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The Archaeology of North Arabia

Oases and Landscapes

Proceedings of the International Congress held at the University of Vienna, 5–8 December, 2013

Marta Luciani (Ed.)

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9 The Role of Dūmat al-Jandal in Ancient North Arabian Routes from Pre-History to Historical Periods

Romolo Loreto[1]

Abstract: This paper gives a first picture of the role of Dūmat al-Jandal (ancient Adummatu) and the 'al-Jawf' region in the ancient roads system of northern Saudi Arabia. Due to its geographic position in the northern al-Nefūd Desert along the wādī al-Sirhān, the ancient Dūmat al-Jandal played a key role in the trade system of the Arabian Peninsula from pre-history to early Islamic times. Right from the first archaeological era, dating back to the Lower and Middle Palaeolithic, the al-Jawf appears to have seen the passage of people from Africa to the east. The Neolithic era accounts for a large number of sites throughout northern Saudi Arabia attesting how the present-day wadis were routes of passage and communication in the Peninsula. And sources from the 1st millennium BCE suggest that the ancient Adummatu was located between the southern and western caravan routes and the Fertile Crescent.
During the Nabataean and Roman times, Dūmat al-Jandal seems to have had a direct link with the heart of the Nabataean realm and then with the Roman provinces, as confirmed by the identification of imported wares and military structures by the Saudi-Italian-French archaeological project. Finally, Dūmat al-Jandal experienced a period of rich commercial trading during the Byzantine and early Islamic domination, testified by the Islamic sources describing the role of the Dūmah 'market', Ukhaydir ibn ʿAbd al-Mālik and the relations between Byzantium, the North Arabian Peninsula and the Sassanid Empire.

Keywords: Saudi Arabia, Neolithic, Bronze Age, caravan routes, Arabia

Introduction

This paper deals with ancient desert roads/routes in the northern Arabian Peninsula, focusing on the al-Jawf oasis of Dūmat al-Jandal (ancient Adummatu) from the 1st millennium BCE to the 1st millennium CE. Much work has been done on ancient trade routes in the Arabian Peninsula, in particular in connection with the commerce of local 'perfume' and the South Arabian caravan kingdoms.[2]

Nowadays, thanks to the activities promoted by the Saudi Commission for Tourism and Antiquities,[3] archaeological projects in northern Saudi Arabia allow us to attempt a first overview of the ancient routes in northern Arabia during the pre-Islamic era based on field data that can integrate the rare epigraphic materials.[4]

The archaeology of desert roads/routes has recently been indicated as a fruitful field of research deserving specific analytical methodologies[5] related to the study of commerce, mobility and nomadism. In addition, the study of ancient routes in the Arabian Peninsula requires a multidisciplinary approach involving research in climate change, human adaptation, mobility ideas and cultural peculiarities.

We shall not only give a general overview of the supposed ancient trade routes in northern Saudi Arabia during the historical periods but also try to suggest how these ancient tracks were created, in order to understand the human adaptation strategies in a region that has seen huge climatic changes that transformed the natural environment during the millennia.

1 Università degli studi di Napoli "L'Orientale", Italy; romololoreto@gmail.com.
2 Groom 1981; Avanzini 1997; Carannante – D'Acunto 2012.
3 al-Ghabban et al. 2010; Charloux – Loreto 2012; Gebel 2013; Loreto – Charloux 2013.
4 Cavigneaux – Ismail 1990; Robin 1991; Graf 2003.
5 Riemer – Förster 2013.

Fig. 1 The oasis of Dūmat al-Jandal along the wādī al-Sirhān (Thomas Sagory – www.du-ciel.com).

The Dawn of Long Distance Travel – A Vocation from Pre-History

The region of the Jawf, lying between what are now Jordan and the Saudi 'northern Frontiers' to the north, and the provinces of Tabūk and Hāʾil to the south, is a natural node between the area of the Persian Gulf, the south of the Arabian Peninsula and Syria-Palestine. Although it appears that the steppe-like deserts of al-Harrat al-Harrah and Hammad, to the north, and the desert of the Nefūd, to the south, isolated and protected the oasis of Dūmat al-Jandal (Fig. 1), they formed along the wādī al-Sirhān in historical times. Thus the alluvial plain of the majestic wādī serves, in fact, as the principal route linking the Jawf valley with Jordan. The wādī al-Sirhān begins near the Azraq basin, beyond the Saudi Arabia-Jordan border and continues southeast for c. 250km, crossing al-Qurayyat, parallel to the boundary between the two kingdoms, until it enters the Jawf

Fig. 2 The wādī al-Sirhān crossing the Jawf region (reelaborated from ©2008 NAVTEQ).

