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An Indian coin in the Eastern Desert of Egypt

Shailendra Bhandare, H el ene Cuvigny, Thomas Faucher

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NETWORKED SPACES

THE SPATIALITY OF NETWORKS IN THE RED SEA AND WESTERN INDIAN OCEAN

*edited by Caroline Durand, Julie Marchand, Bérangère Redon
and Pierre Schneider*

NETWORKED SPACES: THE SPATIALITY OF NETWORKS IN THE RED SEA AND WESTERN INDIAN OCEAN

ARCHÉOLOGIE(S) // 8

The 34 articles published in this volume form the proceedings of the 9th Red Sea conference held at Lyon in July 2019, whose core topic was the “spatiality of networks in the Red Sea”, including the western Indian Ocean. In the networked space that the *Erythra Thalassa* never ceased to be, stable factors such as landscape, climate, and wind patterns have been constantly entangled with more dynamic elements, such as human activity. The contributors to this volume explored how the former were integrated into the countless networks formed by humans in the region, and how these were impacted by spatial constraints over the long course of history.

This volume offers a wide range of stimulating contributions. The first articles are devoted to medieval and modern European sources on the Red Sea and its exploration, and to the networks of knowledge dissemination about the region. They are followed by papers relating to the main nodes, the ports and islands of the Red Sea. Several articles are then focusing on the agency of hinterland populations in the networks, and the relationships between the regions bordering the Red Sea and central powers that governed them, often from distant lands. Production and consumption networks are the subject of the next articles, to assess the extent and nature of exchanges and to shed light on the archaeology of circulations. The logistics of exploration, exploitation and trade in the regions bordering the Red Sea are then examined. The last series of papers focuses on regions where archaeological work started only recently: Somaliland, Tigray, and the Horn of Africa. Thanks to all the participants, whether they have exploited new data or re-examined long-known material, the 9th edition of the “Red Sea Project” gave rise to vibrant debates, showing that the *Erythra Thalassa* remains an endless source of knowledge.

Les 34 articles publiés dans ce volume forment les actes de la 9^e édition de la « Red Sea conference » qui s'est tenue à Lyon en juillet 2019. Son thème central était la « spatialité des réseaux en mer Rouge », mais aussi dans l'océan Indien occidental. Dans l'espace connecté que l'Erythra Thalassa n'a jamais cessé d'être, des éléments stables, tels que le paysage, le climat ou le régime des vents, ont été constamment enchevêtrés avec des éléments plus dynamiques, comme l'activité humaine. Les contributeurs de ce volume ont exploré la manière dont les premiers ont été intégrés au sein des innombrables réseaux formés par les hommes dans la région, et dont ceux-ci ont été affectés par les contraintes spatiales au cours de l'histoire.

Ce volume offre un riche éventail de contributions. Les premières sont consacrées aux sources européennes médiévales et modernes relatives à la mer Rouge et à son exploration, ainsi qu'aux phénomènes de diffusion des connaissances sur la région. Elles sont suivies d'études sur les nœuds principaux que sont les ports et les îles de la mer Rouge. Plusieurs contributions sont ensuite dédiées à l'agency des populations de l'arrière-pays dans les réseaux, de même qu'aux relations entre les régions bordant la mer Rouge et les pouvoirs centraux qui les ont régis, souvent depuis des contrées éloignées. Les réseaux de production et de consommation font l'objet des textes suivants. Ils évaluent l'ampleur et la nature des échanges et mettent en lumière l'archéologie des circulations. La logistique de l'exploration, de l'exploitation et du commerce dans les zones bordant la mer Rouge est ensuite examinée. La dernière série d'articles porte sur des régions où les travaux archéologiques ont commencé très récemment : Somaliland, Tigré et Corne de l'Afrique. Grâce à tous les participants, qu'ils aient exploité de nouvelles données ou réexaminé des documents connus de longue date, la 9^e édition du « Red Sea Project » a donné lieu à des débats animés, témoignant que l'Erythra Thalassa demeure une source d'information inépuisable.



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An Indian coin in the Eastern Desert of Egypt

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In 2007, the French archaeological mission of the Eastern Desert found a square Indian coin during the excavations of the *praesidium* of Dios (Abu Qurayya). Located on the road from Koptos to Berenike, the fort was built in 115/116 AD. The coin is a new type in the series of the “stock coinage” of the Cheras, of South India, usually dated from the 1st and 2nd centuries AD. It is the only Indian coin ever found by the team during more than 25 years of excavations in the *praesidia* of the Eastern Desert and a rare witness of Erythrean trade in one of these Roman garrisons. If its presence is only anecdotic, its stratigraphic context helps to date the Chera coinage.

