

British Foundation for the Study of Arabia Monographs No. 12
Series editors: D. Kennet & St. J. Simpson

Navigated Spaces, Connected Places

Proceedings of Red Sea Project V

Held at the University of Exeter
16-19 September 2010

Edited by

Dionisius A. Agius, John P. Cooper,
Athena Trakadas and Chiara Zazzaro

BAR International Series 2346
2012

This title published by

Archaeopress
Publishers of British Archaeological Reports
Gordon House
276 Banbury Road
Oxford OX2 7ED
England
bar@archaeopress.com
www.archaeopress.com

BAR International Series

Navigated Spaces, Connected Places: Proceedings of Red Sea Project V
Held at the University of Exeter, 16-19 September 2010
Edited by Dionisius A. Agius, John P. Cooper, Athena Trakadas and Chiara Zazzaro

Copyright © 2012 by the authors
DTP by Athena Trakadas

ISBN 978 1 4073 0929 3

Printed in England by 4edge, Hockley

All BAR titles are available from:

Hadrian Books
122 Banbury Road
Oxford OX2 7BP
England
bar@hadrianbooks.co.uk

The current BAR catalogue with details of all titles in print, prices and means of payment is available free from Hadrian Books or may be downloaded from www.archaeopress.com.

Contents

CONTENTS	i
LIST OF FIGURES AND TABLES	iii
ACKNOWLEDGEMENTS	vii
INTRODUCTION	ix
THE DHOW: MASTERY OF THE MONSOON EXHIBITION	xiii
CONTRIBUTORS	xvii
<i>PART I. RECOLLECTIONS</i>	
1. TRAVELS WITH MACHELL IN THE RED SEA AND INDIAN OCEAN: THE VOYAGES OF THOMAS MACHELL AND JENNY BALFOUR PAUL, 1848 AND 2010. Jenny Balfour Paul	3
2. THE LAST OF THE ADEN DHOWS. Antonin Besse	17
<i>PART II. EARLY NAVIGATION AND CONTACT</i>	
3. SAILING THE RED SEA: PHARAONIC VOYAGES TO PUNT AND <i>MIN OF THE DESERT</i> . Cheryl Ward	25
4. A NEW PHARAONIC HARBOUR IN AYN SOKHNA (GULF OF SUEZ). Pierre Tallet	33
5. THE SOUTHERN RED SEA IN THE 3 RD AND 2 ND MILLENNIA BC: AN ARCHAEOLOGICAL OVERVIEW. Rodolfo Fattovich	39
6. NUBIANS AND THE OTHERS ON THE RED SEA. AN UPDATE ON THE EXOTIC CERAMIC MATERIALS FROM THE MIDDLE KINGDOM HARBOUR OF MERSA/WADI GAWASIS, RED SEA, EGYPT. Andrea Manzo	47
7. ANCIENT EGYPTIAN AND ALLIED AFRICAN NAVIGATORS' USE OF SPACE ON THE RED SEA. K.A. Kitchen	59
8. THE SEMITICISATION OF THE ARABIAN PENINSULA AND THE PROBLEM OF ITS REFLECTION IN THE ARCHAEOLOGICAL RECORD. Roger Blench	65
<i>PART III. THE SEA IN CLASSICAL ANTIQUITY</i>	
9. SACRED PLACES AND BEINGS OF THE RED SEA LITTORAL SOCIETIES. Oscar Nalesini	77
10. CROSSING THE RED SEA: THE NABATAEANS IN THE EGYPTIAN EASTERN DESERT. Caroline Durand	85
11. NEW LIGHT ON THE NATURE OF INDO-ROMAN TRADE: ROMAN PERIOD SHIPWRECKS IN THE NORTHERN RED SEA. Lucy Blue, J.D. Hill & Ross Thomas	91

PART IV. FROM THE CLASSICAL TO THE ISLAMIC

12. THE PORT OF BABYLON IN EGYPT. Peter Sheehan 103
13. THE *LIBER PONTIFICALIS* AND RED SEA TRADE OF THE EARLY TO MID 4TH CENTURY AD. 117
Eivind Heldaas Seland
14. THE FATIMIDS AND THE RED SEA (969-1171). David Bramoullé 127
15. TRADE CYCLES AND SETTLEMENT PATTERNS IN THE RED SEA REGION 137
(CA. AD 1050-1250). Timothy Power
16. SAILING WITH THE *MU'ALLIM*: THE TECHNICAL PRACTICE OF RED SEA SAILING 147
DURING THE MEDIEVAL PERIOD. Julian Whitewright

PART V. SUAKIN

17. SUAKIN: PARADIGM OF A PORT. Michael Mallinson 159
18. ARCHAEOLOGY AND THE ARCHAEOLOGICAL AND HISTORICAL EVIDENCE 173
FOR THE TRADE OF SUAKIN, SUDAN. L.M.V. Smith, M.D.S. Mallinson, J.S. Phillips,
A.H. Adam, A.I. Said, H. Barnard, C.P. Breen, G. Breen, D. Britton, W. Forsythe,
J. Jansen van Rensburg, T. McErlean & S. Porter
19. BEIT KHORSHID EFFENDI: A 'TRADER'S' HOUSE AT SUAKIN. Jacke Phillips 187

