

To Hegra through al-Qusayr. The al-‘Ulā–al-Wajh Survey Project



Abstract: The al-‘Ulā–al-Wajh Survey Project deals with ancient trade routes between al-‘Ulā and Madā’in ‘Šāliḥ (ancient Hegra) and the Red Sea in the area of al-Wajh in northwestern Saudi Arabia. This investigation is related to economics of long-distance maritime and caravan trade and the utilization of the "Incense Route" which served to convey frankincense and other commodities from South Arabia to the Mediterranean during the Hellenistic and Roman periods. The Project is also concerned with the localization of Nabataean seaports on the Red Sea coast, such as Leuke Kome and Egra Kome. The results of two fieldwork seasons are presented including a potential caravan route to Hegra along the Wādī al-Ḥamḍ. The site of Nabataean al-Qusayr is highlighted here as the finds from there indicate a participation in the long-distance trade between the Mediterranean, Egypt and the Red Sea region.

Keywords: Ula–al-Wajh Survey Project, Hegra, al-Qusayr

The following text presents some preliminary results of the al-‘Ulā–al-Wajh Survey Project (UWSP), following the first two fieldwork seasons (2013 and 2016). This Saudi–Finnish project is directed by Zbigniew T. Fiema, approved by the Saudi Commission for Tourism and National Heritage (SCTH), and it is affiliated with the Finnish Institute in the Middle East. The UWSP investigates potential ancient trade and communication routes and associated archaeological sites between the ancient settlements of al-‘Ulā and Madā’in Šāliḥ (ancient Hegra; 26° 36' 41.38" N; 37° 55' 25.44" E) and the Red Sea littoral

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in the area between al-Wajh ($26^{\circ} 13' 42.06''$ N; $36^{\circ} 28' 08.25''$ E) and the Cape of Kurkumah (Ras al-Jurayjib) [Fig. 1]. A related issue, also investigated by the Project,

is the localization of Leuke Kome and Egra Kome, two Nabataean seaports on the Red Sea coast mentioned in ancient sources.

HISTORICAL BACKGROUND

While the UWSP fieldwork is spatially modest, it delves into a larger, complex phenomenon, i.e., the trade between the Mediterranean, the incense-growing areas of South Arabia, and the Indian Ocean region, which reached its peak between the 1st century BCE and the 1st century CE [Fig. 2]. By that time, Hegra (modern Madā'in Šālih), located on the Incense Route, had become the major Nabataean political and commercial center in the south. Despite the Roman annexation of

Nabataea in 106, there is no indication that the Arabian long-distance trade in aromatics had ceased; at least not until the 3rd century (Fiema 2003). But the overland trade faced a competition from the faster and cheaper Red Sea traffic through the Egyptian seaports, such as Myos Hormos (Quseir al-Qadim) and Berenike (Arab Saleh).

Sources mention two relevant Nabataean localities on the eastern coast: Leuke Kome and Egra Kome. Narrating