En 2007, la Mission archéologique française du désert Oriental a découvert une monnaie indienne carrée durant les fouilles du praesidium de Dios (Abu Qurayya). Situé sur la route entre Koptos et Berenike, le fort a été construit en 115/116 ap. J.-C. La monnaie est un nouveau type dans la série du « stock monétaire » des Cheras d'Inde du Sud, communément datés des 1^{er} et 2^e siècles ap. J.-C. Il s'agit de l'unique monnaie indienne découverte par l'équipe après plus de 25 ans de fouilles dans les praesidia du désert Oriental et d'un rare témoignage du commerce de la « mer Erythrée » dans l'une de ces garnisons romaines. Si sa présence est seulement anecdotique, son contexte stratigraphique permet d'affiner la chronologie du monnayage chera.

Evidence of the Erythrean trade is very rare in the *praesidia* (forts) of the Eastern Desert of Egypt, and coins are no exception, although coins found in the region have generally fared better than found in the Nile Valley, as there exist better surveys and publications for these (see below). Nevertheless, there is still a need for systematic conservation and publication of such data while excavations happen. With this view, we publish here an Indian coin (*fig. 1*), found in 2007 during the excavation of the fortress of Dios (*Jovis* in the Antonine Itinerary, present-day Abu Quarayya, located in Red Sea Governorate, Egypt, latitude: 25°12'54" N, longitude: 34°2'1" E).¹ Being a witness of the long-distance trade connections between India and Roman Egypt, it also helps with the dating of the particular series to which the coin belongs, because there is precious little archaeological evidence in India for dating these coins.

1. The coin was first identified by O. Bopearachchi.



Fig. 1 – Chera dynasty coin found in Dios (T. Faucher/MAFDO).

6.32 g; 24 mm.

Obverse: a caparisoned elephant standing in profile, facing right, on a horizontal pedestal; to its right, a banner, flying to left and a trident, a tree with wavy branches and small leaves behind. A small row of dots appears below the elephant's belly, possibly suggesting the elephant's back was covered by a *jhula*.

Reverse: strung bow and arrow pointing to right; an elephant-goad standard to its left.

The coin shows corrosion, pitting and scratches along its upper edge but the rest is well preserved. The obverse shows die slippage and, therefore, shadows in the elephant's trunk and forelegs.

The coin is readily identified as an uninscribed coin of the Chera dynasty from South India, ascribed many times to the "Sangam Age", ca 100 BC-250 AD. Mitchiner has described these coins as "prolific issues" and "a Chera stock coinage"; he dates these to ca the 1st and 2nd centuries AD. There appear to be three denominations – a full unit of ca 6-8 gm (to which our coin belongs), a 1/2 unit of this between 3-4 gm and quarters, weighing around 2 gm. Although no specimen illustrated by Mitchiner matches exactly with our coin, the fact that there are two vertical objects to the right of the elephant on the obverse, brings it closest to no. 67 and 68.²

Ancient Indian coins found in Egypt

We know about export of coins from Egypt to India sent as batches of cargo,³ but a lot less about coins from India coming through Egypt. The only other archaeologically documented instances of Indian coins found in the Eastern Desert, prior to this report, come from Berenike. Two Indian coins, one in silver and one in lead, have been reported as found during excavations at this important port of trade. The first in silver is a typical western Kshatrapa coin, issued by the king Rudrasena III (fig. 2).⁴



Fig. 2 – King Rudrasena III coin from Berenike (Sidebotham, Wendrich 2007, p. 209, no. 115).

2. Mitchiner 1998, pp. 71, 77; see also Krishnamurthy 1997.
3. See for example coin bags that could be mentioned in the Berenike ostraca: Nappo, Zerbini 2011.
4. As described in Sidebotham, Wendrich 2007, p. 209, no. 115: "(Obverse: Rudrasena III [reigned AD 348-390], coin minted in Saka year 285? = AD 362, of the Kshatrapas of Western India, bust right, illegible date behind head; Reverse: Caitya and legend [transliterated]: *RajñoMahaksatrapasaSwāmiRudradamaputrasaRajnaMaha IsatrapasaSwāmiRudrasenasa*, cf. Rapson 1967, pp. 179-188 and Pl. XVII in general; Zeymal 1975, p. 7, fig. 2, 41, 10 [Sedov and Bates, personal communication] [plate 8-15]"; Sidebotham 2011a, p. 275.

