Aynuna: A Case Study of the Changing Functions of a Hijazi Coastal Settlement from the Nabatean to the Early Islamic Period

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Abstract: A recent study proved that Aynuna has been settled since at least the Hellenistic period and was the major settlement on the Arabian coast of the northern Red Sea in the Nabatean/Roman period, serving as the port of Petra. Scientific literature is mostly concerned with the identification of Aynuna with ancient Leuke Kome, leaving aside the later history of the site. In the late Roman/Byzantine period its significance as a trade centre slowly diminished, although it might have remained a tax collection point. In the early Islamic period, Aynuna served as a local agricultural centre and war port for the Arabian forces conquering the Eastern Desert. Later on, accessibility of fresh water made it a stop on the Egyptian Hajj Route, and antique Aynuna/Leuke Kome finally became Islamic 'Aynūna. This paper aims to present a diachronic analysis of the changing functions of the site using published archaeological reports and Arabic written sources.

Keywords: Arabian Peninsula, Red Sea, Hijaz, Leuke Kome, Iotabe, trade, agriculture, 'long' Late Antiquity, early Islamic period

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Until recently the Arabian coast of the Red Sea has been archaeologically largely unknown. Except for surveys conducted in the 1970s and 1980s, which produced very interesting and valuable data,[1] research on the Egyptian Hajj Route[2] and excavation in Al Qasr, south of Al Wajh complemented with a recent survey of the route between Al Wajh and Al Ula,[3] not a single site has been a subject of regular archaeological research. Compared to numerous excavations on the other side of the Red Sea, in Egypt, Sudan and Eritrea,[4] the Arabian coast remains understudied.

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[1] Ingraham *et al.* 1981: 76–79; Zarins, Zahrani 1985.
[2] al-Ghabban 2011: 182–183.
[3] al-Ghabban 2017; Fiema *et al.* 2020.
[4] Power 2012: 14.
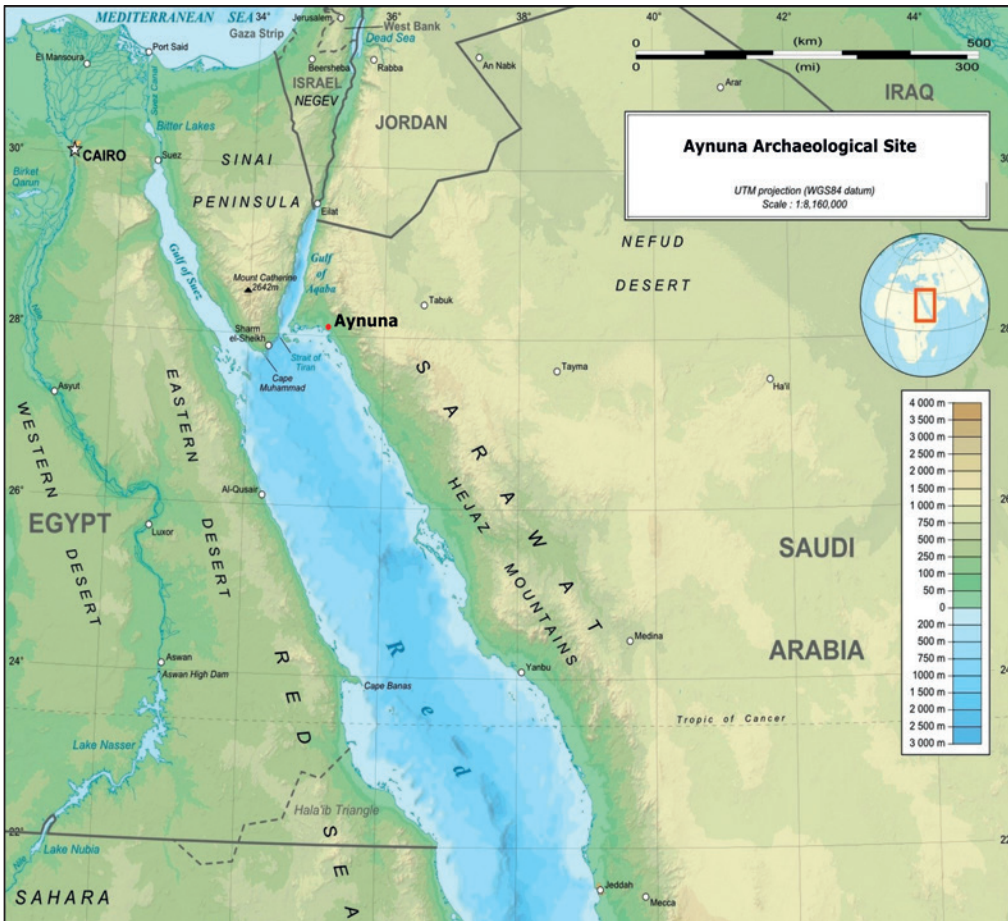
1. Location of Aynuna (elaborating: K. Juchniewicz).

So far, the only site on the coast which has been archaeologically examined is Aynuna (**Figs 1**–**2**). The site was surveyed briefly during the Saudi Arabian Comprehensive Survey Program in the 1980s by a team led by Michael Lloyd Ingraham, who emphasised its importance.[5] Initial topographical investigation conducted in 2014 by the Saudi-Polish team corroborated his observations and prompted further research. Regular archaeological works have been conducted by the Saudi-Polish Archaeological Mission between 2015 and 2018.[6]

In most, if not all, publications related to this site the major research focus has been on the issue of the identification of Aynuna with Leuke Kome and its function as the port for 'India Trade' during the Nabatean and Roman periods. Little has been told about the

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[5] Ingraham *et al.* 1981: 76–79.
[6] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021.

2. Lower Aynuna, aerial photo (Gawlikowski, Juchniewicz, al-Zahrani 2020: Fig. 4).

site during the 'long' Late Antiquity (between the third and ninth centuries CE).[7] This paper aims to fill the gap and propose a new, more complete timeline for the site presenting its functions in the later period. Diachronic analysis of the published archaeological data, as well as Arabic written sources and some results from the ongoing study of the communication routes linking Aynuna with Al Bada', Tabuk, Aqaba, Ruwwafa and Duba, will enable the presentation of the history of the site and its role as a coastal settlement in the transitional period between Antiquity and the Early Caliphate.

AYNUNA ARCHAEOLOGICAL REGION

Aynuna is a cluster of several sites with three major ones among them: Upper Aynuna, Lower Aynuna and Khoraiba, all located along the Wadi Aynuna, which ends in Aynuna Bay (**Fig. 3**).