PART VI. PEOPLE AND THE ENVIRONMENT IN THE RED SEA REGION

20. (DIS)LOCATED SPACES AND MEDIATED OPPOSITIONS: MONKS AND BEDOUIN 203
IN THE DESERTS AROUND THE RED SEA. Janet C.M. Starkey
21. THE INTEGRATION OF THE EASTERN DESERT INTO THE ISLAMIC WORLD: 221
BEJA GROUPS IN MEDIEVAL ISLAMIC GEOGRAPHY AND ARCHAEOLOGICAL
RECORDS. Petra Weschenfelder
22. THE AWARENESS LEVEL AMONG STUDENTS OF KING ABDULAZIZ UNIVERSITY 229
(JEDDAH) OF THE INSTITUTIONS AND ISSUES RELATED TO THE VITALITY,
GEOGRAPHY, AND HISTORY OF THE RED SEA. Sadig A. Malki
23. ARABIC PLANT NAMES AND BOTANY IN ARABIC CIVILISATION. THE CONTRIBUTION 241
OF PETER FORSSKÅL (1732-1763) AND OTHERS. Philippe Provençal
- SELECT INDEX 247

Crossing the Red Sea: The Nabataeans in the Egyptian Eastern Desert

Caroline Durand

The Nabataean kingdom, radiating from its capital Petra, in northwestern Arabia, enjoyed great prosperity between the Late Hellenistic and Roman periods, in particular through its involvement in the trans-Arabian caravan trade.¹ Living on the eastern shore of the Red Sea, the Nabataeans also were involved in maritime trade, as attested by the ancient sources mentioning the existence of Nabataean ports on this coast. The most important one, Leuke Kome (“the white village”) – still unidentified – is described by Strabo as the main Nabataean trade port for Oriental goods and as the gateway to Nabataean territory at the end of the 1st century BC.² According to the *Periplus Maris Erythraei*, this port was still used as a secondary port for small vessels coming from southern Arabia in the mid 1st century AD, after Roman maritime trade in the Red Sea increased.³ Cosmas Indicopleustes, in the 6th century AD, mentions it again regarding an ancient inscription from Adulis⁴ related to the military campaign of an Ethiopian king which had devastated Arabia “from Leuke Kome to the Sabeans country”, probably in the late 2nd or 3rd centuries AD.⁵ In addition, as a consequence of their trading activities in this area, Nabataeans seem to have sometimes crossed the sea to reach Egypt, as evidenced by hundreds Nabataean graffiti recorded in the Eastern Desert, along the roads connecting the Red Sea to the Nile. This paper aims first to present an overview of the data attesting this Nabataean presence in the Egyptian Eastern Desert. Secondly, this paper aims to determine a chronological framework for their presence in the light of recent discoveries. In conclusion, these attestations will be placed into a broader context regarding the Red Sea trade networks and their evolution, especially relating to possible Nabataean ports on the Red Sea coast.

Evidences of Nabataean Presence in the Egyptian Eastern Desert

The most impressive remains of the Nabatean presence in the Egyptian Eastern Desert are not archaeological data but graffiti. Most of these are very simple and usually are in the form of “Greetings, X son of X”. An inventory was first made in the 1950s, mostly by Enno Littmann and David Meredith.⁶ It was completed later by a few new epi-

graphic discoveries, thanks to the important surveys and fieldwork conducted in this region since the late 1970s and 1980s.⁷ This discussion will focus on their spatial distribution along the roads crossing the Eastern Desert (Figure 10:1).

First, Nabataean graffiti are recorded along the north-south road connecting Clysma/Arsinoë (modern Suez) to Berenike.⁸ In the northern part of the Red Sea, on the western shore of the Gulf of Suez, an important group is located at Bir Abu Darag, around 70 km from Clysma/Arsinoë, where the remains of a Roman fort have also been noted.⁹ Farther south, a few spots have been recorded in wadis adjacent to the road: in Umm Dummerana,¹⁰ in the station of Bir Umm Dalfa¹¹ and in Bir Umm ‘Anab.¹² Second, a few Nabataean graffiti have been found along an east-west road connecting the Nile to the Red Sea coast: in Wadi Gidami¹³ and Wadi Hamama.¹⁴ This road probably ends in the vicinity of the modern port of Safaga, perhaps ancient Philoteris.¹⁵ But the remains of the Nabataean presence in the Eastern Desert are mainly concentrated on the road connecting the harbour of Myos Hormos (modern Quseir al-Qadim) and the city of Koptos (modern Qift), on the Nile.