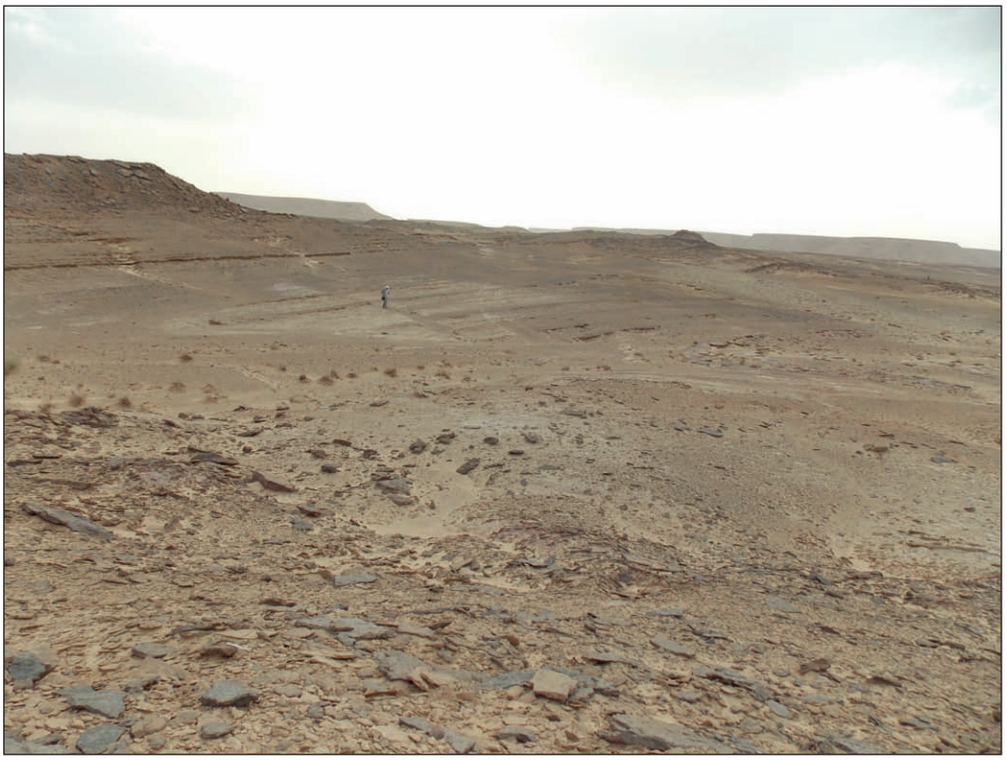

Fig. 3 ash-Shuwayhitīyah lacustrine sediments (photo: R. Loreto).

valley (Fig. 2). From here it changes direction, going east, crossing Dūmat al-Jandal until it peters out in the sands of the Nefūd near Sakākā. It was precisely this geomorphological situation that enabled travellers to move along a northwest/southeast axis during prehistoric and historical times.

Although we still have no archaeological or epigraphic evidence for the transit of caravans during the 1st millennium BCE, the numerous water courses which converge on the Mesopotamian alluvial plain may well have constituted natural routes for crossing the Nefūd, providing safe passage and means of watering for caravans heading east.

Examining the traces of the region's past with respect to the passage of people can contribute to explaining how big a strategic role the Jawf region played in transit through the Peninsula and how the routes, far from coming into being in a short amount of time, actually experienced lengthy periods of gestation. The Jawf valley conserves traces of the transit of *Homo erectus* from Africa to Asia at the site of ash-Shuwayhitīyah (Fig. 3), a huge palaeolake located 50km northeast of Dūmat al-Jandal, surrounded by flint tools dated to the Lower and Middle Palaeolithic (2,000,000–300,000 years ago).[6]

Mobility and Nomadism – North Arabian Traffic during the Neolithic

The Neolithic era in the Jawf valley, extensively attested along the north flank of wādī al-Sirhān and in the desert of al-Harrat al-Harrah (Fig. 4), and recently identified near Dūmat al-Jandal (Aṣfān, on the northern edge of the Nefūd), represents another period of intense exchanges and passage of people between the Levantine regions in the north and northern Arabia.[7]