Upper Aynuna covers the rocky plateau of Jabal al-Safra approximately 3km from the coast. It overlooks the coastal plain and the outlet of Wadi Aynuna, giving a good view

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[7] Cameron 2002.
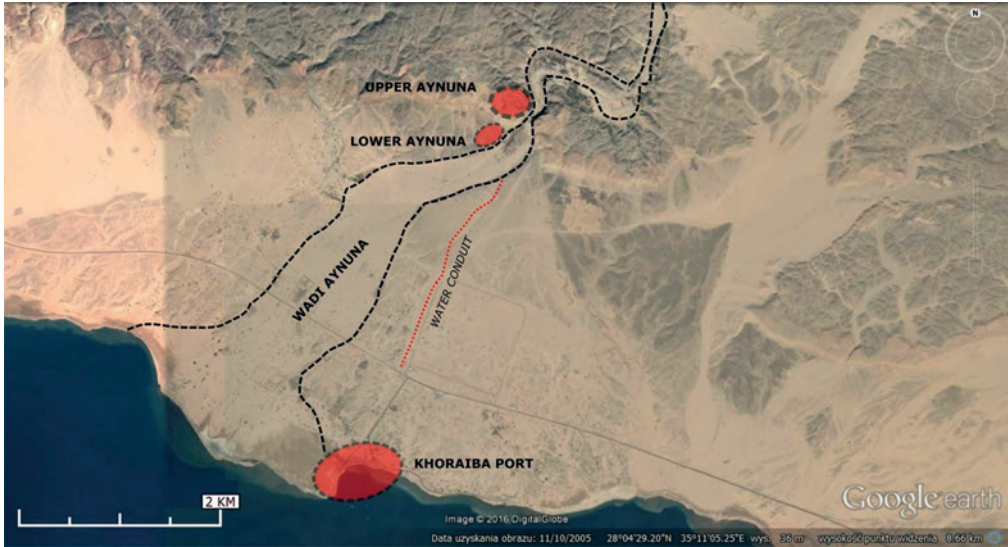
3. Aynuna archaeological cluster (based on: Google Earth; elaborating: K. Juchniewicz).

also at the bay and the sea. The settlement, although naturally protected by the steep slopes and ravines, seems to have an additional fortification system. It covers an area approximately 3ha, with dense buildings, narrow streets, squares and clearly marked districts. Its chronology is not exactly known but the results of the brief survey[8] suggest the same chronology as the better studied Lower Aynuna.

Lower Aynuna is located at the foot of the aforementioned settlement, on the western bank of Wadi Aynuna. Still at a safe distance from the coast, it is however well connected with the port in Khoraiba. The site has been largely excavated by the Saudi-Polish mission.[9] Six separate structures were distinguished on the site of Lower Aynuna (**Fig. 4**), five of which have been tentatively named Khans, as their plans resemble similar constructions known all over the Middle East. These were dedicated to both local and international trade and served as inns for merchants and their stock. The sixth unit has been marked as the Tower.[10]

Since the Khoraiba port is functioning to the present day, any trace of ancient structures is either buried or has been destroyed by modern constructions. There are still some old houses, most probably dated to the beginning of the twentieth century. Surface finds collected by Ingraham in 1981 and Ali al-Ghabban later on points to the Abbasid occupation of the place, which is corroborated by Arabic written sources mentioning Aynuna as important site in the middle of the ninth century CE. Port and inland settlements are linked

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[8] Unpublished report.
[9] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 10–16.
[10] Gawlikowski, Juchniewicz, al-Zahrani 2020: 75; Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 13–16.
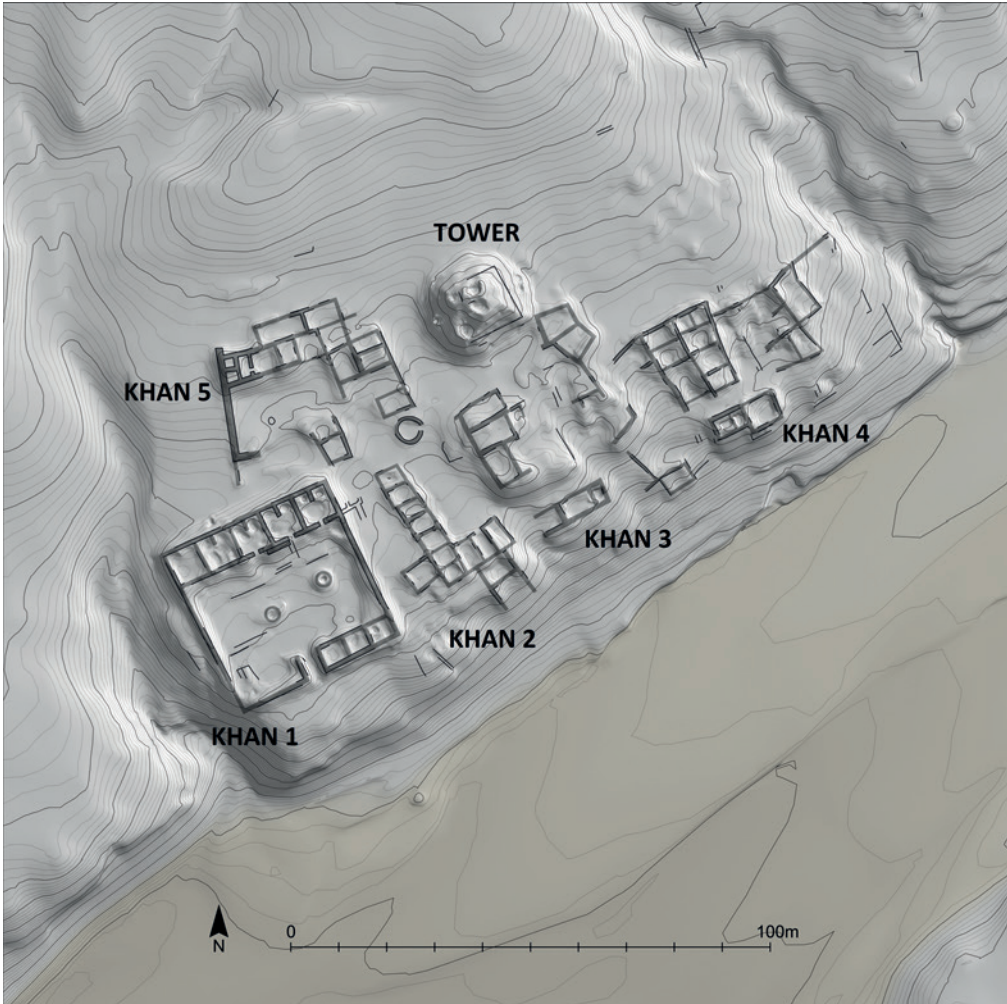
4. Lower Aynuna, plan and topography (Gawlikowski, Juchniewicz, al-Zahrani 2020: Fig. 6).

with a water conduit, which provides fresh water for coastal facilities from a permanent source inside the Wadi Aynuna.[11]

AYNUNA AS A TRADE STATION

Lower Aynuna served as a trade station, *emporion*, and generally it is identified with the place known as Leuke Kome. The foundation for this idea is the Periplus Maris Erythraei, which describes the ancient Leuke Kome as a port of Petra and a custom chamber for trade

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[11] Ingraham *et al.* 1981: 76–79; al-Ghabban 2011: 182–183; Musil 1926: 124.

with South Arabia.[12] Interpretation of the paragraph of the Periplus regarding the location of Leuke Kome is not in the scope of this paper as it is comprehensively discussed elsewhere.[13] Hence, some major arguments for the trade-related function of Lower Aynuna in the Nabatean/Roman period (second century BCE – fourth century CE) will be presented very briefly here.