It bears on the obverse a bust of the king and, on the reverse, a Brahmi legend surrounding the dynastic emblem. Although Sidebotham et al. have tentatively suggested the date on the coin to be Saka Era 285, the illustration provided by them makes it evident that the date is incomplete and could well be 28X or 29X. It can be safely surmised that the coin was struck in the middle of Rudrasena III's long reign in late 4th century AD.

The lead coin is an issue of the Satavahanas, originating from the Krishna-Bheema basin in the Deccan and dated to ca the 2nd century AD (*fig. 3*).⁵ Comparable coins have been reported from the excavations at the sites of Kondapur and Sannati. The obverse has an elephant and a partly preserved inscription ...*Siri Satakanisa* while the reverse had an Ujjain symbol. It was, most likely, struck by Vasithiputa Siri Satakani, or Gotamiputa Siri Yajna Satakani, but with a shortened version of the king's name.



Fig. 3 – Satavahana coin from Berenike (Sidebotham et al. 2019, pl. XXII).

Unlike Berenike, which was a trading centre, Dios was a *praesidium* situated on the road from Koptos to Berenike, that provided water to caravans, maintained order by suppressing smuggling and local unrest, and relayed official mail between the Nile Valley and the Red Sea. The Chera coin, found in 2007, comes from Stratigraphic Unit (SU) 3632 in the outdoor dump of the Dios *praesidium*. Stratigraphy gives us an imprecise date:⁶ we can say that the coin was lost after the foundation of the fort at Dios in 115/116 AD⁷ and before the Antonine Plague in 166, at which time there was a break in the occupation of the *praesidia* on the Koptos-Berenike road. The Greek ostraca found in SU 3632 help us to attribute a date to its finds tentatively. Several of them mention a woman named Hegemonis, who was residing in Dios. The fact that this name is not found elsewhere in Egypt allows us to identify her with the same Hegemonis mentioned in the letters on ostraca from Didymoi and Krokodilo, two other forts in the desert of Berenike. In the ostraca of Didymoi, Hegemonis appears only once (O.Did. 386). At Krokodilo, she seems to be the young wife of a sutler and pimp called Philokles, who was helped in his business by a procuress called Sknips. At Dios, however, Hegemonis belongs to a different circle, which does not include Philokles.⁸ It is therefore plausible that Hegemonis settled at Dios later in her life. The ostraca from Krokodilo date to the reign of Trajan and the first years of Hadrian, so we might surmise that Hegemonis' stay at Dios might be later than this, perhaps extending into the later reign of Hadrian or even Antoninus Pius. The Antonine Plague in 166 AD thus seems to be a reasonable marker to close the chronological bracket for material from SU 3632, which also includes the Chera coin.

5. The coin was found inside the Isis temple in 2018. See Sidebotham et al. 2019, p. 15, pl. XXII, 1 and 2.

6. The dump was excavated that year by Emmanuel Botte who made a preliminary analysis of the stratigraphy of the middens with Jean-Pierre Brun.

7. Date known from the dedication of the fort, published in Cuvigny 2010, p. 245 f.

8. O.Dios. inv. 421 and 447, which mention Hegemonis, come from SU 3632, where the Chera coin was found; seven other occurrences of Hegemonis are from linked layers. On the circle and the matrimonial life of Philokles, see Cuvigny 2003, pp. 376-382, and Bülow-Jacobsen 2012, pp. 295-298; Bülow-Jacobsen, Fournet, Redon 2019, pp. 33-127.

A survey of coins found in the Eastern Desert (fig. 4)

Excavations at many fortress sites present on the routes of the Eastern Desert have yielded coins. H. Cuvigny and K. Lach-Urgacz have surveyed coins found in the Roman fortresses along the way from the Nile to the Red Sea.⁹ In the Ptolemaic fortresses, coins are found in low numbers. In Bi'r Samut, 16 coins were excavated during the four seasons of excavations (2013-2016) while 7 have been unearthed in Abbad in 2017 and 2018.¹⁰ All these coins belong to the 3rd century BC and document very well the occupation of these two sites. The corpus of excavated coin finds becomes more significant during the Roman period. At least 79 coins found during the excavations of the Mons Claudianus must be added to the 91 coins published by Cuvigny and Lach-Urgacz. The coins found by the team of S. Sidebotham during the excavations of Berenike have been partly published and number now 877 from all periods (+19 from Shenshef and 45 from Sikait¹¹);¹² 21 coins were reported from the British excavations at Porphyrites and 26 from Abu Sha'r.¹³ The coin finds from the excavations