In Roman times, this road was punctuated by a series of small forts (*praesidia*). The military stations protected the journey of the goods coming from the Red Sea, offering shelter and security for caravans. Nabataean graffiti recorded along this road were all found in the immediate vicinity of these Roman forts and caravan stations. They are situated in Qusur el-Banat,¹⁶ Krokodilo (modern al-Muwayh),¹⁷ Abu Quei’ (or Kuway’),¹⁸ Bi’r el-Hammamat,¹⁹

1. Regarding Nabataean trade, see Graf & Sidebotham 2003; Schmid 2004, 2007; Durand 2008, 2009.

2. Strabo, *Geography* XVI.4.24.

3. *Periplus Maris Erythraei* 19. On the date of the *PME*, around the mid 1st century AD: Bowersock 1983: 70-1; Robin 1991.

4. Probably near modern Zula, in Eritrea: Peacock & Blue 2007.

5. Cosmas Indicopleustes, *Christian Topography* 2.62.

6. Littmann & Meredith 1953, 1954; Jomier 1954.

7. Hammond 1979; Briquel-Chatonnet & Nehmé 1998.

8. The southern part of this road, between Antinoopolis and Berenike, corresponds to the Roman *Via Hadriana*, finished in AD 137 (Starcky 1955: 151).

9. Littmann & Meredith 1953: 11-3 (n°22a-34); probably Littmann & Meredith 1953: 14-7 (n°35-49). These sites were firstly localised near Bir al-Dakhal and Ras Gemsa (Littmann & Meredith 1954: 245); Jomier 1954.