Topographical, landscape and environmental condition analysis are the basic tools providing arguments for the interpretation of Lower Aynuna as an *emporion* – a trade facility and a place where merchants could store their goods and wait for caravans to carry them further inland, to the markets of Transjordan and Arabia.[14] Regarding environmental conditions, two issues must be pointed out here, as they have a major impact on the interpretation of the site. Aynuna was the last safe point for merchants shipping their goods from the south to the markets of Transjordan and Syria. Prevailing strong winds from the north, as well as generally rough sailing conditions on the northern part of the Red Sea, especially in the Gulf of Aqaba, often rapidly occurring and with strong and long lasting squalls, combined with the lack of safe harbours, made Aynuna Bay truly exceptional.

Topography and landscape makes Aynuna the best spot as an *emporion* because of its direct connection with the markets of Transjordan and northern Arabia. Abundance of fresh water, food supplies and fodder for the beasts of burden was easily accessible in Wadi Aynuna, making it an ideal stop for caravans.

Connection with Petra is granted through Wadi Aynuna and, after reaching Al Bada', through Wadi 'Ifal and Aqaba. The distance between Aynuna and Petra is approximately 300km, which means that a caravan could reach the Nabatean capital after 8–9 days (taking 35km as daily mileage for a loaded beast of burden). A comparison of the time and risk that ancient merchants had to consider while choosing a sea route through the Gulf of Aqaba or caravan track from Aynuna through Wadi Aynuna and Wadi 'Ifal, shows that an inland route is safer and possibly even faster.[15] This route has never been surveyed. However, a recent project carried out by the author and based on analysis of the satellite imagery, may help to understand the links between Aynuna and major sites in the region as well to target areas of special interest for finding possible stops for caravan traffic (**Fig. 5**).

REGIONAL AGRICULTURAL CENTRE

Availability of water from a permanent source located in the valley, relatively good soil for planting palm trees and probably some other crops made Aynuna one of the regional centres of oasis agriculture. Due to its location on the sea coast, it was an attractive regional trading

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[12] Casson 1989: 61–63.

[13] Kirwan 1979; Gatier, Salles 1988: 186–187; Nappo 2010; Durand 2012: 88; Pedersen 2015: 126; Juchniewicz 2017; Gawlikowski 2018; 2019; Fiema *et al.* 2020: 82–83; Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 19–22, Gawlikowski 2022.

[14] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021.

[15] Facey 2004: 7; Juchniewicz 2017: 37.
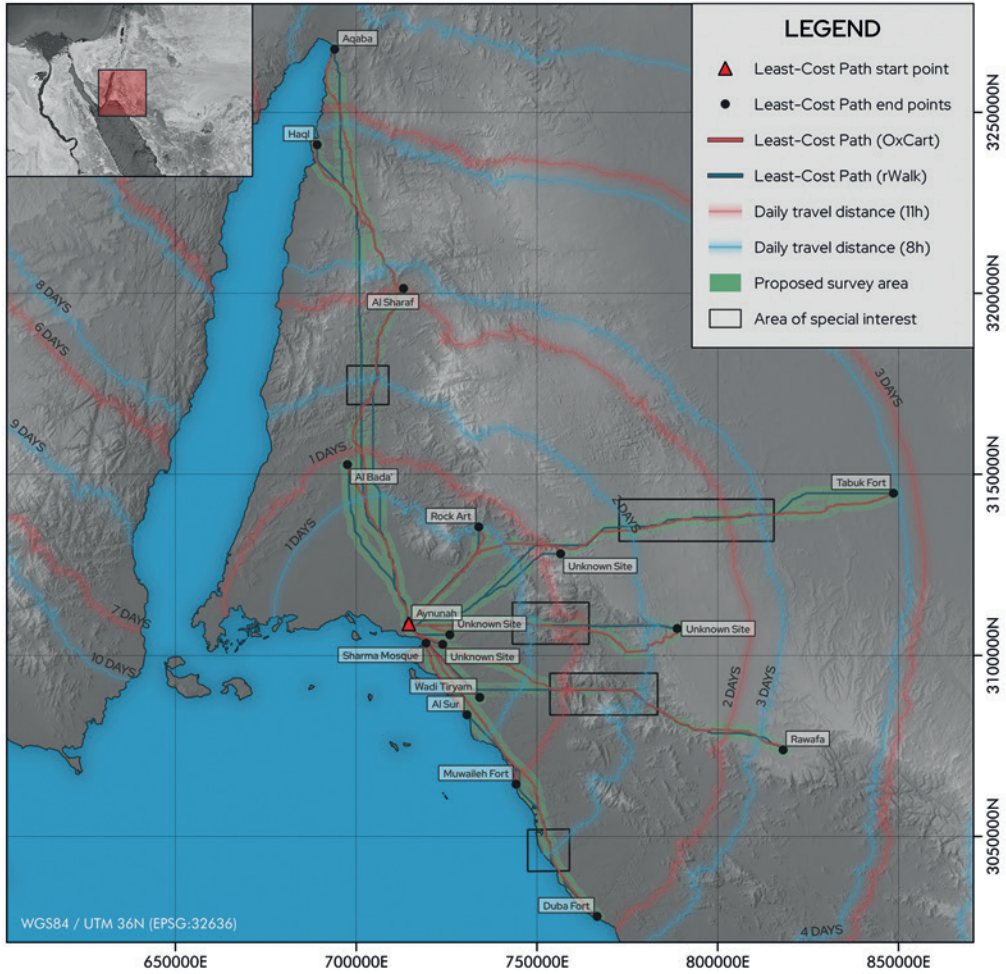
5. Least Cost Path map with possible trade routes linking Aynuna with major settlements in the region, with daily distances and proposed areas for caravan stops (elaborating: K. Juchniewicz, O. Bagi).

hub even without an active international network connecting it with distant markets. That is what happened in Aynuna between the end of the fourth century CE and sixth century CE, when 'Indian Trade' decreased considerably.[16] Some major changes took place at that time or slightly later in the general layout of the urban fabric, so to speak, in Lower Aynuna. The best example of those changes is probably Khan 1 (**Fig. 6**).