6 Nayīm 1990.

7 Loreto 2013; Aurino – Loreto in press; Marcolongo in press.

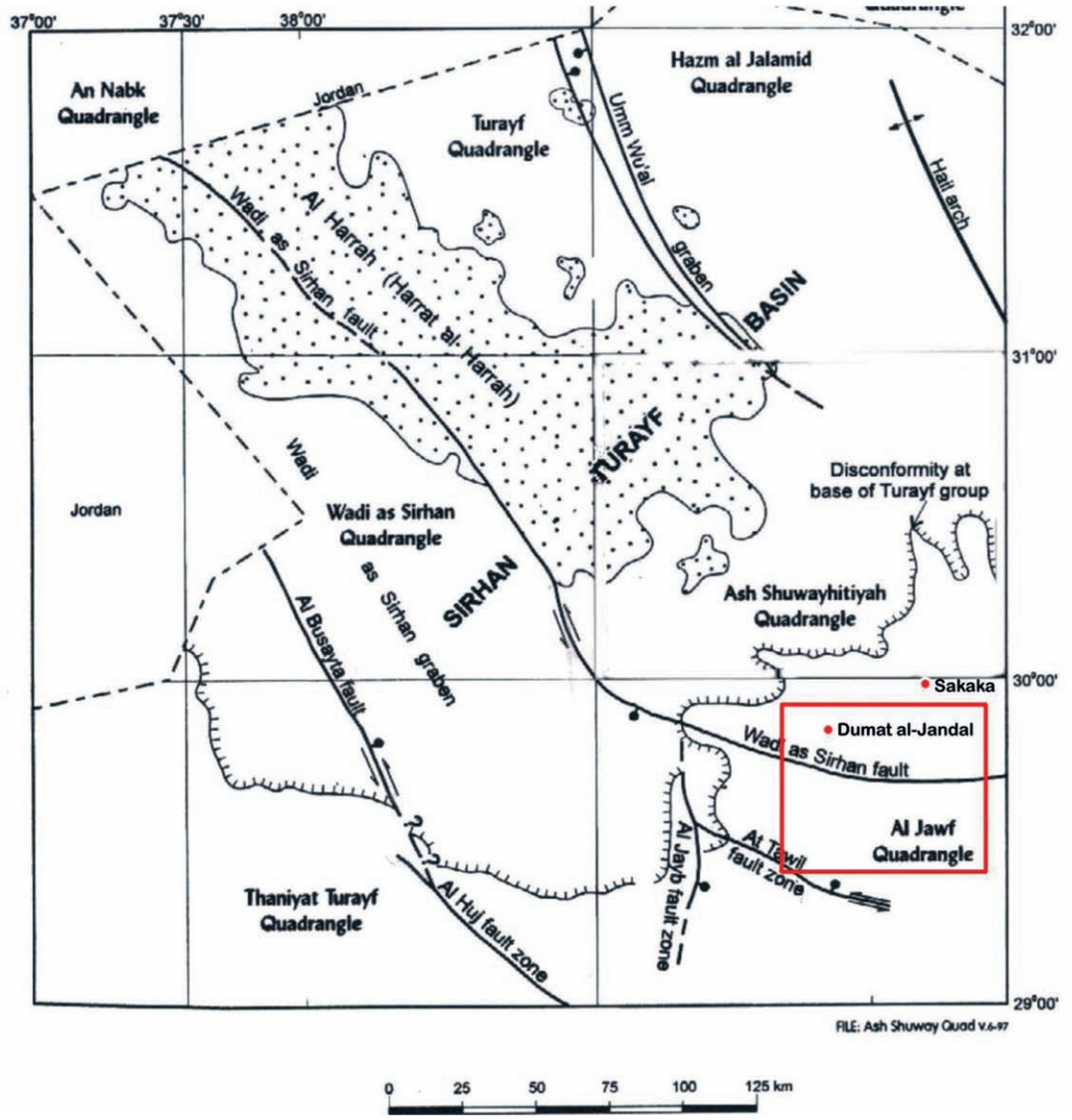

Fig. 4 al-Harrat al-Harrah area (elaborated from Wallace et al. 1997).

Thanks to favourable climatic conditions and the availability of adequate water supplies, the whole crescent of wādī al-Sirhān enabled the development of communities of hunter-gatherers, characterised by so-called 'desert kites', with parallels ranging from the Levant along the entire western side of the Arabian Peninsula (Figs. 5–6). Communities of hunter-gatherers spread along the basalt outcrops of al-Harrat, from Syria through Jordan to Saudi Jawf and on into the western areas of Arabia, with a common adaptation pattern and covering a huge geographical area.[8]

Analogously the repertory of stone tools associated with neolithic communities of hunter-gatherers near Aṣfān testifies to contacts between the Jawf valley, the Syro-Palestinian areas and, at least, northern Arabia. Although for the Neolithic era one cannot actually speak of a 'pan-Arabic' circulation of people throughout the Peninsula,[9] this proposition is nonetheless very useful – for studying the mobility of these people and as a working hypothesis –, in order to identify the

[8] Holzer et al. 2010; Kempe – al-Malabeh 2010; Kennedy 2012.
[9] Crassard – Drechsler 2013.

Fig. 5 Neolithic settlements along al-Harrat al-Harrah palaeowadis, north of wādī al-Sirhān (image from Google Earth).

Fig. 6 Neolithic settlements and desert kites along al-Harrat al-Harrah (image from Google Earth).

routes of transit at locations where water was available (Fig. 7), since the availability of water was the chief factor for allowing the development of caravan routes in historical times. Thus we can recognise Arabia as a region with particularly rich water resources during the Holocene.[10] It was

[10] Engel et al. 2012.

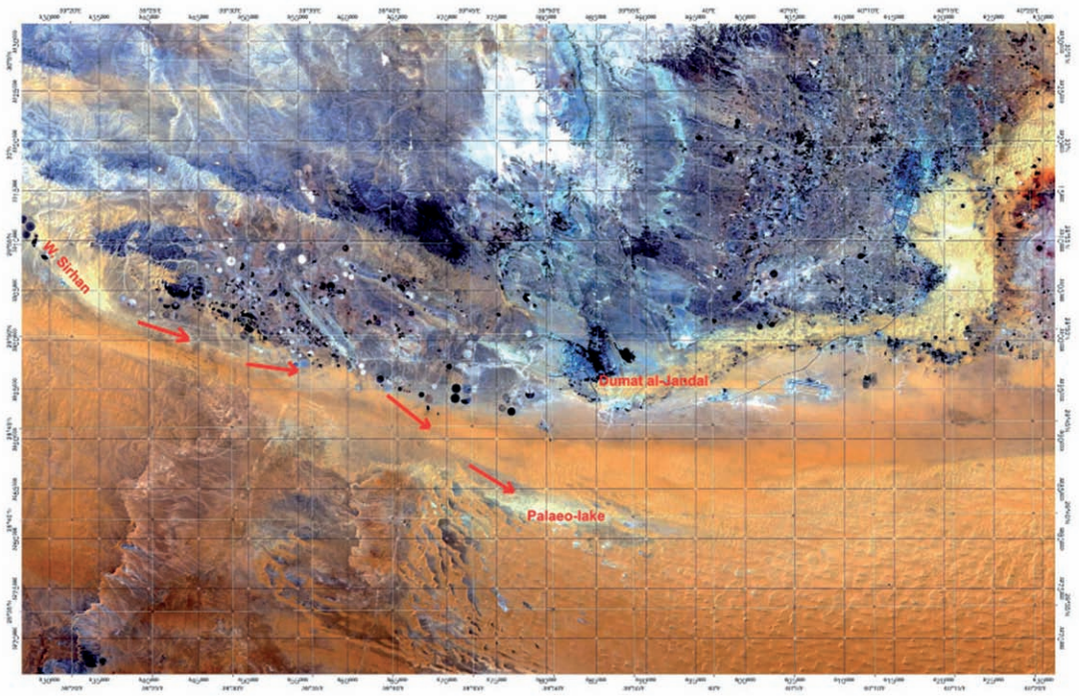

Fig. 7 al-Jawf palaeolake close to Aṣfān, surrounded by Neolithic sites (Marcolongo in press).

traversed by water courses which would have permitted the passage of people even over great distances.