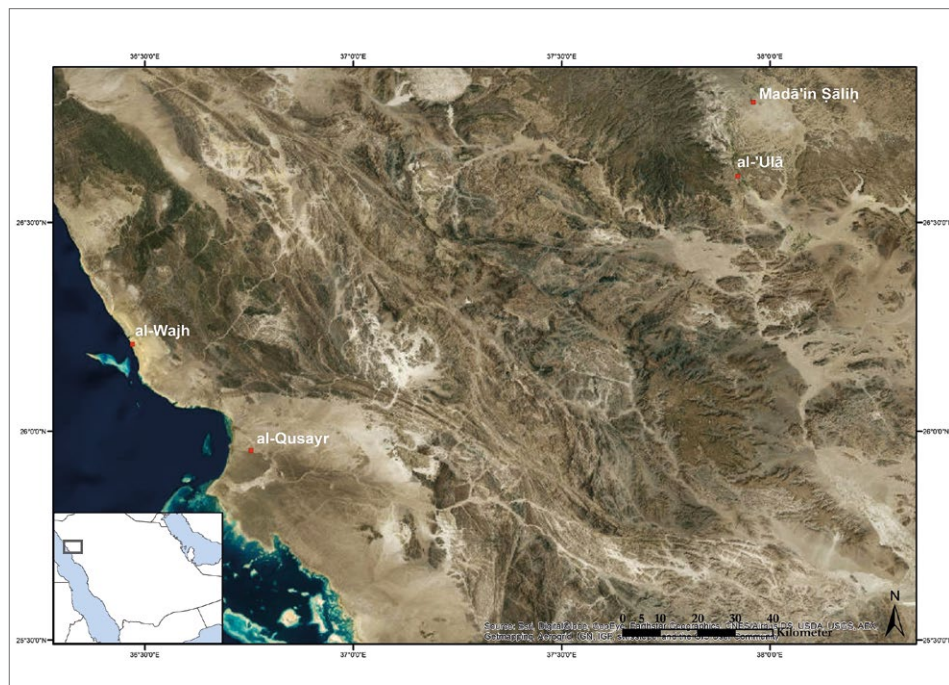


Fig. 1. Satellite image of the al-Wajh-al-'Ulā Survey Project area (Source: Landsat, Google Earth | modified for UWSP/Ippo W. Kennedy)

the expedition of Aelius Gallus to South Arabia in 25 BCE, Strabo (16.4.23–24) described Leuke Kome as a large em-

porium where Oriental commodities were disembarked and then transported overland to Petra and, ultimately, to the