Khan 1 is the best preserved structure on the site so far. It measures 37 x 35m. The only gate, opening towards the Wadi Aynuna, leads to a spacious courtyard. The building has eight rooms – three smaller (T.7, T.8, T.19) along the southern wall (east of the gate) and

[16] Power 2012: 56–57.
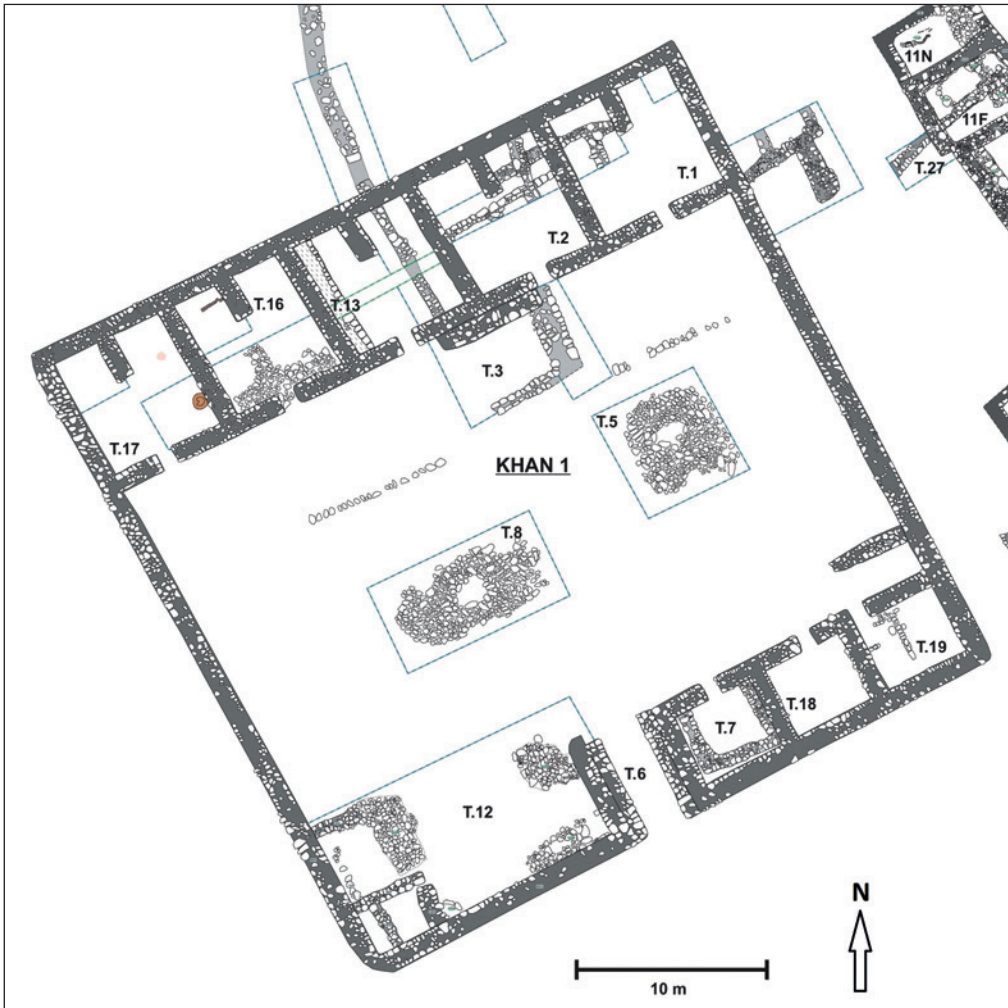
6. Lower Aynuna, Khan 1 (Gawlikowski, Juchniewicz, al-Zahrani 2020: 84, Fig. 2).

five larger ones, along the northern wall (T.1, T.2, T.13, T.16, T.17). The state of preservation of the walls is generally good, up to 1.5m. Internal features are scarce and badly preserved. Every room from the northern row has slightly different internal furnishings, although all of them seem to serve domestic activities. Numerous small hearths, usually located in the SE corner of each room, were connected with some features made of fired bricks, unfortunately highly deteriorated. One room has a stone bench along the western wall, and in another a grinder has been excavated made of very soft material, probably gypsum. On the mud floors in every excavated room a considerable amount of remains of cereals, dates and animal dung (sheep or goat) has been found, usually concentrated in the NE quarter of each room.

In the courtyard a craft area can be recognised, located in its southern quarter (marked as T.12). A number of relatively large fireplaces have been found as well as stone structures also connected with firing, although their exact nature remains unknown. The only element connected with water, a small basin or trough, measuring 2 x 1m, has been found in the northern corner, next to room T.1.

Khan 1 has a very uniform construction. No obvious traces of major repairs or reconstructions has been noted during excavations. Its walls were erected almost without any foundations, except the southern wall, which is deeper and has a clear foundation trench. Only one level of the floor made of mud has been detected and recorded. The complex had been constructed on the intentionally levelled ground using material from collapsed buildings from an earlier phase. All buildings in Lower Aynuna, in any period, were constructed from rough stones bonded with mud. Once they collapsed, the material was locally available.[17]

According to ^{14}C dating retrieved from the foundation trench and from the floor connected to the wall, Khan 1 can be dated to the seventh century. Also, the pottery collection seems to corroborate such a chronology as a vast number of Aila Ware sherds were found.[18] However, this is still under discussion, as the coins found in the fabric of the wall are dated to the reign of Constantius II (337–361 CE).[19]

It seems that the discussed unit represents a completely different building tradition than earlier constructions in Lower Aynuna. Although its plan does not contradict the possibility of being a trade facility, it should be interpreted as a residential compound rather than caravanserai or khan, which seems to be corroborated by the archaeological material. Each room, although similar in plan, had a slightly different set of features. All of them, however, were domestic,

There have been attempts to point out some basic features of a caravanserai. Close proximity to the trade route, physical separation from local populations, the presence of space for sleeping for a number of people, food preparation areas, space for sheltering animals and goods, security provided by fortifications of some sort and accessibility of water should be listed among them.[20] Comparing the plan of Khan 1, with its big open courtyard, a row of rooms of the same size located on the side opposite the entrance, with other constructions of this character in Arabia one can see a clear resemblance to a traditional Arabic household or mansion – *dar*. Arabic *dar* differs slightly from the plan of a caravan inn, although, except maybe for the separation from local populations, all features mentioned above can be easily attributed to any house with a central courtyard, a design common all over the Middle East not only in case of single farms but also in towns. There are some differences, though. A caravanserai or *khan* arrangement of space is dictated by the necessity of housing as many people as possible. A *dar* plan of the building reflects

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[17] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 85.

[18] Unpublished report.

[19] Gawlikowski, Juchniewicz, al-Zahrani 2020: 74–75; Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 449.

[20] Thareani-Sussely 2007: 128.

rather domestic activities with some divisions within a single family or clan.[21] Households in Umm el Jimal are perhaps the best example of *dar*.[22] Looking deeper into the Arabian Peninsula one can find Dawqira, Doqra or el Hamra, built on exactly the same plan as in Khan 1. All of them are dated to the Late Antique/early Islamic period.[23]

Archaeological material found in Khan 1 in Aynuna shows rather clearly that the building was used mainly for domestic activities, housing animals like goats or sheep, storing crops and preparing meals. It cannot be excluded that it was also used as a place for a seasonal market, although this remains in the sphere of conjecture. Perhaps the latter function is preserved in the name that local people have given to the place – al Musaywiq, which means 'little *suq*'.