The particular conformation of the Peninsula created a series of hydrographic systems which flowed eastwards from the high ground in the west towards the Arabo-Persian Gulf, giving rise to the major wadis (wādī Rima, wādī Batin, wādī Dawasir, the wadis stretching from the Najd and the ʿAsir towards the basin of Sabhat Matti and Uruq al-Mutarida, etc.).[11] This was in fact a particularly favourable and uniform environmental situation which saw the development of human cultures, associated with the Neolithic, throughout the Arabian Peninsula. They moved and settled along the water courses and lakes which served as routes of transit, extending as far as the regions ranging from what is now Jordan[12] to northern Syria.[13]

From the Bronze Age to the Iron Age: From Roads to Caravan Routes

At present we do not have much evidence for the Bronze Age at Dūmat al-Jandal. Only a few *tumuli* have been identified that can be dated to the 4th–3rd millennium BCE, and these will certainly have been pillaged long ago. On the contrary numerous attestations of the Bronze Age are still visible along the course of the wādī al-Sirhān, in the form of megalithic or trilithic monuments associated with the first structures built to control the water supply (mainly wells), from Qulbān Banī Murra to the funerary complex of Rajajīl, situated about 10km southeast of Sakākā.[14] One element which indicates a notable mobility during the Bronze Age is occurrences of the obsidian produced in the Yemen or the Horn of Africa, found throughout the Arabian Peninsula or at least

11 Parker et al. 2006; Parker – Rose 2008; Sanlaville 2010; Petraglia et al. 2011.
12 Richter et al. 2009.
13 Sanlaville 1996.
14 Gebel 2013.

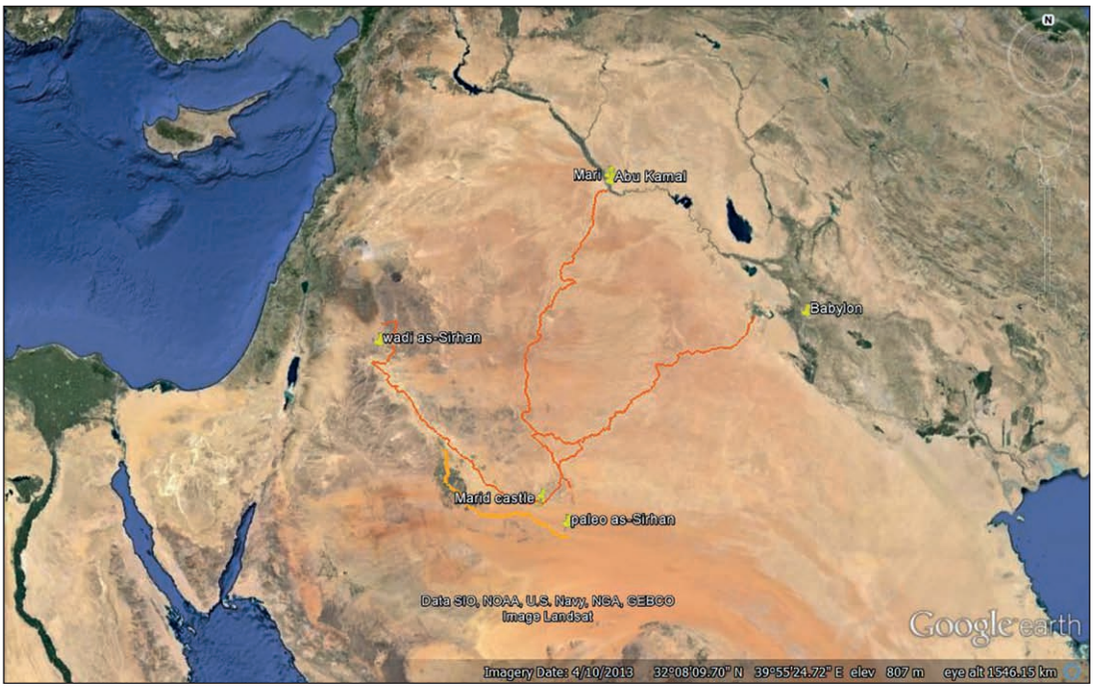

Fig. 8 Main routes suggested on the basis of the main hydrological systems flowing eastwards (elaborated from Google Earth).

as far as the desert of Mundafan.[15] This does not in itself constitute evidence of early trading activities, rather of people venturing ever greater distances, but it does show how the areas where the well established caravan routes were to appear had already been frequented in ancient times. These areas began to be provided with hydraulic systems catering for the reduced availability of water and anticipated the formation of the oases in the 1st millennium BCE. It was in fact the formation of the oases, offering travellers security and the certainty of re-supplying that provided the greatest impulse for the development of overland traffic in historical times.

Although we have little tangible evidence referring to the 1st millennium BCE, written sources do throw some light on the events of that era and on the caravan routes which crossed the north of the Arabian Peninsula. Beyond the first attestations of Arab peoples in the inscriptions of Salmanassar III (859–824 BCE), Tiglath-Pileser III (745–727 BCE) and Sargon II (721–705), which speak of continuous conflicts between Arabs and Assyrians, the annals of Sennacherib (705–681 BCE), Esarhaddon (680–669 BCE) and Assurbanipal (668–627 BCE) refer, once again in the context of armed conflicts, to the queens Telkhu and Tabuʾa and their capital Adummatu. In particular Esarhaddon speaks of the victory of his father Sennacherib, who carried off the two Arab queens to Nineveh together with their deities. Tabuʾa was finally allowed by Esarhaddon to return to Adummatu with the local deities.[16] Among the peoples who are named in addition to the Arabs there were the Qedarites, meaning the tribal confederation of Qedar – the association of Duma and Qedar is also found in the Bible –, who among other gods venerated Atarshamein, one of the deities carried off by Sennacherib.