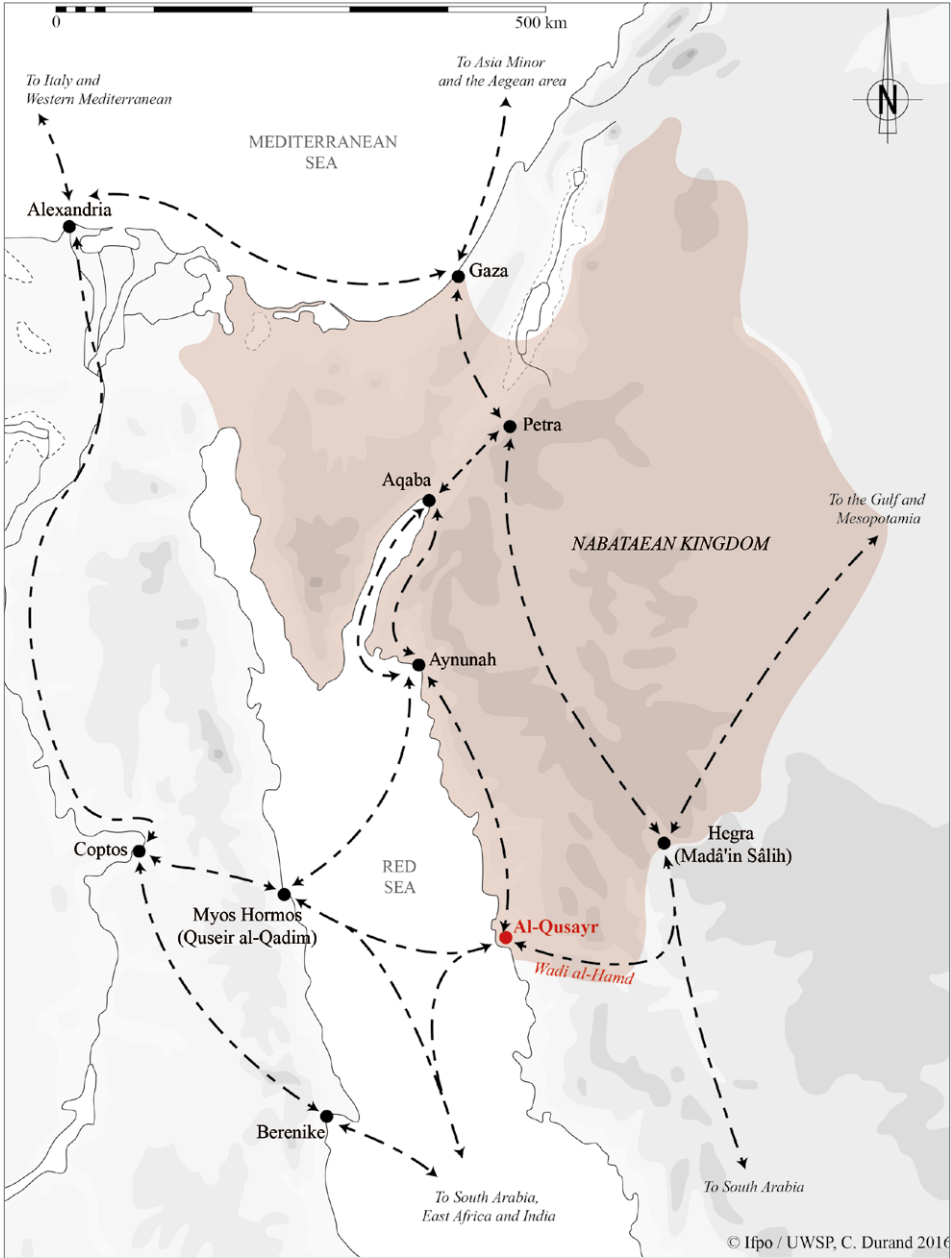


Fig. 2. Ancient commercial centers and trade routes in the Red Sea area (UWSP/Ifpo | drawing C. Durand)

Mediterranean. About 50 years later, the *Periplus Maris Erythraei* (19) listed Leuke Kome as a cabotage harbor for small commercial vessels from South Arabia, with a customs post and military presence, and located 2–3 days of uninterrupted navigation from Myos Hormos eastward. Both sources state that Leuke Kome was essential in the combined seaborne/overland transport from South Arabia to Petra. Two possible locations are debated: 'Aynunah, in the northernmost part of the Red Sea coast (e.g., Bowersock 1983: 48; Kirwan 1984; Sidebotham 1986: 124–126; Young 1997; Tomber 2008: 68; Gawlikowski 2020, in this volume) and the al-Wajh area located further south (e.g., Gatier and Salles 1988: 186–187; Cuvigny 2003: 28–29; Durand 2008: 332–336; 2012: 88). Recent examination of distances preserved in ancient sources, combined with features of the natural terrain and a comparative analysis of the location of Myos Hormos and Aynunah demonstrated that Leuke Kome should have been located

further south than Aynunah and that the area of al-Wajh is indeed the optimal location (Nappo 2010).

In the context of Gallus' expedition, Strabo also mentioned Egra Kome, as located in Nabataean territory and by the sea. Although unspecified, it is assumed that the Romans embarked in Egra on the way back to Myos Hormos. Dario Nappo (2010: 340–341) proposed that Strabo might have confused Egra with Hegra, where Gallus stopped during his withdrawal. Others proposed the area south of al-Wajh, in the delta of the Wādī al-Ḥamḍ, Egra Kome being the harbor of Hegra, as postulated by Ursula Hackl, Hanna Jenni, and Christoph Schneider (2003: 615). Assuming that Aynunah corresponds to Leuke Kome, Al-Ghabban (1993) has suggested the identification of Egra Kome with al-Qusayr in the area of Cape Kurkumah, about 45 km south of al-Wajh, by the outlet of the Wādī al-Ḥamḍ, where a building interpreted as a Nabataean temple is located.

RESEARCH AND FIELDWORK METHODOLOGY

Undoubtedly, Arabian commerce benefitted from the combination of coastal sea-borne transport and land transshipment on the Incense Route. With the Nabataean remains at al-Qusayr, it is indeed probable that a seaport participating in the Red Sea trade was located in the area of al-Wajh. Thus, if South Arabian produce was unloaded in the seaport for further transshipment overland, as ancient sources indicate, it is logical to expect a caravan route leading from there to Hegra. To reach inland settlements from the coast would have been

a formidable undertaking for large groups of humans and merchandise-carrying animals, because the region between al-'Ulā and the coast is dominated by the Hijazi mountain range (up to 1600 m), which generally runs NW–SE. Typical are the narrow mountainous valleys and large natural drainages, such as Wādī al-Jizl and Wādī al-Ḥamḍ, which could have served as routes.

Determination and evaluation of the potentially most convenient route(s) through difficult terrain and challenging environment is crucial and the UWSP

has utilized a GIS-based, least-cost paths (LCP) method as a realistic survey strategy-building device (e.g., Herzog and Posluschny 2011: 236–237). Pre-fieldwork analysis identified two least-cost routes between al-'Ulā and the coast, taking al-Wajh as the western terminus. During the 2013 fieldwork season, three alternative routes, 1, 2, and 3, discerned in satellite imagery, were explored [Fig. 3]. Routes 1 and 2 are shorter, connecting al-'Ulā with the Red Sea shore more directly, but they traverse mountainous terrain, which would not have been practical in the context of large-scale caravan traffic (water/fodder for camels, as well as terrain preferable for laden camels). Route 3 is a possibility were

the terminus indeed located at al-Wajh (Fiema et al. 2020a).