Another structure which might correspond chronologically with Khan 1 is Khan 4. Two test trenches (T.20 and T.21) did not produce sufficient evidence to support the hypothesis with certainty, however the sequence of layers filling the rooms seems to be similar to the sequence in Khan 1. A major indication might be the burial found in the T.20, which was clearly Muslim. The deceased was put on the floor on his right side with his face towards Mecca and buried under the rubble. It seems that the body was placed on the floor when the room was abandoned but not yet collapsed as no traces of any burial pit was detected.[24] Similar burials were found in Khan 1 in T.18 and T.19, although the burial in T.19 seems to be of later date, after the collapse of the building.[25]

AYNUNA AFTER 'LONG' LATE ANTIQUTY

Lower Aynuna seems to be abandoned at least in the ninth century as the pottery material does not go beyond this date.[26] The settlement, with its toponym, moved towards the sea, where the modern village of Khoraiba is now located. Within the first couple of centuries of the Caliphate the Red Sea became almost entirely controlled by Muslims. There was no point therefore in keeping a safe distance from the shore in fear of pirates.

Our knowledge of this vast period is based on the written sources, as Khoraiba has not been excavated. Except Abbasid pottery on the surface there is no other archaeological data related to this epoch.[27] It seems Aynuna regained its importance. Later Arab geographers usually link Aynuna with the Hajj route,[28] however in the tenth century work of Muqaddasi, Aynuna is listed among the chief towns of the District of Al Sharah together with Moab, Mu'an, Tabuk, Adruh, Wailah and Madyan.[29] Ibn Hauqal, about the same time, gives an

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[21] El-Shorbagy 2010: 18.
[22] De Vries 1990; 2000; Knauf 1984.
[23] Adams *et al.* 1977: 37; al-Mushari 2001; al-Helwah, al-Shaikh, Murad 1982: 45–46.
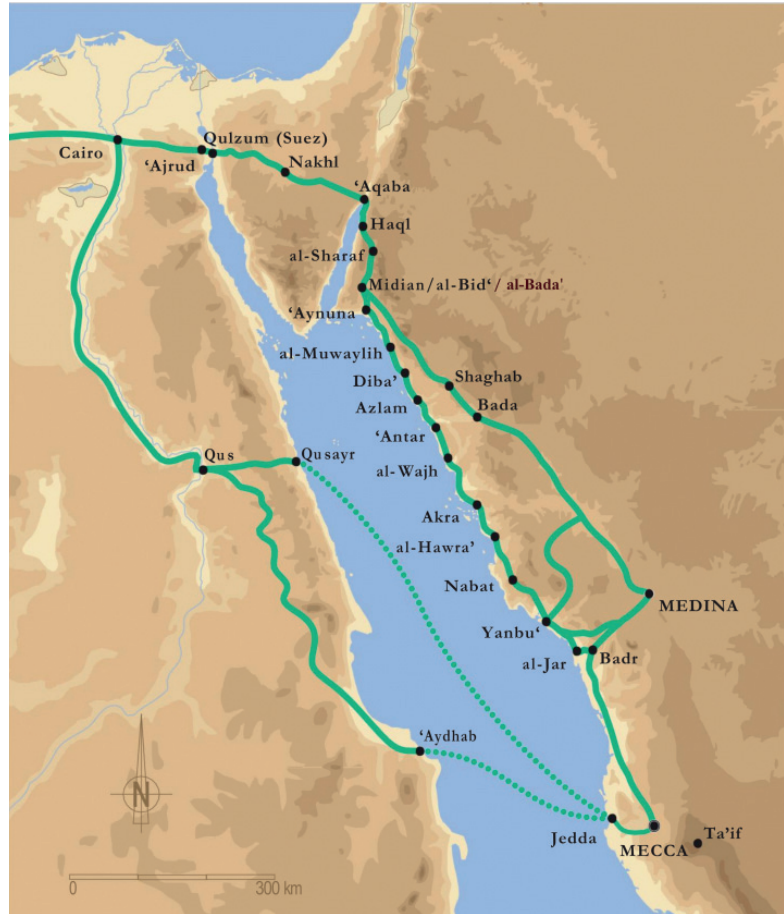[24] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 237–252.
[25] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 114–116.
[26] Unpublished report.
[27] Personal communication with Dr Ali al-Ghabban.
[28] Ya'qubi 1892: 341; Yaqut 1866–1873: 765.
[29] al-Muqaddasi 1906: 47, 53, 70, 86, 98, 104, 113.

7. Egyptian Hajj Route
(André-Salvini *et al*.
2010: 470).

important account from a century earlier. In his book Surat al Ard, Ibn Hauqal tells the story of a freedman of the Caliph Al-Mamun named Ubayd bin Jahm. He was the governor of Aswan, Kom Ombo, Aynuna and Al Hawra. In 847 he launched a campaign against the Beja in the Eastern Desert, embarking his troops in Aynuna and Al Hawra, while Aynuna was supposed to be his seat.[30] The story shows clearly the change of administrative conditions as the northern Tihama and Upper Egypt apparently became one district sometime in the ninth century. It also shows the importance of Aynuna as the troops came back to this port after accomplishing their punitive tasks in the Eastern Desert.[31]

Later on, Muslim geographers list Aynuna only as a stop on the way to Mecca and Medina, along the so-called Egyptian Hajj Route (**Fig. 7**), a place without major significance. To reach the Holy Cities pilgrims from Egypt, Ifriqiyya and Maggrib had to cross the Sinai

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[30] Baadj 2015: 89.
[31] Vantini 1975: 156.
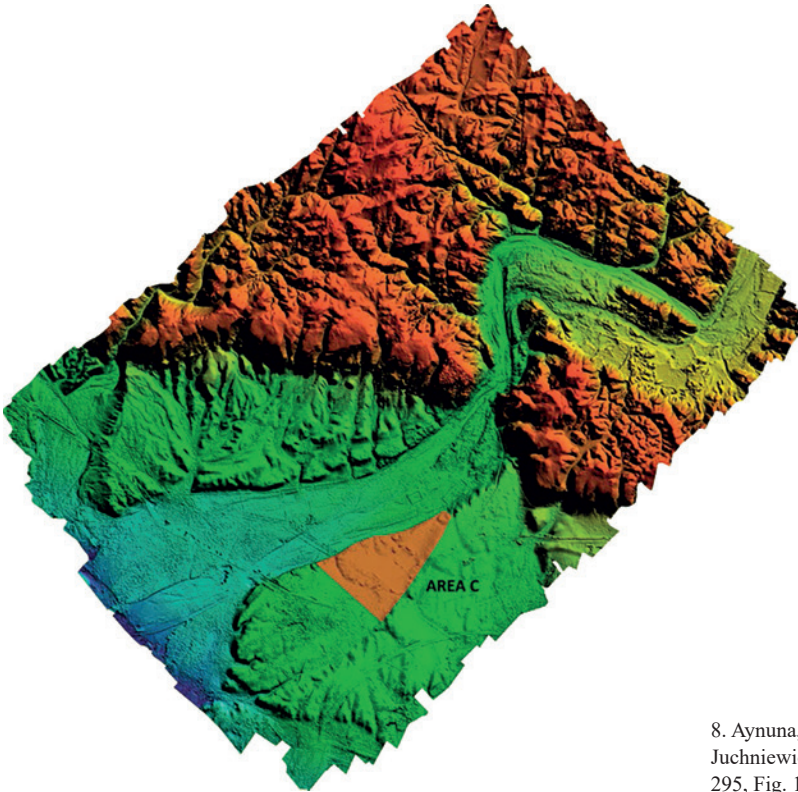
8. Aynuna, Area C (Gawlikowski,
Juchniewicz, al-Zahrani 2020:
295, Fig. 1).