Thus it seems plausible that the ancient Adummatu was part of a more extensive system of tribal confederations of Arab people, including the Qedarites, who controlled the north of the Peninsula. They were repeatedly harrassed by the Assyrian armies from the reign of Salmanassar III onwards,

15 Khalidi et al. 2010; Khalidi 2011; Khalidi et al. 2012; Khalidi et al. 2013, 59–67.
16 Ephʿal 1982.

Fig. 9 Area surveyed during the 2013 campaign (GPS elaboration from Google Earth).

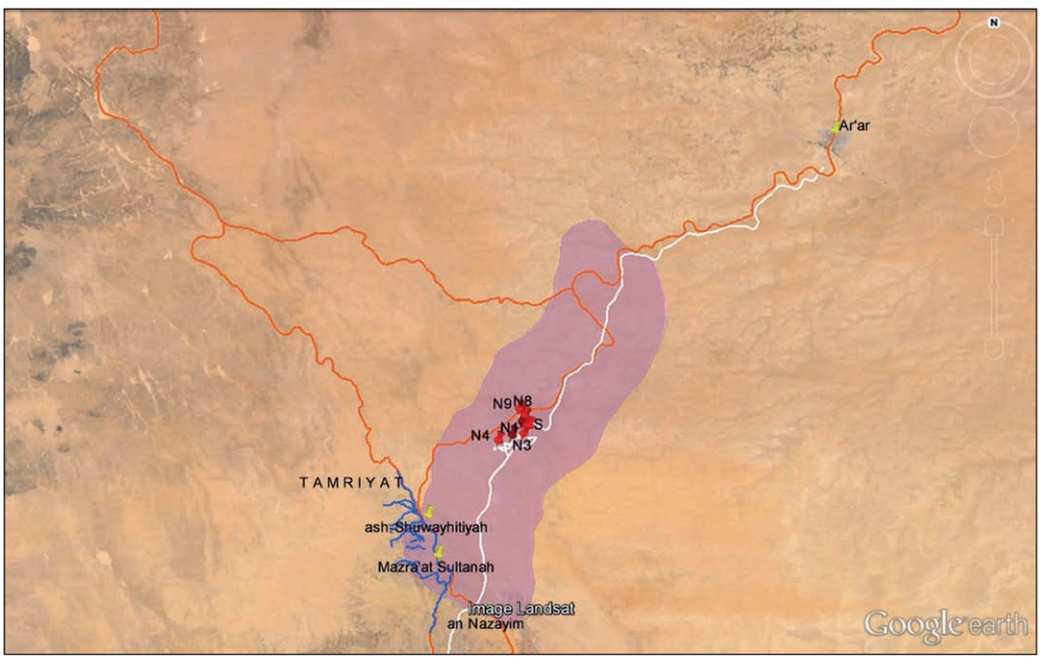

Fig. 10 Detail of the surveyed area of Tamriyat (GPS elaboration from Google Earth).

probably in an attempt to gain control of the caravan routes as well as for the defence of border areas.

The only reliable epigraphic attestation for the passage of caravans from southern Arabia towards the north of the Arabian Peninsula at the time of the Arab 'queens' dates from the 8th century BCE. It is an inscription in Assyrian commissioned by a king of the land of Sukhu, in the