More realistically, the 2016 LCP recalculation included al-Qusayr as a terminus, producing two main possibilities: Central route (dashed line in orange; minimum time and energy expenditure) and the Southern route (dashed line in black; minimum energy expenditure only) [see Fig. 3]. The southern part of the Central route (between al-Kharrār and al-Manjūr) was already investigated in 2013, coinciding with the southern parts of Routes 1, 2, and 3. But its central section passes over high mountains, and it was neither discerned on the satellite maps nor known to the local inhabitants and will have to be investigated in the future.

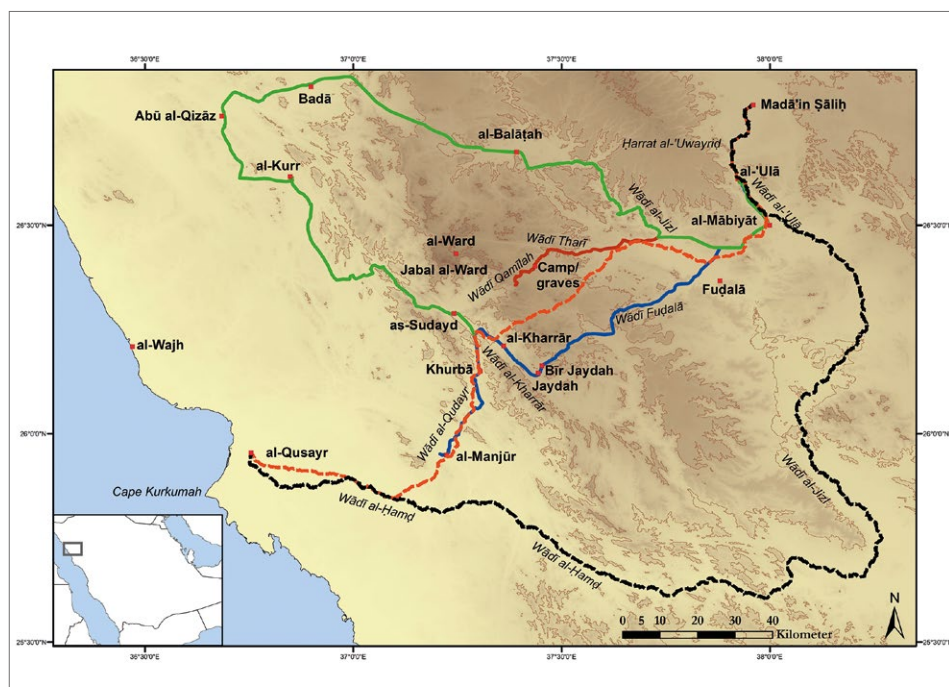


Fig. 3. Least-cost paths: Central route – minimum time and energy expenditure (dashed orange line) and Southern Route – minimum energy expenditure only (dashed black line); other routes explored in 2013: 1 (blue line), 2 (red line) and 3 (green line) (UWSP/Ifpo | map J. Schiettecatte and W. Kennedy)

The 2016 fieldwork concentrated on the Southern GIS least-cost path, which is longer than any other route (Fiema et al. 2020b). This route follows Wādī al-Ulā, then Wādī al-Jizl to its confluence with Wādī al-Ḥamḍ and, continuing along

this wadi, it enters the coastal plains northeast of Cape Kurkumah, passing by al-Qusayr [see *Fig. 3*]. A visit to the Cape of Kurkumah was inconclusive because of restrictions associated with a military zone located there.

SITE OF AL-QUSAYR

In the later 19th century, al-Qusayr was visited by Richard F. Burton who interpreted a monumental building found there as representing “Classical culture” (Burton 1879: 219–233). In 1992, the Qasr was excavated by an SCSH-organized project headed by Ali al-Ghabban. Several high-quality architectural elements and other artifacts on display in the Riyadh National Museum, labelled as coming from ‘Akra Komi’, are undoubtedly from the al-Qusayr excavation [*Fig. 4*]. The

exhibition is also accompanied by a 3D model of the building in question, interpreted by al-Ghabban as a Nabataean temple. Al-Ghabban mentions other remains, including a presumed settlement with surface pottery (Al-Ghabban 1993; 2017). The 2016 UWSP fieldwork has confirmed the importance of the Saudi discoveries while proposing an alternative interpretation for the building.