10. Littmann & Meredith 1953: 9-11 (n°16a-21c).

11. Littmann & Meredith 1953: 7-9 (n°11-15).

12. Littmann & Meredith 1953: 5-7 (n°1-10).

13. Littmann & Meredith 1954: 220-3 (n°64-73).

14. Littmann & Meredith 1954: 219 (n°61-63).

15. Sidebotham *et al.* 2008: 169.

16. Littmann & Meredith 1953: 18 (n°52); Littmann & Meredith 1954: 215-6 (n°55-57).

17. Briquel-Chatonnet & Nehmé 1998: 82-6 (n°1-3).

18. Brun 2002: 398; Fournet 1995.

19. Briquel-Chatonnet & Nehmé 1998: 86-8 (n°4 a-c).

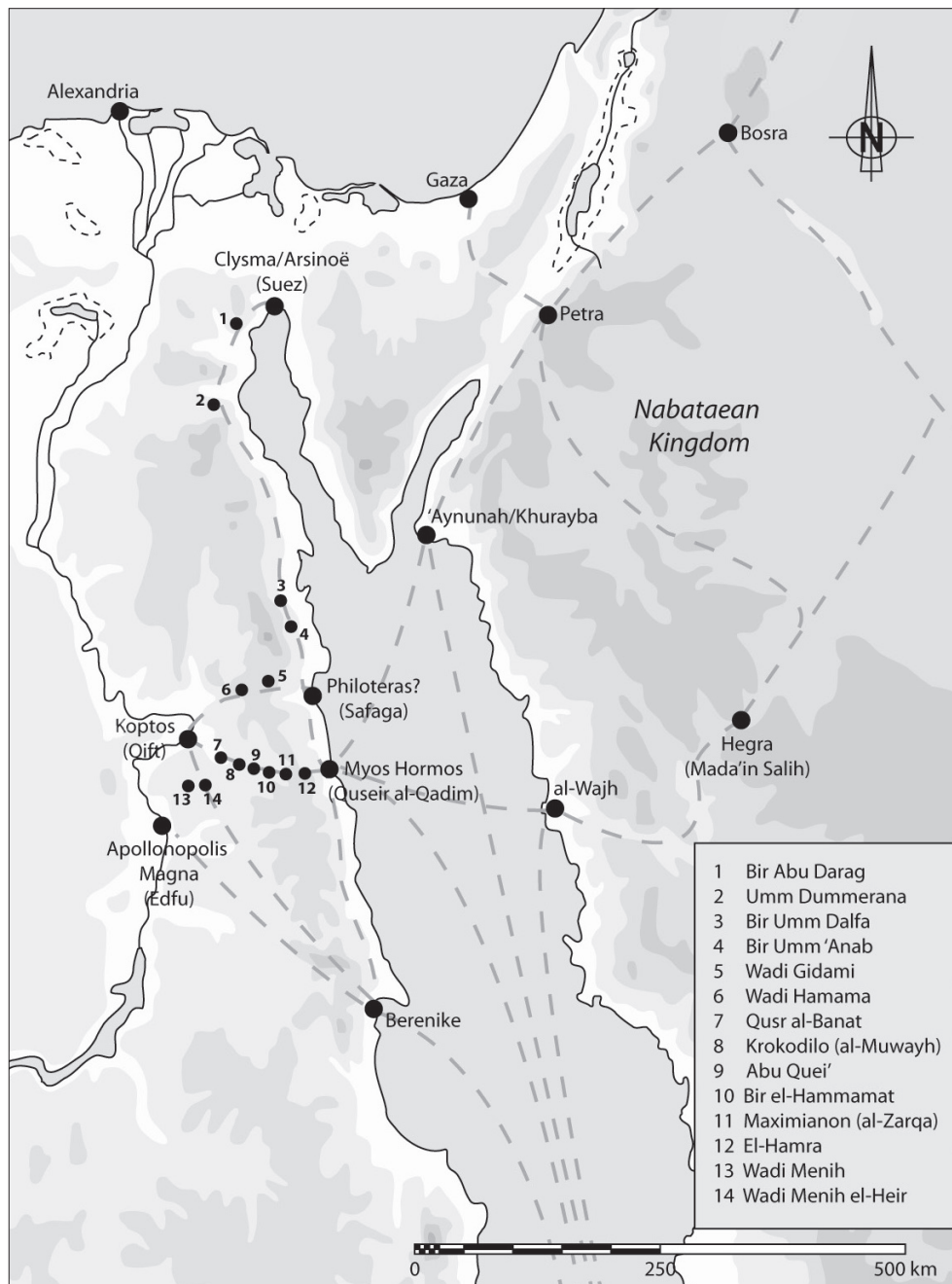


Figure 10:1. Distribution of Nabataean graffiti in the Egyptian Eastern Desert and probable main caravan and maritime routes.

el-Hamra,²⁰ and the Myos Hormos area.²¹ Two Nabataean *ostraca* were also found in Maximianon (modern Wakalat al-Zarqa).²² Recent archaeological fieldwork conducted along this road makes it possible to reconstruct the building progression of the different stations and forts.²³ Three successive building phases can be distinguished. The first

phase can be dated to the end of the 1st century AD/beginning of the 2nd century AD. At this time, the Roman stations of Maximianon and Krokodilo probably already existed. In Krokodilo, three Nabataean graffiti were engraved on the door posts of the fort,²⁴ which means that they cannot be dated to before the end of the 1st century AD. It is possible, however, that they belong to a later period, after the fort was abandoned. The two Nabataean *ostraca* found in Maximianon are dated, based on their context, to the 2nd century AD.²⁵ The *praesidia* of Bi'r el-

20. Littmann & Meredith 1953: 17 (n° 50-51); Littmann & Meredith 1954: 218 (n°60).

21. Hammond 1979. Several Nabataean graffiti have been recorded in an area of 10 km around Myos Hormos. Unfortunately, only one has been published in detail, and the exact number and content of these graffiti are unknown.

22. Toll 1994. On Maximianon excavations: Bülow-Jacobsen *et al.* 1994; Brun 1994, 1996.

23. Brun 2002; Cuvigny 2003.

24. Briquel-Chatonnet & Nehmé 1998: 82-6 (n°1-3).

25. Toll 1994: 381. These two fragmentary documents are still unique. They bear one or several series of numbers. The better preserved one is probably a kind of calculation table. The first line contains a few il-

Hammamat and el-Hamra' possibly were built during a second phase, corresponding to the second half of the 2nd century AD, under Hadrian or Antonius Pius.²⁶ The two Nabataean graffiti found in Bi'r el-Hammamat were once again engraved on the door posts of the fort, giving a *terminus post quem* for these inscriptions. On the other hand, we do not have any chronological indication for the two Nabataean graffiti recorded in the vicinity of el-Hamra. The fort of Qusur el-Banat belongs to a third phase and was built at the very end of the 2nd century AD, under Marcus Aurelius or Septimus Severus. It was in use during the first quarter of the 3rd century AD.²⁷ It is tempting to associate the three Nabataean graffiti found on a rock wall very close to this fort to the fort's occupation, but they could also be earlier or later. At this time, the fort of Maximianon was abandoned. At last, the site of Abu Quei' is not a Roman station but a rock shelter used by caravaneers before the road was developed, probably as early as the Ptolemaic period.²⁸ The two Nabataean graffiti found there could thus possibly date to an earlier period than the others, even though this is still very uncertain. They may have been associated with two small groups of earlier inscriptions discovered ca. 60 km from Koptos. The first group is situated in Wadi Menih (or Minayh), among the inscriptions of the *paneion*, a stone shelter dedicated to the god Pan-Min, and covered by Egyptian, Greek and Latin inscriptions.²⁹ The second group is located close to the first one, under a stone shelter of the adjacent Wadi Menih el-Heir (or Minayh al-Hir). Based on associated Greek and Latin inscriptions, Nabataean inscriptions from these two locations must date from the first half of the 1st century AD.³⁰

Striking is the fact that except for the two small groups from the stone shelters of Wadi Menih and Wadi Menih el-Heir, no other Nabataean inscriptions are recorded along the road from Berenike to Koptos, although it was extensively surveyed in the 1990s by Steven Sidebotham.³¹ On the other hand, the Nabataeans were probably active on the Myos Hormos to Koptos road for quite a long time, as a date between the end of the 1st century AD and the 3rd century AD must be stressed for the Nabataean graffiti located on the Myos Hormos to Koptos road. This dating fits well with the period given by the few clearly dated Nabataean graffiti from the Sinai Peninsula³² with which the Eastern

Desert Nabataean graffiti are usually associated because of very similar writing and common names.³³