Peninsula to reach Aila (modern Aqaba), the first way-station on the Egyptian road across
the Arabian Peninsula. After Aila, the caravans passed through Haql, al-Sharaf and Midian.
From Midian, there were two possible routes: the inland route via Shaghab and Al Bada',
followed by several way-stations leading to Wadi al-Qura and joining the Damascus route
near Suqiya, or the coastal route along the Red Sea, passing through Aynuna. Later on,
pilgrims could stop in al-Muwaylih, Diba, al-Hawra, Yanbu', al-Jar (the port of Medina),
al-Jahfa, Khulays, Asfan, Badr and Medina before finally reaching Mecca. According
to local tradition, the pilgrimage encampment of Aynuna was located in an area called
Area C (**Fig. 8**), connected with the nearby cemetery.[32]

The Egyptian Hajj Route was in use almost continuously from the early Islamic period
until the Ottoman period with only temporary abandonment in the eleventh century due to
the conflict between Fatimids and Abbasids.[33]

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[32] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 295–296.
[33] André-Salvini *et al*. 2010: 471–472.

CONCLUDING REMARKS

Both the landscape archaeology and archaeological material from the excavations carried out so far in Lower Aynuna, as well as analysis of the text of Periplus, strongly corroborate the general idea of the location of Leuke Kome in the Wadi Aynuna region, namely at the Aynuna archaeological site, although direct proof is still lacking. The discussion is ongoing as the other possible location is in the region of Al Wajh.[34] In this respect the idea of the location of the possible camp of Aelius Gallus on the southern bank of Wadi Aynuna remains very promising and awaits further research.[35]

Whatever the ancient name of the place was, however, it is indisputable that the whole cluster of sites visible in Aynuna was of major importance for the region throughout the period from the second century BCE until the ninth century CE. The chronological span of this cluster is based on the pottery, coins and ^{14}C dates and can be divided into several phases reflecting the changing function of this centre.

The first, between the second century BCE and second century CE is purely hypothetical in terms of its function, and is thereby not covered in detail in the above conducted analysis. The site plays the role of a Nabatean coastal settlement, probably connected with trade or, perhaps, also with piracy in its very early stage. The latter remains a purely hypothetical assumption based on classical sources depicting coastal folks as pirates and brutes scavenging shipwrecks.[36] The occupation of the site in the Nabatean period is confirmed by the collection of coins excavated during the Saudi-Polish project. Of twenty-eight coins, fourteen are Nabatean and twelve among them can be dated to the first century BCE or earlier.[37]

The second phase, in terms of archaeological material, represents a clear continuation of the first, although one must take into account changing political context. In 106, Trajan annexed the Nabatean Kingdom. Thus, between the second century and probably the beginning of the fifth century the place still operated as a transhipment hub and possibly as a custom chamber, although as the Roman port. In terms of trade logistics nothing changed. As before, disembarked goods were loaded onto camels and transported north, to Petra, Bosra and other markets of Transjordan, avoiding the dangerous passage through the Gulf of Aqaba. The architecture of both phases is represented by the remains of Khan 2, Khan 3 and Khan 5. In terms of archaeological examination, these two periods definitely need further study, although the data that emerges from the trenches seems to match the identification of the site with Leuke Kome. The architecture of Khan 2, with its elaborate gate chamber controlling access to the site from the wadi bed and a row of small, possibly

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[34] Fiema *et al.* 2020: 82–83.
[35] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 295–296.
[36] Diod., *Hist.* III, 43.4; Seland 2009: 182.
[37] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 319.

storage rooms, is highly indicative.[38] The function and importance of the place might be exemplified in the Nabatean inscription found between Khan 2 and Khan 3, in the area of a possible gate. The text suggests the construction of the row of rooms by the Nabatean official in the reign of king Aretas IV or one of his successors.[39] 'India Trade' peaked in the fourth and fifth centuries, which is also reflected in the numismatic material collected in Aynuna. The second largest group of coins from the site are the fourth century coins of Constantius II.[40] It seems however, that it was also the last days of glory for Aynuna. Or perhaps not?

The period between the fifth and the beginning of the seventh century is the least represented in the archaeological material from Aynuna, although this might result from the extent of the excavations. If we look carefully into the archaeological data, indications of the destruction events on the site can be noted.[41] Such a downfall might be explained by the overall political instability of the region in this period. Roman presence on the southern fringes of the Empire seemed to shrink.[42] In more or less the same time Aila became the dominant port of North Arabia, together with being the legionary base of *Legio X Fretensis*.[43] Generally, however, it seems that a number of different factors played a role in the changing status of Aynuna. In the late Roman period, especially in the third/fourth century, the overland route became less safe as the region was penetrated by Saracen tribes, possibly an effect of the third century crisis.[44] The imperial interest in the restoration of authority was reflected in deploying new military units along the *Via Nova Traiana*, with the aforementioned legion.[45] South of Aila the political situation became complicated and unstable as it seems it was not controlled by the Roman army anymore. At the same time further development of sailing techniques allowed for more efficient sailing against the wind. A combination of these factors resulted in a situation opposite to the one from earlier periods when the overland route from Aynuna to Transjordan via Wadi 'Ifal was the best option for merchants carrying valuable cargo. By this time crossing the Gulf of Aqaba on the ship was safer.

