith 2005b.
- 6 Parker 2002, 59 and Van Beek 1960.
- 7 Graf and Sidebotham 2003; Thorley 1969, 209.
- 8 Cohen 1982, 243.
- 9 The rescue techniques employed on site were designed to increase efficiency and allow the excavators the freedom to conduct several essential tasks on site. Due to the absence of a total station, because of political complications, elevations were conducted using a level and stadia rod. In addition, much of the excavation was conducted by shovel with trowels being used primarily for delicate or thin soil layers and around features and artifacts.
- 10 Further study of the pottery is necessary to determine which specific types are present at the site.
- 11 Thareani-Sussely 2007, 128.
- 12 Thareani-Sussely 2007, 128.
- 13 Several sites of small-scale occupation have been uncovered in the region though the association between these sites and the caravanserai is unclear. Smith 2005a.
- 14 Currently, there is no evidence of craft production having occurred within the complex. The inner courtyard of caravanserai were commonly used to house the camel caravans as discussed by Thareani-Sussely 2007, 127. The faunal material has not been thoroughly studied from the excavations though predominately the bones were those of equines at Khirbet Sufaysif.
- 15 These had been heavily looted with large (roughly) 2.00 x 2.00 m pits having been dug in the centre of the ruins.
- 16 Smith 2014 - personal communication.
- 17 Thareani-Sussely 2007, 126-128.
- 18 The thickness of the wall varies substantially what may be evidence of wall repair, or collapse, within the ancillary room which could have been a factor in the abandonment and closing off of the room.
- 19 There is no evidence that either of the ovens served any type of industrial purpose.
- 20 Although this is unsure, the presence of large quantities of ash within another interior room of the complex, located along the eastern casement, showing that the later occupants of the site did not utilise the rooms as extensively or for the same purposes as they had been used earlier.
- 21 Moyat 'Awad and Sha'ar Ramon: Erickson-Gini and Israel 2013, 28f; Cohen 1982, 244; Meshel and Tsafirir 1975, 14; Dorsey 1991, 217; Frank 1934. The site reports are currently being processed by Tali Erickson-Gini following the death of Rudolph Cohen and are currently unavailable for study.
- 22 Erickson-Gini and Israel 2013, 39.

- 23 Erickson-Gini and Israel 2013, 44.
- 24 Erickson-Gini and Israel 2013, 39. Further study and publication of domestic areas within caravanserais and urban areas will help in expanding upon the interpretations of this room as domestic quarters. Currently excavations at Petra are focusing on the domestic areas as seen in Kolb 2003, 230-237.
- 25 Erickson-Gini and Israel 2013, 41.

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