Besides the Nabataean graffiti, a few Nabataean painted fineware pottery sherds have also been uncovered in the Egyptian Red Sea ports. Nabataean sherds have been recorded in Myos Hormos, dating – on the base of the two published sherds – from the end of the 1st century BC/beginning of the 1st century AD to the 2nd/3rd centuries AD.³⁴ A few sherds that could be dated to the first half of the 1st century AD were also uncovered in Berenike.³⁵

The Evolution of Trading Networks in the Egyptian Eastern Desert

Berenike harbour was founded by Ptolemy II Philadelphus in the mid 3rd century BC in order to receive the large ships carrying war elephants from the south.³⁶ One hundred and fifty years later, during the course of the 2nd century BC, the road from Myos Hormos to Koptos began to dominate after the ancient road from Berenike to Apollonopolis/Edfu started to decline, probably because of the Thebais' secession at the beginning of the 2nd century BC (207/206-187 BC).³⁷ This new configuration made the maritime itinerary in the Red Sea almost 300 km longer to the north, but reduced to a minimum – 175 km – the caravan journey between the Red Sea and the Nile.³⁸ During the 1st century AD, the situation was reversed. At this time, the decision was made to exploit the southern road from Koptos to Berenike. An inscription from Koptos celebrates the commission of three watering points along this road that did not exist during the Ptolemaic period.³⁹ The oldest inscription of the Wadi Menih' *paneion* gives the date of 4 BC as a *terminus ante quem* for this inscription and for the opening of the road.⁴⁰ The reasons why this road was preferred once again were probably the same as those in Ptolemaic times:⁴¹ it was difficult to sail in the northern part of the Red Sea due to a permanent north-to-south wind,⁴² particularly for large vessels that at this time came in great numbers from India.⁴³ This road quickly became important and Berenike became the main landing-port for the Erythraean goods as early as the mid 1st century AD. Around AD

legible letters, and then the following lines are numbered by order. It has been thought that it was a goods inventory. The goods must have been known by the writer of the *ostrakon*, and this would explain why it bears only numbers.

26. Brun 2002: 402.

27. Brun 2002: 403.

28. Brun 2002: 398; Fournet 1995.

29. De Romanis 1996: 203-17; Cuvigny & Bulow-Jacobsen 1999: 133-72.

30. Nehmé in Cuvigny & Bulow-Jacobsen 1999: 154-5 (n°40-41), 167-8 (n°66-67).

31. Sidebotham 2002. Nevertheless, this program seems to have focused mainly on architectural and material remains.

32. Littmann & Meredith 1953: 3; Cantineau 1930-1932, vol. I: 23; Negev 1967. Around 7,000 Nabataean graffiti were discovered in the Sinai Peninsula: Starcky 1955: 152; Teixidor 1998: 85-6, who recorded 2,700 graffiti.

33. Negev 1991. A graffito found in Myos Hormos is comparable by its onomastics to those of Sinai and northern Egypt: Hammond 1979.

34. Whitcomb & Johnson 1982: 59-60, 67-8, fig. 21d & 21e; Schmid 2004: 418, n°10; Schmid 2007: 66, n°10.

35. Hayes 1995: 38; Hayes 1996: 150; Schmid 2004: 418, n°11; Schmid 2007: 66, n°11. Unfortunately, no pictures of these sherds are available.

36. Strabo, *Geography* XVII.45.

37. At the end of the 2nd century BC, *Agatharchides* of Cnidus writes that Myos Hormos was a "big harbour", while Berenike seemed then to be a forgotten place. One century later, Strabo also described the Myos Hormos road as a flourishing trade itinerary (Strabo, *Geography* XVII.45).

38. Cuvigny 2000: 158.

39. Bernard 1984: n°56.

40. Cuvigny, Bulow-Jacobsen 1999: 134-5.

41. Strabo, *Geography* XVII.45: "(...) and that he did this because the Red Sea was hard to navigate, particularly for those who set sail from its innermost recess."

42. Facey 2004.

43. Cuvigny 2003: 29 (n. 164); De Romanis 1996: 23-8.

50, Pliny describes very precisely the merchants' itinerary from Alexandria to India, passing through Berenike, but he does not mention the harbour of Myos Hormos.⁴⁴ On the other hand, most of the ca. 120 Greek and Latin inscriptions from Wadi Hammamat (i.e. Koptos-Myos Hormos road)⁴⁵ date between the reigns of Augustus and Domitian, i.e. 1st century AD, and most of these inscriptions seem to date from the Tiberian era (AD 14-37).⁴⁶ It seems that after the first half of the 1st century AD, Mediterranean merchants preferred the Berenike road to the Myos Hormos road. Nevertheless, the *hodos Myshormitike* – as this road was called by Roman soldiers, based on some *ostraca* found in the fort of Krokodilo⁴⁷ – was still in use as it had been secured by a series of small forts at the end of the 1st century and during the 2nd century AD. Excavations in Myos Hormos show that the port probably ceased to operate during the 3rd century AD.⁴⁸

Evidence of a Nabataean presence near these small forts precisely dates from this 2nd/3rd centuries AD period. We can thus wonder what the Nabataeans did on this road at this time. A first explanation, which has often been suggested, is that the strong competition between Roman maritime trade and Nabataean caravan trade after the 1st century AD possibly led the Nabataeans to collaborate with Roman merchants, guiding their caravans through the Eastern Desert after the goods arrived in the Red Sea ports, in order to ensure their security.⁴⁹ Nevertheless, this hypothesis is contradictory, as the Myos Hormos road seems to become a secondary itinerary for the Indo-Roman trade in the 2nd-3rd centuries AD, precisely when the Nabataeans frequented this road.