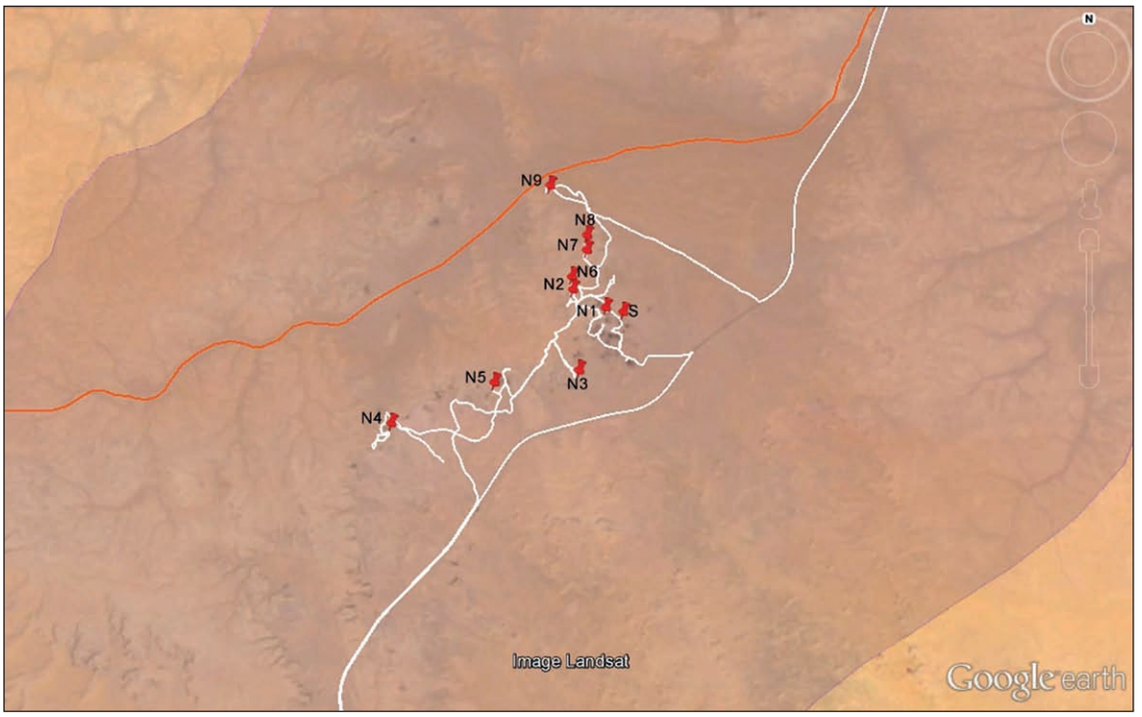

Fig. 11 Necropolises along the wadis; suggested ancient route in red; car tracks in white (GPS elaboration from Google Earth).

Middle Euphrates, recording how he assaulted and pillaged a caravan of 200 camels coming from Taymāʾ and Saba which was transporting cloths, iron and alabaster.[17]

As part of the Saudi-Italian-French archaeological project at Dūmat al-Jandal we have undertaken a geomorphological study of the area between the Jawf valley and Abū Kemal and Babylonia on the basis of the written sources, with the aim of identifying the possible caravan routes that may have crossed the north of Arabia from west to east, going east/northeast from Taymāʾ and passing through the ancient Adummatu (Fig. 8).

Our analysis, undertaken at the macroscopic level using aerial photos and satellite images, makes it possible to map a series of wadis, now dry all year round, which started out from [the] Jawf in an easterly direction towards the Middle Euphrates or the Bassora basin. This seems to have been a well established system along the wādī al-Sirhān, which in pre-historic times and in the Nabataean era served as a passage, above all due to the availability of water supplies.

The data that has emerged from the 2013 campaign of the Saudi-Italian-French archaeological project is particularly promising. Preliminary on-site surveys have enabled us to identify a series of necropolises in the area of Tamriyat, circa 120km northeast of Dūmat al-Jandal (Figs. 9–11).

The necropolises that have been identified are situated on high ground at the edge of the banks of the wadis. Their position makes them visible from the bed of the wadis from a long way off, while they are hidden by the high ground, as one approaches the edges of the wadis.

Following a preliminary investigation, 9 different necropolises have been identified, with a variable density of structures (less than 10 to more than 20 tombs) and architectonic typology (*tumuli*, tower and turret tombs).

Generally you find one larger burial (*tumulus* or tower type tomb which may be as wide as 7–8m in diameter and as tall as 1.80m) surrounded by a series of satellite structures varying in size (1m to 4–5m in diameter) (Figs. 12–15). Only the turret tombs, measuring not more than 1.5m

[17] Cavigneaux – Ismail 1990; Robin 1991.

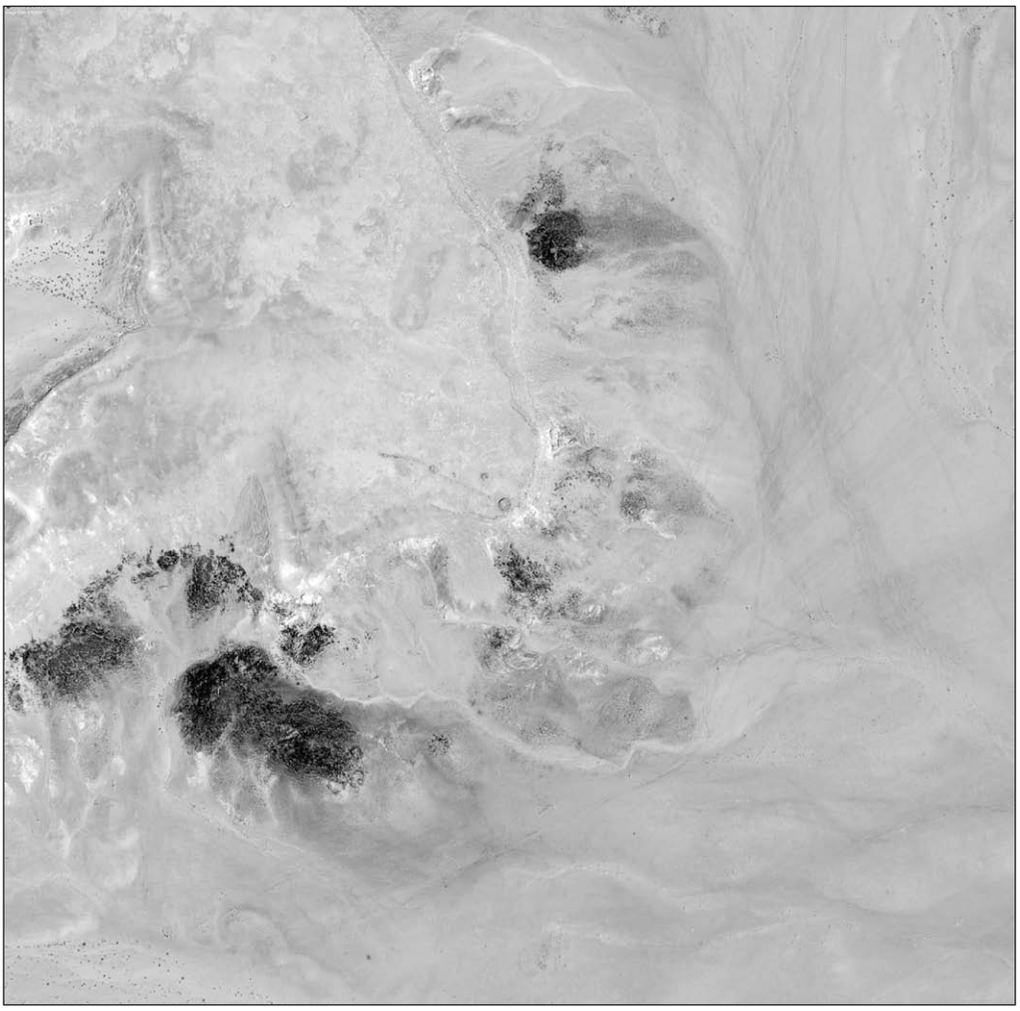

Fig. 12 Main tomb (N3) with satellite units along the upper ridge of a wadi (photo: http://www.terraserver.com).