The site of al-Qusayr consists of several spatial entities [*Fig. 5*]. The Qasr, on



Fig. 4. Nabataean architectural elements from al-Qusayr in the Riyadh National Museum (UWSP/ Ifpo | photo W. Kennedy)



Fig. 5. Site of al-Qusayr (Source: Google Earth | processing for UWSP/Ifpo W. Kennedy)

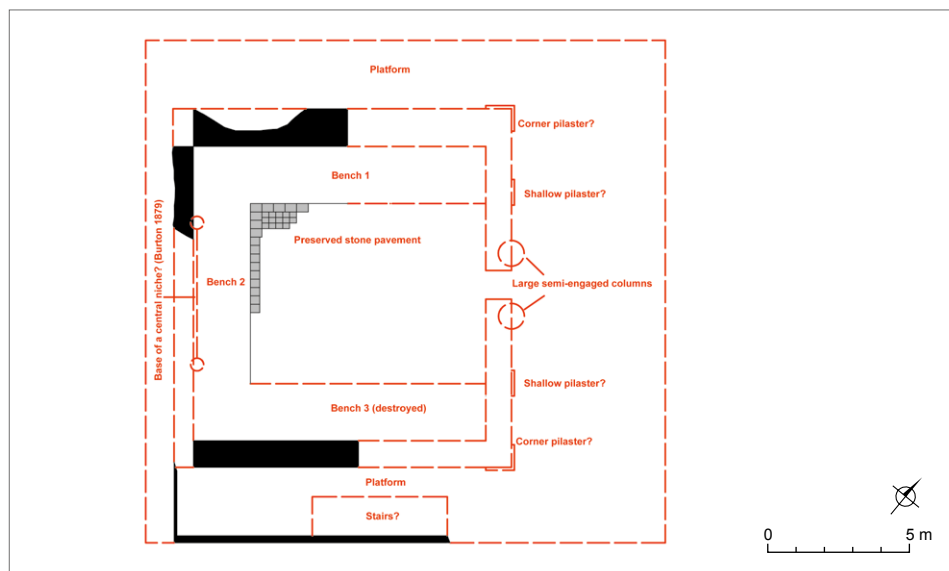


Fig. 6. Plan of the monumental building at al-Qusayr: minimal reconstruction without internal columns. Elements still visible on the ground marked in black and grey, lost elements reconstructed based on Burton's description and other parallels in red (UWSP/Ifpo | drawing & processing W. Kennedy, C. Durand and Z.T. Fiema)

the southern bank of Wādī al-Ḥamḍ, is a well constructed building of shell limestone and sandstone, with mortar and iron clamps holding blocks together. However, its current state of preservation is exceedingly poor [Fig. 6]. The nearly square (8.30 m by 8.20 m) structure stands on a rectangular stereobate. The corners of the structure mark the cardinal points almost exactly. Inside, there are two benches, both 2 m wide, built against the northwest and southwest walls, and a third, reconstructed by the Saudi archaeologists but no longer extant, against the southeast wall. The northeast wall is not preserved; this entire side of the building has eroded away. The flagstone floor is about 0.30 m below the tops of the benches. Saudi researchers reconstructed the entrance in the southeast, flanked by two large columns, and in alignment with four steps found on this side of the building. These steps appear to lead to the top of the stereobate; to enter the structure one would need to step on top of the southeast wall and then step down onto the (not preserved) southeastern bench.

According to Burton, the square structure on top of the podium was accessed through an entrance on the (non-preserved) northeastern side, flanked by two engaged columns [Fig. 7]. His drawing shows a possible threshold and one column base, both on that side. He postulated that these columns were engaged with the inner face of the northeast wall, forming pilasters crowned by Nabataean half-capitals, but the outer face engagement is preferable. Burton's proposition of a raised area against the northeast wall cannot be verified and

the preference is for three benches, as reconstructed in the 3D model in Riyadh. Burton suggested a back wall niche, flanked by two colonnettes. A wing of an eagle statue from the Qasr, perhaps from such a niche, is today in Riyadh. Burton proposed that the building was either hypaethral or covered with (a light ?) roof. In the latter case, he opted for a classical-inspired pitched roof. His propositions cannot be verified without further detailed studies.