Another reason that could have led the Nabataeans to frequent the Myos Hormos road at this time is that they used it for their own trade activities. We know, thanks to the ancient sources, that the Nabataeans controlled the caravan trade in northwestern Arabia as soon as the 4th century BC. The main trade road – the famous “incense road” – connected southern Arabia to Petra and there, to Gaza and the Mediterranean.⁵⁰ A secondary trade road linking Petra to the land of the Gerrhaeans is also attested by classical authors.⁵¹ These two trade roads seem to have been in use during the entire Hellenistic period, but during the 1st and 2nd centuries AD, several historical events were the cause of strong changes in the Nabataean trade networks: first, the considerable increase of Indo-Roman trade, which probably caused strong competition for the caravan trade,

and which is considered to have marked the start of the Nabataean decline; second, the annexation and transformation of the Nabataean kingdom into the Roman *Provincia Arabia* at the beginning of the 2nd century AD. It is probable that as soon as the 1st century AD, facing Roman competition and trying to preserve their rank in economic networks, the Nabataeans deviated part of their own trade goods to Koptos, the new hub for the Oriental trade.

Crossing the Red Sea: Nabataean Ports on the Eastern Red Sea Coast

The concentrated presence of the Nabataeans on the Myos Hormos road could be explained by the fact that Myos Hormos was easier for them to reach than Berenike, being located almost at the same latitude as the southern border of their kingdom. It also suggests that one or several Nabataean ports should have functioned on the eastern coast of the Red Sea between the 1st and 3rd centuries AD, most probably at latitude close to that of Myos Hormos.

Two main areas along the eastern Red Sea coast have yielded archaeological remains: the first one in the northern part of the Red Sea, around the site of ‘Aynunah/Khurayba, where Nabataean pottery sherds and architectural structures were uncovered;⁵² the second one around the modern port of al-Wajh, where the remains of a temple in the delta of the Wadi al-Hamd were uncovered by Burton in the late 19th century.⁵³ Both sites have been interpreted as possible locations for the ancient Leuke Kome. Aynunah has sometimes been preferred because of the important archaeological remains uncovered and of the direct link to Petra offered by the road from Wadi Afal, which fits with the *Periplus Maris Erythraei* description,⁵⁴ but the site of al-Wajh tends now to be considered as the favourite hypothesis, in particular because of its geographical situation opposite Quseir/Myos Hormos.⁵⁵ We assume that the concentrated Nabataean presence along the Myos Hormos road to Koptos could corroborate this point of view, even if this long-term debate will only be solved when archaeological programmes launched in this part of the Saudi coast will bring new results and shed new light on these possible Nabataean ports.

References

Primary sources

44. Pliny, *Natural History* VI.102-103.

45. Meredith 1953: 98; Bernand 1972.

46. Bernand 1972: 15; Sidebotham 1986: 55.

47. Brun 2002: 395.

48. Sidebotham *et al.* 2008: 170.

49. Sartre 1993: 27; Littmann & Meredith 1954: 239-241; Starcky 1955: 151.

50. Strabo, *Geography* XVI.4.4; Diodorus Siculus, *Library of History* XIX.94.5; Pliny, *Natural History* XII.63-65.

51. Diodorus, *Historical Library* III.42; Strabo, *Geography* XVI.4.19. See also Durand 2009.

Cosmas Indicopleustes. *La Topographie Chrétienne*. W. Wolska-Conus (tr. & ed.) 1968. Paris: Editions du CERF.

Diodorus Siculus. *Historical Library*. T.E. Page, E. Capps, W.H.D. Rouse, L.A. Post & E.H. Warmington (eds.) 1946. *Diodorus of Sicily, with and English Translation by C.H. Oldfather*. London: William Heinemann.

52. Ingraham *et al.* 1981: 75-8.

53. Burton 1879 (vol. II): 219-33.

54. Kirwan 1984; Sidebotham *et al.* 2008.

55. See the recent discussion by Nappo 2010, following Starcky 1961: 912; Teixidor 1984; Gattier & Salles 1988: 186-7; De Romanis 1996: 136, n. 34; Cuvigny 2003: 28-30.