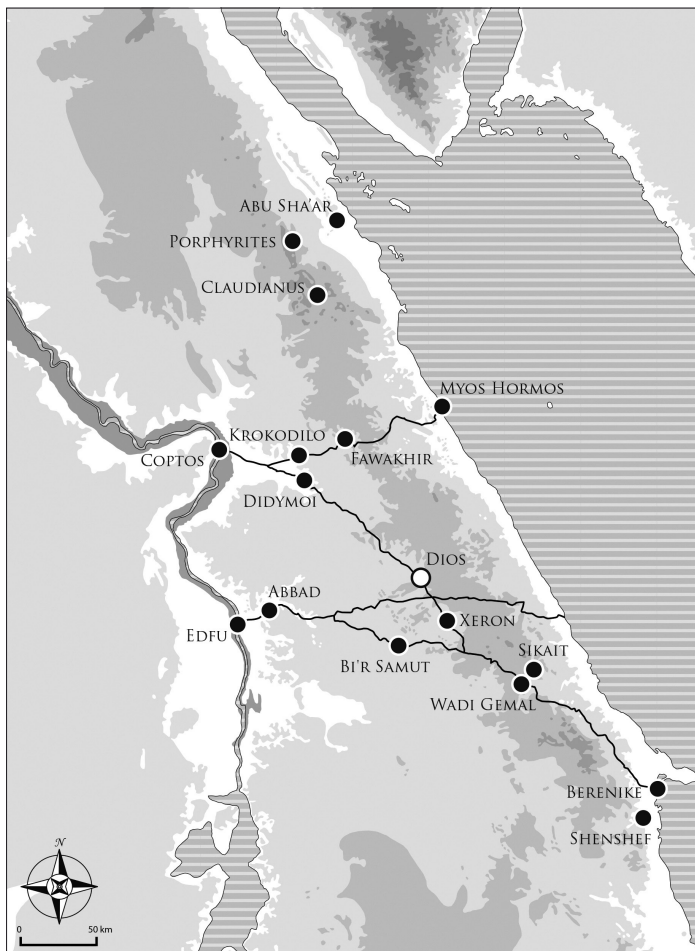


Fig. 4 – Map of the Eastern Desert of Egypt with mentioned sites (T. Faucher).

9. Cuvigny, Lach-Urgacz 2020.
10. These two excavations were held by the French archaeological mission of the Eastern desert (MAFDO), led by Bérangère Redon from 2013 to 2017.
11. 33 coins were recovered during the 2018 excavations and survey. We are indebted to Joan Oller Guzmán for this information.
12. A catalogue of coins exists for the coins found between 1994 and 2000: Sidebotham, Wendrich 2007, pp. 200-210. At that time, the amount of coins was already numbered 522 for the single site of Berenike. We also have a catalogue for coins found during 2009 season: Sidebotham 2011b, pp. 79-81.
13. All these coins are held in the archaeological store room of Quft but a lot of them need restoration.

of the site of Bir Umm Fawakhir (Late Roman period) have not yet been published.¹⁴ The excavations at Quseir al-Qadim (anc. Myos Hormos) recovered only little numismatic evidence since only one Ptolemaic and one coin of the 3rd century AD were recovered during three years of excavations.¹⁵

This cursory survey shows that coins were not totally absent from the Eastern Desert, but their use there may have been different from that in the Nile Valley. The main characteristics of this circulation is the persistence of bronze coins struck in the first and second half of the 2nd century through to the 3rd century CE. When other coins, mainly billon tetradrachms, were in use in the rest of Egypt, they are conspicuously absent from the Eastern Desert sites. This shows that the use of coins in the Eastern Desert was mainly to facilitate small monetary transactions that were taking place at that period in the sites along the route. These sites were mostly connected with movements of Roman soldiery.

A different kind of evidence is offered by the Indian coins found in the Eastern Desert. Since Greek and Roman rulers imposed a closed monetary system in Egypt it is normal not to find coins from outside the country during the Ptolemaic and Roman periods (at least until 296 AD).¹⁶ It appears that this rule was scrupulously followed, as the finds of foreign coins in this period are relatively rare. However, considering the large number of Roman coins found in India, it would be logical to expect some traces of coins circulating in the opposite direction. To our best knowledge, except the two coins found in Berenike, the only other Indian coin found so far in the Eastern Desert is this Chera coin found during the excavations of the *praesidium* at Dios.