Furthermore, Burton recorded 10 column bases (diameter about 0.45 m) at the site, smaller than the entrance flanking columns (diameter about 0.65 m), and reconstructed 12 columns standing on the "benches," as in a peristyle. It is not clear whether he meant columns or

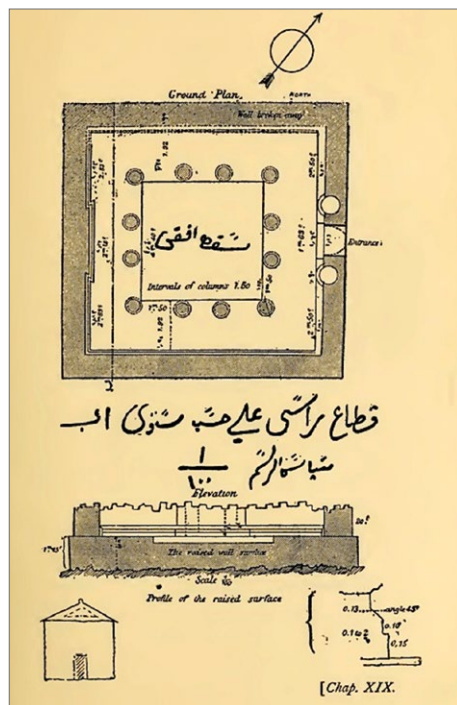


Fig. 7. Burton's plan of the monumental structure at al-Qusayr (After Burton 1879: 222)

semi-columns; no traces of their location have been found. The smaller columns are not present in the Riyadh model but could have formed a colonnade on the podium. At any rate, the impressive array of architectural elements found at the site includes fragments of column drums, Nabataean blocked-out capitals, column and pilaster bases, at least one cornice, bevelled uppermost blocks of the crepidoma, and fragments of thick, decorative stucco elements. The size of the elements implies the presence of two orders—large pilasters in the two (or four) external corners of the building, and smaller, shallower pilasters on the outer, rather than inner, sides of the walls [see *Fig. 6*].

The building is certainly monumental, but its interpretation as a temple is problematic. One would expect a platform/*motab* in the center of a Nabataean temple (for examples see Tholbecq 1997), while the dominant element at al-Qusayr are the benches. This configuration suggests a monumental triclinium, serving as a place for ritual banquets and official assemblies. Triclinia are well attested in Nabataea as components of sanctuaries, (e.g., Khirbet edh-Dharih and Khirbet at-Tannur), but also in isolated places, such as the “Obodas Chapel” in Petra (Tholbecq and Durand 2013) or the triclinia in Madā’in Šālīḥ. A Nabataean triclinium, found in Dūmat al-Jandal (Charloux et al. 2016) indicates the importance of these structures in the “Nabataeization” of peripheral areas of the kingdom. If this hypothesis is correct, the al-Qusayr structure was probably used for official/ritual purposes by a Nabataean elite and/or other social groups or local tribes settled there. The localiza-

tion of the Qasr, overlooking the wadi and the settlement, could suggest that it was intentionally built to be a landmark for travelers following the Wādī al-Ḥamd, either coming from the coast or from the opposite direction.

Some remains of structures are located near the building, indicating the existence of other structures at the site [see *Fig. 5*]. These include walls constructed of well-dressed ashlar, fragments of paved surfaces, and scatters of mortar and wall plaster. South of the Qasr one finds a circular tumulus (diameter approximately 10 m), formed of huge quantities of camel bones. A ¹⁴C determination of the material from the bottommost layers could determine whether this deposit is relatively recent (19th century?) or relates to the ancient site. If the Qasr is interpreted as a triclinium, the deposit of camel bones could represent an intentional, long-lasting practice of bone burial, presumably linked to ritual banquets in the triclinium.