in diameter and not more than 1.80m in height, have no satellite tomb, standing in isolation. It may be that these 'turret tombs' were actually a sort of milestone indicating the route to be taken (Fig. 16).

Although no archaeological dig has yet been carried out, on the basis of the architectonic typology it is possible to attempt a dating for the structures. The *tumulus* type tombs can be confidently dated to the Bronze Age, at least as far back as the 3rd millennium BCE. The tower type tombs can also be dated to the Bronze Age, although parallels from southern Arabia[18] may suggest a more recent dating. It is fundamental to be able to excavate the burials, though – almost all of them are already pillaged – they feature in some circumstances intact parts. We cannot rule out the possibility that finds of materials dated to the Iron Age will indicate phenomena of re-occupation of more ancient structures.[19] Lastly the turret tombs, which on account of their small size apparently do not contain a funerary chamber, are difficult to date, at present.

Apart from the architectonic features which can distinguish one tomb from another, the general context in which the burials occur is striking, on high ground which is readily visible from the valleys down below, i.e. the beds of the wadis, according to a scheme which is found elsewhere

[18] Crassard et al. 2010.

[19] See Gebel this volume; Schiettecatte et al. this volume.

Fig. 13 N3. Main sepulchral structure (photo: R. Loreto).

in the Peninsula, e.g. in the Yemen[20] and Oman.[21] In general these are burials relating to nomadic contexts dating from between the Bronze Age and the Iron Age, in the Yemen, and from the end of the 4th to the beginning of the 2nd millennium, in Oman.

The Nabataean Era and the Province of Arabia Deserta

With the advent of first the Nabataeans and then the Romans, the Jawf yields even more archaeological evidence, although the architectonic remains in the oasis cannot always be confidently attributed to one phase or the other. Similarly, the textual sources of Roman authors not only give a detailed treatment of the South Arabian civilisations and the 'Incense Routes' but they also speak of ancient Domatha[22] or Dumaetha[23] as a major city in Arabia.

The Nabataeans

The presence of Nabataean people in the north of Saudi Arabia is well documented thanks to a series of archaeological sites which, once again, follow the course of the wādī al-Sirhān. From the north to the southeast, the first is al-Qurayyat, near the border with Jordan. Along the wādī al-Sirhān rare rupestrian graffiti testify to the passage of caravans towards Dūmat al-Jandal, where

[20] de Maigret – Antonini 2005.
[21] Méry 2010; Bortolini – Tosi 2011.
[22] Pliny the Elder, Nat. Hist.
[23] Ptolomey, Geog.

Fig. 14 N1. Different tomb types. Tumulus and tower type (photo: R. Loreto).

the excavations carried out in 2009 by the Saudi-Italian-French archaeological project brought to light a series of remains from the Nabataean era which confirm the close ties between the Jawf valley, the easternmost limit of the Nabataean kingdom, and Jordan.[24] In particular, the excavation at the foot of Mārid Castle – probably constructed on the ancient acropolis – brought a rich private house to light which yielded a large quantity of imported ceramic ware, proving how the ancient Dūmat al-Jandal was part of a circuit of exchanges with the Nabataean west also in terms of private enterprise.

Continuing eastwards, along the alluvial plain of the wādī al-Sirhān, more sites and rupestrian graffiti show how the Jawf valley had its place within the borders of the Nabataean kingdom. Muwaysīn, a military outpost comprising a small fort which was reoccupied in the Ottoman era, is located circa 10km east of Dūmat al-Jandal; at-Tuwayr, 33km northeast of Dūmat al-Jandal, only marginally investigated in the ’80s,[25] is a site featuring domestic buildings which yielded a lot of Nabataean ceramic ware of both local and imported production; the site of Sakākā has not yet been included in an archaeological project to classify the remains dating to the Nabataean era, although several remains can be seen above ground; and lastly there is the so-called Biʾr Saysara, a particularly large Nabataean well which was part of a system of undergorund *qanāt*, the foundations of the medieval castle of Zaʾbal, burials, rupestrian inscriptions, etc.

Thus, although archaeological investigations are only just beginning, the evidence already available and above all, the constant presence of imported ceramic ware made at Petra show

[24] Loreto 2012.
[25] al-Muaykel 1994.

Fig. 15 N1. Tumulus type tomb (photo: R. Loreto)

to what high extent the north of the Peninsula was included in a circuit of exchanges in the Nabataean era, thanks to the favourable geomorphological conformation of the wādī al-Sirhān.

The New Roman Province

With the creation of the province of Arabia Petraea, in 106 CE, the ancient Dūmat al-Jandal found itself at the easternmost edge of the Roman Empire. Rare epigraphic attestations testify to the presence of Roman legions in the Jawf: the stela of Flavius Dionisus, a legionary of the Third Cyrenaic Legion, celebrating the construction of a sanctuary dedicated to the god Salmus, dating from the 3rd century CE[26] and the 'Praetensio Stela' from Qasr al-Azraq,[27] recording work on the road linking Bosra and Dūma carried out by various squads of Roman legionaries.