- The Periplus Maris Erythraei: Text with Introduction, Translation and Commentary.* L. Casson (ed. & tr.) 1989. Princeton: Princeton University Press.
- Pliny the Elder. *Natural History.* H. Rackham (tr.) 1938. *Pliny: Natural History, with an English Translation in Ten Volumes.* London: William Heinemann.
- Strabo. *Geography.* H.L. Jones (tr.) 1917-32. *The Geography of Strabo.* London: William Heinemann.
- Secondary sources*
- Bernand, A. 1972. *De Koptos à Kosseir.* Leiden: Brill.
- Bernand, A. 1984. *Les portes du désert: recueil des inscriptions grecques d'Antinoopolis, Tentyris, Koptos, Apollonopolis Parva et Apollonopolis Magna.* Paris: CNRS Editions.
- Bowersock, G.W. 1983. *Roman Arabia.* Cambridge, MA & London: Harvard University Press.
- Briquel-Chatonnet, F. & Nehmé, L. 1998. Graffiti nabatéens d'al-Muwayh et de Bi'r al-Hammamat (Égypte). *Semitica* 47: 81-88.
- Brun, J.-P. 1994. Le faciès céramique d'Al-Zarqa. Observations préliminaires. *Bulletin de l'Institut français d'archéologie orientale* 94: 7-26.
- Brun, J.-P. 1996. Le présidium romain de Maximianon (Al-Zarqa, Égypte). Fouilles 1994-1995. *Topoi* 6: 685-695.
- Brun, J.-P. 2002. *Hodos Myshormitikè: l'équipement de la route entre Coptos et la mer Rouge aux époques ptolémaïque et romaine.* In *Autour de Coptos. Actes du colloque organisé au Musée des Beaux-Arts de Lyon (17-18 mars 2000).* *Topoi*, Suppl. 3, pp. 395-414.
- Bülow-Jacobsen, A., Cuvigny, H. & Fournet, J.-L. 1994. The Identification of Myos Hormos: New Papyrological Evidence. *Bulletin de l'Institut français d'archéologie orientale* 94: 27-42.
- Burton, R.F. 1879. *The Land of Midian (revisited).* London: C.K. Paul.
- Cantineau, J. 1930-1932. *Le Nabatéen.* Paris: E. Leroux.
- Cuvigny, H. 2000. Coptos, plaque tournante du commerce érythréen, et les routes transdésertiques. In P. Ballet & H. Cuvigny, *Coptos, l'Égypte antique aux portes du désert*, pp. 158-175. Lyon: Musée des Beaux-Arts.
- Cuvigny, H. (ed.) 2003. *La route de Myos Hormos: l'armée romaine dans le désert oriental d'Égypte. Praesidia du désert de Béréenice.* Fouilles de l'Institut français d'Archéologie orientale 48/1-2. Le Caire: IFAO.
- Cuvigny, H. & Bülow-Jacobsen, A. 1999. Inscriptions rupestres vues et revues dans le désert de Béréenice. *Bulletin de l'Institut français d'archéologie orientale* 99: 133-193.
- De Romanis, F. 1996. *Cassia, Cinnamomo, Ossidiana: uomini e merci tra Oceano Indiano e Mediterraneo.* Roma: L'Erma di Bretschneider.
- Durand, C. 2008. *Le rôle des Nabatéens dans le commerce oriental et méditerranéen, de l'époque hellénistique aux campagnes de Trajan (III^{ème} siècle av. J.-C. - II^{ème} siècle ap. J.-C.). Étude historique et archéologique.* PhD thesis, University of Lyon.
- Durand, C. 2009. The Nabataeans and Oriental Trade: Roads and Commodities (4th c. BC to 1st c. AD). In *Studies in History and Archaeology of Jordan X*, F. al-Khaysheh (ed.), pp. 405-411. Amman: Department of Antiquities, American Center of Oriental Research.
- Facey, W. 2004. The Red Sea: the wind regime and location of ports. In *Trade and Travel in the Red Sea Region. Proceedings of Red Sea Project I held in the British Museum October 2002*, P. Lunde & A. Porter (eds.), pp. 7-17. *Society for Arabian Studies Monographs* 2. Oxford: Archaeopress, British Archaeological Reports 1269.
- Fournet, J.-L. 1995. Les inscriptions grecques d'Abu Ku' et de la route de Qufi-Qusayr. *Bulletin de l'Institut français d'archéologie orientale* 95: 173-233.
- Gatier, P.-L. & Salles, J.-F. 1988. Aux frontières méridionales du royaume nabatéen. In *L'Arabie et ses mers bordières*, J.-F. Salles (ed.), pp. 173-190. Lyon: Maison de l'Orient.
- Graf, D.F. & Sidebotham, S.E. 2003. Nabataean Trade. In *Petra Rediscovered. Lost City of the Nabataeans*, G. Markoe (ed.), pp. 65-73. London: Thames & Hudson/Cincinnati: Cincinnati Art Museum.
- Hammond, P.C. 1979. Nabataean. In *Quseir al-Qadim 1978. Preliminary Report*, D.S. Whitcomb & J.H. Johnson (eds.), pp. 245-247. Cairo: American Research Center in Egypt.
- Hayes, J.W. 1995. Summary of Pottery and Glass Finds. In *Berenike 1994. Preliminary Report of the 1994 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, S.E. Sidebotham & W.Z. Wendrich (eds.), pp. 33-40. Leiden: Centre of Non-Western Studies.
- Hayes, J.W. 1996. The Pottery. In *Berenike 1995. Preliminary Report of the 1995 Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert*, S.E. Sidebotham & W.Z. Wendrich (eds.), pp. 147-178. Leiden: Centre of Non-Western Studies.
- Ingraham, M.L., Johnson, T.D., Rihani, B. & Shatla, I. 1981. Saudi Arabian Comprehensive Survey Program. C. Preliminary Report on a Reconnaissance Survey of the North-western Province. *Atlat* 5: 59-84.
- Jomier, J. 1954. Les graffiti 'sinaïtiques' du Wadi Abou Daradj. *Revue Biblique* 61: 419-424.
- Kirwan, L. (Sir) 1984. Where to Search for the Ancient Port of Leuke Kome. In *Studies in the History of Arabia, Vol. II. Preislamic Arabia. Proceedings of the Second International Symposium on Studies in the History of Arabia, Riyadh, April 1979*, A. Al-Ansary (ed.), pp. 55-61. Riyadh: King Saud University.
- Littmann, E. & Meredith, D. 1953. Nabataean Inscriptions from Egypt. *Bulletin of the School of Oriental and African Studies* 15: 1-28.
- Littmann, E. & Meredith, D. 1954. Nabataean Inscriptions from Egypt II. *Bulletin of the School of Oriental and African Studies* 16: 211-246.
- Meredith, D. 1953. The Roman Remains in the Eastern Desert. *Journal of Egyptian Archaeology* 39: 95-106.