Nearby, and along the Wādī al-Ḥamd, stretches an oasis with wells. An area of low hillocks situated south of the Qasr, being about 300 m E–W and 200 m N–S, corresponds to an ancient settlement associated with the Qasr and recognized as such by Burton and Saudi archaeologists [see *Fig. 5*]. The surface pottery collection examined by the UWSP is mainly from the 1st century BCE–1st century CE and represents a striking assemblage of imports, mainly from the Mediterranean, as well as fine and common Nabataean pottery produced in the Petra area. The paper by Caroline Durand (2020, in this volume), discusses in detail the ceramic finds and their parallels.

THE WĀDĪ AL-HAMD ROUTE

The survey covered a total roughly 90 km from the sea, starting at the outlet of Wādī al-Ḥamd, going eastward and following the wadi, which corresponds to the Southern GIS LCP. The area between al-Qusayr and the sea coast (about 6 km) was only superficially covered, because the last 3–4 km to the sea is a wide delta of the wadi, the ground periodically inundated, featuring a very soft surface characterized by salinity and marshy vegetation.

Some past surveys of the northwestern Hijaz have already indicated Wādī al-Ḥamd to be the best candidate for a principal communication route across the mountains, linking the eastern side of Hijaz with the Red Sea coast (e.g., Ingraham et al. 1981: 63). The UWSP survey has confirmed the availability of water

in notable quantities in perennial water sources. Along the 90 km of the survey route there are at least eight wells, situated approximately 10–20 km from one another. Beside seasonal water sources, subsurface water is available and holes dug in the wadi bed produce water that is muddy but suitable for animals [Fig. 8].

The western third of the environs of the wadi consists of a flat, stony plain, the central part is a premontane zone turning into hill-country, and the last third features the wadi cutting through the western range of mountains. In the western part, the wadi is no wider than 0.3 km, with well-defined sandy banks. Further east, the wadi widens into a vast expanse of grassland, more than 2–3 km wide. Clusters of grass and shrubs and



Fig. 8. Seasonal water in Wādī al-Ḥamd (UWSP/Ifpo | photo C. Durand)

occasional trees are found everywhere, thus animal fodder is available. The wadi bed—generally a silty, alluvial deposit, occasionally turning into major sand deposits—can easily be used for animal and human travel in dry seasons. The passage along the wadi seems easier on the northern bank which, with the exception of

one area around B'ir Akra, is only slightly higher than the wadi bed and consists of very low plateaus or undulating hills. The southern bank is often much higher, forming cliffs in places, and the high plateaus are often disarticulated or crossed by transversal wadis and ravines, making the area difficult to traverse.

RECORDED SITES

Site distribution was uneven, with a higher concentration of sites on the northern wadi bank in the western and central part of the surveyed area. Altogether, 39 archaeological sites (including al-Qusayr) were recorded. Generally, the sites reflect well the repertoire of sites already known from northwestern Saudi Arabia. These include: stone circles and enclosures of

different forms, which may be either habitations or burials; different types of cairns and tumuli, being most often burials; complex enclosures or structures, isolated or in clusters [Fig. 9], usually representing encampments of pastoral nomads. Rows of standing stones (small “pillars”) were also noted on one site with complex enclosures.



Fig. 9. Site 036 – hilltop settlement(?), Wādī al-Ḥamḍ in the far background, looking northeast (UWSP/Ifpo | photo W. Kennedy)

Nowhere save site S.001 (al-Qusayr) were there any pottery sherds collected from the surface, and the lithic material found at three sites could not be precisely dated. Therefore, while most of the sites should be linked to pastoralist nomads, the dating of all sites is exceedingly difficult and some may be relatively recent in date. However, comparative studies show that some sites featuring circular enclosures and larger cairns could be dated to the Chalcolithic/Early Bronze Age or even to the Nabataean period (for parallels see Rosen 2007). Only one site (S.039) yielded iconographic material—animal and human images as well as *wusum* tribal

marks—and no epigraphic finds were noted during the survey. This may be due to the scarcity of suitable rock outcrops along the wadi in the coastal plains.

The majority of the sites—stone piles of various forms and dimensions, made of cobbles and small boulders—may be labelled generically as “cairns”, although they actually include a variety of construction types (for discussion see Parr et al. 1978: 40; Abu-Azizeh et al. 2014: 161). Burial cairns are often referred to as tumuli (e.g., Gilmore, Al-Ibrahim, and Murad 1982: 15), especially if featuring an intentionally regular, sometimes conical form, but not every cairn was intended as a burial.