The architectonic evidence from the site, which can be dated between the 2nd and 4th century CE, testifies to the importance of Dūma and the wādī al-Sirhān for controlling the borders and particularly the passage of the caravans. In fact the largest architectonic structure consists of a new fortified settlement erected about 3km northwest of the old Nabataean nucleus.[28] The excavations of the Saudi-Italian-French archaeological project have shown that the western settlement was situated at the beginning of the easternmost stretch of the wādī al-Sirhān, controlling access to the valley. Thus, in view of the sheer size of the fortifications, it is clear that the Jawf valley must

[26] al-Jāsir 1981.
[27] Christol – Lenoire 2001.
[28] Charloux et al. 2012.

Fig. 16 N7. Turret type tomb (photo: R. Loreto).

have been an integral part of the *Limes Arabicus* and played a significant role in maintaing control over the region.

The Byzantine Era and the Advent of Islam

The years prior to the advent of Islam saw the emergence of the figure of Ukhaydir ibn ʿAbd al-Mālik of the tribe of the Kinda, a Christian ruler who was apparently placed on the throne by the Himyarites.[29] Ukhaydir must have recognised Heraclius as Emperor and the neighbouring Ghassanids as allies. In practice, the various campaigns launched by the Prophet Mohammed against Dūmat al-Jandal (626–633 CE) involved a clash between the forces of the nascent Islam and an alliance between Ukhaydir and the Ghassanid king Ibn al-Aiham. They are on record as the first *ghazwa* of the Prophet against Rome.[30]

The Market of Dūmah

The years of Ukhaydir's rule must have been particularly prosperous ones for the city. The sources concur in attributing the construction of a church to the Christian king, of which a belltower probably still survives, readapted as a minaret, in the mosque of ʿUmar ibn al-Khattāb, and the Castle of Mārid. On the basis of written sources,[31] moreover, Dūmat al-Jandal, like other cities on the Peninsula, hosted a seasonal market which was held in rotation in each Arab city for a whole month. Thus its vocation as a commercial node still persisted, above all considering the strong inter-relations between the Byzantine and Sassanid Empires, with Dūmat al-Jandal situated

[29] al-Jāsir 1981.
[30] al-Jāsir 1981.
[31] al-Sudairi 1995.

between the two. In addition to its commercial function, this type of market became a social and religious institution, linked to periodical pilgrimages to pre-Islamic sites of cults and idols venerated by particular tribes such as Wadd for Dūmat al-Jandal.

Written sources attest to the presence of people from all over Arabia and beyond in the market of Dūmat al-Jandal: from Hijāz and Najd, the Quraish from Mecca, the Ghassan, and various tribes from Syria and al-Hīraʾ in Iraq.

The market appears to have been run by King Ukhaydir himself, who collected taxes and income from the sale of goods. Al-Waqīdī (747–826 CE) and al-Masʿūdī (died in 957/8) record that the first military campaign launched by the Prophet (626) against Dūmat al-Jandal was motivated by Ukhaydir's interference with merchants, stopping caravans on their way to Mecca and Medina.[32]

Dūmat al-Jandal reappears in Arab sources in the Umayyad era, but vanishes with the Abbasid era, when new pilgrimage routes were established to Mecca and Medina. In particular the famous Darb Zubeyda, which linked Baghdad and Bassora with Mecca going through the Najd, eliminated Dūmat al-Jandal from the overland routes that crossed Arabia.[33] Similarly the most popular route starting from Damascus became the one passing through Tabūk and then following the ancient caravan route linking Saba and Gaza, excluding the Jawf and the wādī al-Sirhān. It was not until the 19th century, with the arrival of the first Western explorers, that the ancient routes were travelled once again and the Jawf was reached crossing the Nefūd.

Conclusion

Thanks to the first archaeological missions, the region of the Jawf is beginning to be seen as an integral part of a system of traffic and movement of people which affected the whole of the Arabian Peninsula over an extended time span. The traces of human presence suggest that it was particularly highly frequented in Neolithic times, as is seen by the intense occupation of the region. On the contrary, frequentation in the Bronze Age appears to have been less widespread, localised in clearly defined areas, but in view of the climatic changes and the process of desertification, it is apparent that people modified their strategies of adaptation. As a result occupation was concentrated in the wadis, where it was possible to draw water on the surface or from wells (although we must recall that archaeological research dedicated to this period is only just starting). Moreover, although it has not yet been well defined, a key moment is the passage from the Bronze Age to the early Iron Age. In spite of the lack of clear archaeological evidence, the study of the routes of passage, together with palaeoenvironmental information, suggest that the region of the Jawf may have experienced continuous occupation during these centuries. Furthermore, this was the period which saw the development of the oases that characterised the north of Arabia throughout the 1st millennium BCE to the 1st millennium CE. Not only were they the necessary places to stop at for the caravans coming from the south, but they also testify to the status of the Arabian Peninsula as an integral part of the ancient Near Eastern world, acting as a link between the southern Arabian cultures that developed from the end of the 2nd millennium BCE and the crescent of the Levant.

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The Archaeology of North Arabia: Oases and Landscapes provides us with the proceedings of the namesake international congress organised at the University of Vienna. Its rich list of contributions both on recent results of field activities and new considerations on different settlement patterns and historical and cultural processes within North Arabia makes this volume a state-of-the-art account of the multiple scholarly pursuits in the region.

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