Shifting trade from overland to sea route may also allow a better understanding of another issue related to Aynuna/Leuke Kome. The status of Leuke Kome as the port of the 'India Trade' was significant for the overall economic system of the Empire because of the custom chamber which operated there.[46] Sometime between the peak of prosperity of Aynuna in the time of Constantius II and the second half of the fifth century

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[38] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 119–182.
[39] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 325.
[40] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 319.
[41] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 176.
[42] Power 2012: 33, 68; Ward 2007: 168.
[43] Parker 2013: 740.
[44] Isaac 1984: 190–201.
[45] Ward 2012: 289.
[46] Casson 1989: 61–63.

the custom chamber was moved to the island called Iotabe somewhere at the entrance to the Gulf of Aqaba. The exact location of Iotabe is still being discussed. Most scholars point to the island of Tiran, which is the largest of the islands at the mouth of the Gulf of Aqaba, thus perfectly positioned to control sea traffic.[47] However, an Israeli survey in the 1950s did not record any ancient buildings on the island nor any traces of occupation of any sort. Michał Gawlikowski rightly suggested that, if located on Tiran, Iotabe could not survive without a supporting settlement on the shore and as such, Aynuna is the best candidate.[48] One could go even further and suggest the location of Iotabe much closer to Aynuna, on the small island of Umm Usayliyyah, in the middle of the Aynuna Bay. There are a number of factors which corroborate such a location, like the separation from the mainland, which provides security but at the same time allows for easy supply with water and food. Also, despite the political changes, Aynuna Bay remained the best safe anchorage with a supply of freshwater in the northern portion of the Red Sea. There was simply no point making an isolated post in Tiran with Aynuna Bay the most natural stop on the way to Aqaba/Aila. The tax collection point could be just moved to some safer place within the vicinity of the former location. That would also explain the later story of the Saracen chieftain Amorkesos, who took the island in 473 and became self-appointed tax collector. It took twenty-five years to re-establish a legal Roman office there. Before that happened, however, Amorkesos was recognised as a *phyllarh* as it was probably the only way to keep some sort of control over this strategic point. Umm Usayliyyah seems to match all requirements to be identified with Iotabe. Last but not least, this is the only island in the region with actual archaeological remains detected, although it is not clear from which period.[49] The author visited the island in 2015. Preliminary inspection of the pottery from the surface might suggest the late Roman period.

The situation changed in the seventh century, when Khan 1 was being constructed in Lower Aynuna. It seems that the function of the site was then different, oriented towards local agricultural and pastoral.[50] Along with the disappearance of old patterns of economic interdependence, new opportunities arose, meeting the needs of the newly born Caliphate.[51] The settlement revival of Lower Aynuna, in the new shape of an agricultural hub, corresponds with the general observation on the development of the countryside and economy based on oasis agriculture in the region.[52] Wadi Aynuna, with its source of water and the hinterland suitable for intensive husbandry based on date palms cultivation, as well as its connection with the sea routes and the proximity of the Egyptian coast, had every advantage to be a production centre and importantly, a local market place. Khan 1 is the main representative of this period in Lower Aynuna. It is very likely, however, that the settlement

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[47] Mayerson 1995: 33–34.
[48] Gawlikowski 2018.
[49] al-Ghabban 2017: 46–47.
[50] Gawlikowski, Juchniewicz, al-Zahrani (Eds) 2021: 19.
[51] Walmsley 2000: 265; 2007: 321, 351–352.
[52] Avni 1996; Haiman 1995a; 1995b; Magness 2003: 4–5.

of the seventh/eight century was as large as its predecessor. Khan 4 seems to share the character of stratigraphy with Khan 1. The Tower, which is the least known structure on the site, might reflect the typical Arab settlement pattern – houses or compounds clustered around a fortified tower, *utum*.[53]

Sometime between the eighth and ninth centuries CE Aynuna shifted from the inland settlement towards the sea. From then on the history of the place is known only from written sources as the coastal village of Khoraiba has never been surveyed nor archaeologically examined. It seems that in the ninth and tenth centuries CE Aynuna regained its importance as a port and became a seat of a wealthy noble. After the tenth century CE Aynuna gradually lost its position and became a stop on the Egyptian Hajj Route. The process, however, remains vague and awaits further research.

To sum up, the transition from the pre-Islamic settlement, possibly identifiable with Leuke Kome, to an early Islamic 'Aynūna seems to be well reflected in the architecture of Lower Aynuna: the function of the site shifted from international trade station and tax collection point and regional production centre, eventually into a humble stop along the Egyptian Hajj Route.

Acknowledgements

Primary Sources

al-Muqaddasi 1906: *Ahsan al-taqasim fi ma'rifat al-aqalim*, Descriptio imperii Moslemici / auctore Schamso 'd-din Abu Abdollah Mohammed ibn Ahmed ibn abi Bekr al-Banna al-Basschari al-Mokaddasi, Ed. De Goeje, M.J, *BGArab* I-3, Leiden 2014

Ya'qubi 1892: *Kitab al-Alaq al-nafisa* / tasnif Abi Ali Ahmad b. Umar b. Rusta. *Kitab al-buldan* / tasnif Ahmad b. Abi Yaqub b. Wadih al-Katib al-maruf bi-al-Yaqubi, *BGArab* I-7, Leiden 2014

Yaqut 1866–1873: *Muʾjam al–buldāan*. Jacut's geographisches Wörterbuch aus den Handschriften zu Berlin, St. Petersburg und Paris, Yaqut al-Rumi al-Hamawi, Ed. Wüstenfeld, F., Leipzig 1866–1873

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[53] Whitcomb 1996: 42–44; King 1994.

References

Adams, R.McC., Parr, P.J., Ibrahim, M., al-Mughannum, A.S. 1977: Saudi Arabian Archaeological Reconnaissance 1976. The Preliminary Report on the First Phase of the Comprehensive Archaeological Survey Program, *Atlal* 1, 21–40

al-Ghabban, A.I. 2011: Les deux routes syrienne et égyptienne de pèlerinage au nord-ouest de l'Arabie Saoudite, *TAEI* 44, Le Caire

al-Ghabban, A. 2017: Akra Kome, Loki Komi, and Amblone. Historical Ports on the Red Sea of Saudi Arabia (Achieving their Location in Light of the Results of Archaeological Research), Riyadh

al-Helwah, S., al-Shaikh, A.A., Murad, A.S. 1982: Preliminary Report on the Sixth Phase of the Darb Zubaydah Reconnaissance 1981 (1401), *Atlal* 6, 39–62

al-Mushari, S.M. 2001: Report on the Site of Doukara, *Atlal* 16, 89–90

André-Salvini, B., Juvin, C., Demange, F., al-Ghabban, A., Cotty, M. 2010: Roads of Arabia. Archaeology and History of the Kingdom of Saudi Arabia, Paris

Avni, G. 1996: Nomads, Farmers, and Town-Dwellers: Pastoralist-Sedentist Interaction in the Negev Highlands, Sixth-Eighth Centuries CE, Jerusalem

Baadj, A.S. 2015: Saladin, the Almohads and the Banū Ghāniya. The Contest for North Africa (12th and 13th Centuries), *Studies in the History and Society of the Maghrib* 7, Boston

Cameron, A. 2002: The 'long' late antiquity: a late twentieth-century model, [*in*:] Wiseman, T.P. (Ed.), Classics in Progress: Essays on Ancient Greece and Rome, Oxford, 165–191

Casson, L. 1989: The Periplus Maris Erythraei: Text with Introduction, Translation, and Commentary, Princeton, NJ

De Vries, B. 1990: Umm el-Jimal, Amman

De Vries, B. 2000: Continuity and Change in the Urban Character of the Southern Hauran from the 5th to the 9th Century: The Archaeological Evidence at Umm Al-Jimal, *MeditArch* 13, 39–45