CONCLUSIONS

So far, the UWSP fieldwork has produced significant results, including the confirmation of an association between al-Qusayr as a probable Nabataean seaport, and Wādī al-Ḥamḍ as a potential major caravan route, as already suggested through GIS analysis. It seems reasonable for now to suggest that Wādī al-Ḥamḍ, while the longest, appears to be the most convenient route between the area of al-ʿUlā/Madaʿin Ṣāliḥ (ancient Hegra) and the Red Sea littoral and, as such, would most probably have been utilized also in antiquity. Its topography allows for a relatively smooth passage of a larger number of humans and pack animals, and its water resources and vegetation can easily sustain such travelling groups.

As opposed to desert routes and caravan tracks elsewhere (i.e., Egypt, Syria), no evidence of regular and specialized trade/communication and defense-related infrastructure has been found. Environmental

constraints are only partly responsible for this situation. One might expect, more likely, specific political conditions and security arrangements, e.g., alliances with local tribes for the protection of commercial traffic, which would have also benefitted the local population. If such arrangements were prevalent in the area in Nabataean-Roman times, it would not have been essential to introduce and maintain any specialized trade/defense system.

Undoubtedly, the site of al-Qusayr warrants much more attention in the context of the history of Red Sea trade than it is usually accorded. Be it a temple or, as suggested here, a monumental triclinium, the main structure at al-Qusayr should be examined in connection with other components, such as wells, the settlement, surface ceramics, and bone deposits, which all make up a sizeable Nabataean coastal town, apparently in-

volved in long-distance trade. The presence of both common and fine Nabataean pottery from Petra confirms Nabataean occupation at the site, already suggested by the design and architectural decoration of the Qasr. Surface ceramics also indicate that al-Qusayr was strongly linked to the Roman Red Sea routes and trade [see Fig. 2], as exemplified by the presence of Roman amphoras (e.g., Dressel 2–4 from Campania, probable Lamboglia 2 from the Adriatic area) and the fine Mediterranean products (Western and Eastern sigillata). It is not a coincidence that the same ceramic types were found in Myos Hormos, located on almost the same latitude as al-Qusayr, on the other side of the Red Sea, where trading activities peaked in the 1st century CE (e.g., Whitcomb and Johnson 1979; Peacock and Blue 2006).

The chronological frame provided by the archaeological finds from al-Qusayr, that is, from the mid-1st century BCE to the mid-1st century CE, coincides perfectly with the time of Aelius Gallus' expedition and the peak in Leuke Kome's trade activities. Therefore, in addition to the proposition to identify the area of al-Qusayr with Egra Kome (Al-Ghabban 1993), one could also entertain the identification of al-Qusayr as Leuke Kome. The localization of al-Qusayr, on almost the same latitude as Myos Hormos, would well correspond to the geographical description of Leuke Kome as presented in the *Periplus*. The imaginary line connecting Myos Hormos with al-Qusayr, across the Red Sea, seems to have been the maximum latitude beyond which

smaller sailing ships could not navigate easily (De Romanis 1996: 23–28; Facey 2004).

As for Egra Kome, it could have been located somewhere in the environs of Ras Kurkumah. There is also a modern locality called B'ir Akra ("well of Akra"), situated by the Wādī al-Ḥamd, about 30 km east of al-Qusayr, which might perhaps be worth considering as Nabataean Egra, especially in view of the proximity of the sea and the striking similarity between the toponym Akra and Egra. Strabo's account does not specify the name of the place from where Roman troops departed to Myos Hormos. Egra Kome could have been a stop on their way to the sea, just before arriving in Leuke Kome. It is worth mentioning that a locality named Akra is also mentioned by John L. Burckhardt as a station on the Hajj Route between Cairo and Mecca, just after "Kalat el Wodjeh" (al-Wajh), and described as a short stop because the water here is "of a most offensive smell" (Burckhardt 1829: Appendix No. 5). But this proposition remains highly speculative since no ancient ceramics were found at B'ir Akra during the 2016 survey season.

At any rate, it is now firmly established that al-Qusayr was an important Nabataean settlement, directly linked to Roman harbors on the Red Sea between the mid-1st century BCE and the mid-1st century CE. Future intensive explorations at the site—a geophysical survey of the settlement site, potentially followed by excavations—are highly warranted and should prove most fruitful.

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