- Nappo, D. 2010. On the Location of Leuke Kome. *Journal of Roman Archaeology* 23: 335-348.
- Negev, A. 1967. New Dated Nabatean Graffiti from the Sinai. *Israel Exploration Journal* 17: 250-255.
- Negev, A. 1991. Personal Names in the Nabatean Realm. *Qedem* 32. Jerusalem: Institute of Archaeology, Hebrew University of Jerusalem.
- Peacock, D.P.S. & Blue, L. (eds.) 2007. *The Ancient Red Sea Port of Adulis, Eritrea: Results of the Eritro-British Expedition, 2004-5*. Oxford: Oxbow.
- Robin, Ch. J. 1991. L'Arabie du sud et la date du *Périple de la mer Erythrée* (nouvelles données). *Journal Asiatique* 279: 1-30.
- Sartre, M. 1993. *Inscriptions de la Jordanie IV. Pétra et la Nabatène méridionale, Inscriptions grecques et latines de la Syrie XXI*. IFAPO, BAH 115. Paris: P. Geuthner.
- Schmid, S.G. 2004. The Distribution of Nabataean Pottery and the Organisation of Nabataean Long Distance Trade. *Studies in the History and Archaeology of Jordan* VIII: 415-426.
- Schmid, S.G. 2007. La distribution de la céramique nabatéenne et l'organisation du commerce nabatéen de longue distance. *Topoi*, Suppl. 8: 61-91.
- Sidebotham, S.E. 1986. *Roman Economic Policy in the Erythra Thalassa, 30 B.C.-A.D. 217*. Mnemosyne Supplementum 91. Leiden: Brill.
- Sidebotham, S.E. 2002. From Berenike to Coptos: Recent Results of the Desert Route Survey. In *Autour de Coptos. Actes du colloque organisé au Musée des Beaux-Arts de Lyon (17-18 mars 2000)*. *Topoi*, Suppl. 3, pp. 415-438.
- Sidebotham, S.E., Hense, M. & Nouwens, H.M. 2008. *The Red Land. The illustrated Archaeology of Egypt's Eastern Desert*. Cairo & New York: The American University in Cairo Press.
- Starcky, J. 1955. Compte-rendu: Enno Littmann, *Nabataean Inscriptions from Egypt II*. *Syria* 32: 150-157.
- Starcky, J. 1961. Pétra et la Nabatène. *Supplément au Dictionnaire de la Bible* 36: 886-1017.
- Teixidor, J. 1984. Un port romain du désert. Palmyre et son commerce d'Auguste à Caracalla. *Semitica* 34. Paris: A. Maisonneuve-J. Maisonneuve.
- Teixidor, J. 1998. Les Nabatéens du Sinai. In *Le Sinai durant l'Antiquité et le Moyen âge: 4000 ans d'histoire pour un désert. Actes du colloque tenu à l'UNESCO du 19 au 21 septembre 1997*, D. Valbelle & C. Bonnet (eds.), pp. 83-87. Paris: Errance.
- Toll, C. 1994. Two Nabataean Ostraca from Egypt. *Bulletin de l'Institut français d'archéologie orientale* 94: 381-382.
- Whitcomb, D.S. & Johnson, J.H. (eds.) 1982. *Quseir al-Qadim 1980. Preliminary Report*. American Research Center in Egypt Reports 7. Malibu: Undena Publications.