Durand, C. 2012: Crossing the Red Sea: The Nabataeans in the Egyptian Eastern Desert, [*in*:] Agius, D.A., Cooper, J.P., Trakadas, A., Zazzaro, Ch. (Eds), Navigated Spaces, Connected Places. Proceedings of Red Sea Project V Held at the University of Exeter 16–19 September 2010, *BAR-IS* 2346, Oxford, 85–90

El-Shorbagy, A. 2010: Traditional Islamic-Arab House: Vocabulary and Syntax, *International Journal of Civil & Environmental Engineering* 10/4, 15–20

Facey, W. 2004: The Red Sea: the wind regime and location of ports, [*in*:] Lunde, P., Porter, A. (Eds), Trade and Travel in the Red Sea Region: proceedings of Red Sea Project I held in the British Museum, October 2002, *BAR-IS* 1269, Oxford, 7–17

Fiema, Z.T., al-Qanoor, N.A., Durand, C., Kennedy, W., Abu Hassan, B., al-Dayel, I., al-Faqeer, M. 2020: The 2016 Season of The Al-Wajh – Al-ʿUla Survey Project: Preliminary Report, *Atlal* 29, 81–111

Gatier, P.-L., Salles, J.-F. 1988: Aux frontières méridionales du domaine nabatéen, [*in*:] Salles, J.-F. (Ed.), L'Arabie et ses mers bordières. I. Itinéraires et voisinages. Séminaire de recherche 1985–1986, *TMO* 16, Lyon, 173–190

Gawlikowski, M. 2018: A Nabataean Trading Station in the Northern Hijaz, *ARAM-Period.* 30/1–2, 395–402

Gawlikowski, M. 2019: Looking for Leuke Kome, [*in*:] Manzo, A., Zazzaro, Ch., De Falco, D.J. (Eds), Stories of Globalisation. The Red Sea and the Persian Gulf from Late Prehistory to Early Modernity, *Selected Papers of Red Sea Project* VII, Leiden-Boston, 281–291

Gawlikowski, M., Juchniewicz, K., al-Zahrani, A. 2020: The Saudi-Polish Excavations at Aynuna, a Nabataean Port on the Red Sea, *Atlal* 29, 66–77

Gawlikowski, M., Juchniewicz, K., al-Zahrani, A. (Eds) 2021: Aynuna. A Nabataean Port on the Red Sea. Seven Seasons of Saudi-Polish Excavations (2014–2018), Warsaw-Riyadh

Gawlikowski, M. 2022: Les Nabatéens à Aynouna sur la mer Rouge, [*in*:] Durand, C., Marchand, J., Redon, B., Schneider, P. (Eds), Networked Spaces. The Spatiality of Networks in the Red Sea and Western Indian Ocean, *Archéologie(s)* 8, Lyon, 97–106

Haiman, M. 1995a: Agriculture and Nomad-State Relations in the Negev Desert in the Byzantine and Early Islamic Periods, *BASOR* 297, 29–53

Haiman, M. 1995b: An Early Islamic Period Farm at Nahal Mitnan in the Negev Highlands, *'Atiqot* 26, 1–13

Ingraham, M., Johnson, T., Rihani, B., Shatta, I. 1981: Preliminary Report on a Reconnaissance Survey of the Northwestern Province, *Atlal* 5, 59–84

Isaac, B. 1984: Bandits in Judaea and Arabia, *HSCP* 88, 171–203

Juchniewicz, K. 2017: The port of Aynuna in pre-Islamic period: nautical and topographical considerations on the location of Leuke Kome, *PAM* 26/2, 31–42

King, G.R.D. 1994: Settlement in western and central Arabia and the Gulf in the sixth–eighth centuries A.D., [*in*:] King, G., Cameron, A. (Eds), The Byzantine and Early Islamic Near East. Volume 2: Land Use and Settlement Patterns, Princeton, 181–212

Kirwan, L. 1979: Where to Search for the Ancient Port of Leuke Kome, [*in*:] Abdalla, A.M. (Ed.), Pre-Islamic Arabia. Proceedings of the Second International Symposium on Studies in the History of Arabia, Riyadh, 55–61

Knauf, E.A. 1984: Umm al-Jimāl: An Arab Town in Late Antiquity, *RevBibl* 91, 578–586

Magness, J. 2003: The Archaeology of the Early Islamic Settlement in Palestine, Winona Lake

Mayerson, Ph. 1995: A Note on Iotabê and Several Other Islands in the Red Sea, *BASOR* 298, 33–35

Musil, A. 1926: The Northern Ḥĕǧaz. A Topographical Itinerary, New York

Nappo, D. 2010: On the location of Leuke Kome, *JRA* 23, 335–348

Parker, S.T. 2013: The Roman port of Ayla and its economic hinterland, [*in*:] Hadidi, A. (Ed.), *Studies in the History and Archaeology of Jordan* XI, Amman, 735–743

Pedersen, R.K. 2015: A Preliminary Report on a Coastal and Underwater Survey in the Area of Jeddah, Saudi Arabia, *AJA* 119/1, 125–136

Power, T. 2012: The Red Sea from Byzantium to the Caliphate AD 500–1000, Cairo-New York

Seland, E.H. 2009: Shipwreck, Maroons and Monsters: The Hazards of Ancient Red Sea Navigation, [*in*:] Blue, L., Cooper, J., Thomas, R., Whitewright, J. (Eds), Connected Hinterlands. Proceedings of Red Sea Project IV Held at the University of Southampton, September 2008, *BAR-IS* 2052, Oxford, 179–185

Thareani-Sussely, Y. 2007: Ancient Caravanserais: An Archaeological View from 'Aroer, *Levant* 39, 123–141

Vantini, G. 1975: Oriental Sources Concerning Nubia, Heidelberg-Warsaw

Walmsley, A. 2000: Production, Exchange and Regional Trade in the Islamic East Mediterranean: Old Structures, New Systems?, [*in*:] Hansen, I.L., Wickham, Ch. (Eds), The Long Eighth Century. Production, Distribution and Demand, Leiden-Boston-Köln, 265–343

Walmsley, A. 2007: Economic Developments and the Nature of Settlement in the Towns and Countryside of Syria-Palestine, ca. 565–800, *DOP* 61, 319–352

Ward, W. 2007: Aila and Clysma: The Rise of Northern Ports in the Red Sea in Late Antiquity, [*in*:] Starkey, J., Starkey, P., Wilkinson, T. (Eds), Natural Resources and Cultural Connections of the Red Sea, *BAR-IS* 1661, Oxford, 161–171

Ward, W.D. 2012: 'In the Province Recently Called Palestine Salutaris': Provincial Changes in Palestine and Arabia in the Late Third and Fourth Centuries C.E., *ZPE* 181, 289–302

Whitcomb, D. 1996: Urbanism in Arabia, *Arabian Archaeology and Epigraphy* 7, 38–51

Zarins, J., Zahrani, A. 1985: Recent Archaeological Investigations in the Southern Tihama Plain (The Sites of Athar and Sihi, 1404/1984), *Atlal* 9, 65–107

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