Conclusion

The find of the Chera coin from an archaeological context is therefore a significant advance on how we ascertain chronology for the Chera coinage. Since the coins themselves are uninscribed, secondary evidence becomes crucial in anchoring the coinage on a reliable chronological peg. The find of the coin in the excavations of Dios affords us this important marker.

Bibliography

- Bülöw-Jacobsen 2012: A. Bülöw-Jacobsen, "Private letters", in H. Cuvigny (ed.), *Didymoi. Une garnison romaine dans le désert Oriental d'Égypte II. Les textes*, Cairo, IFAO, 2012, pp. 234-400.
- Bülöw-Jacobsen, Fournet, Redon 2019: A. Bülöw-Jacobsen, J.-L. Fournet, B. Redon, *Ostraca de Krokodiló II. La correspondance privée et les réseaux personnels de Philoklès, Apollós et Ischyros*, Cairo, IFAO, 2019, <https://www.ifao.egnet.net/uploads/publications/enligne/FIFAO081.pdf> (accessed 18/01/2021).
- Callataÿ 2005: F. de Callataÿ, "L'instauration par Ptolémée I^{er} Sôter d'une économie monétaire fermée", in F. Duyrat, O. Picard (ed.), *L'exception égyptienne? Production et échanges monétaires en Égypte hellénistique et romaine. Actes du colloque d'Alexandrie, 13-15 avril 2002*, Cairo, IFAO, 2005, pp. 117-134.
- Christiansen 2005: E. Christiansen, "Coin circulation in Roman Egypt before Diocletian's currency reform", in F. Duyrat, O. Picard (ed.), *L'exception égyptienne? Production et échanges monétaires en Égypte hellénistique et romaine. Actes du colloque d'Alexandrie, 13-15 avril 2002*, Cairo, IFAO, 2005, pp. 279-283.

14. A list of 6 coins is published in Meyer et al. 2014, pp. 81-83; other mentions are scattered in several reports: Meyer 1999, pp. 27, 32; Meyer 2001, pp. 17-19.

15. Whitcomb 1996, pp. 747-772.

16. Callataÿ 2005, pp. 117-134; Christiansen 2005, pp. 279-283.

- Cuvigny 2003: H. Cuvigny, “La société civile des *praesidia*”, in H. Cuvigny (ed.), *La route de Myos Hormos. L’armée romaine dans le désert Oriental d’Égypte*, Cairo, IFAO, 2003, pp. 361-398.
- Cuvigny 2010: H. Cuvigny, “The shrine in the *praesidium* of Dios (Eastern Desert of Egypt): graffiti and oracles in context”, *Chiron* 40, 2010, pp. 245-299.
- Cuvigny, Lach-Urgacz 2020: H. Cuvigny, K. Lach-Urgacz, “Ὁρεινὸν κέρμα. Monetary circulation in the *praesidia* of the Eastern Desert during the principate”, in T. Faucher (ed.), *Money rules! The monetary economy of Egypt, from Persians until the beginning of Islam*, Cairo, IFAO, 2020, pp. 309-339.
- Krishnamurthy 1997: R. Krishnamurthy, *Sangam Age Tamil coins*, Madras, Garnet Publications, 1997.
- Meyer 1999: C. Meyer, “Bir Umm Fawakhir”, *The Oriental Institute Annual Report 1998-1999*, 1999, pp. 25-37.
- Meyer 2001: C. Meyer, “Bir Umm Fawakhir”, *The Oriental Institute Annual Report 2000-2001*, 2001, pp. 17-25.
- Meyer et al. 2014: C. Meyer, L.A. Heidorn, S. Ikram, R.L. Jaeschke, T.C. Roby, W. Smith, *Bir Umm Fawakhir 3. Excavations 1999-2001*, Chicago, Oriental Institute of the University of Chicago, 2014.
- Mitchiner 1998: M. Mitchiner, *The coinage and history of southern India. Part two. Tamilnadu-Kerala*, London, Hawkins Publications, 1998.
- Nappo, Zerbini 2011: D. Nappo, A. Zerbini, “On the fringe: trade and taxation in the Egyptian Eastern Desert”, in O. Hekster, T. Kaizer (ed.), *Frontiers in the Roman world. Proceedings of the ninth workshop of the international network Impact of Empire, Durham, 16-19 April 2009*, Leiden/Boston, Brill, 2011, pp. 61-77.
- Rapson 1967: E.J. Rapson, *Catalogue of the coins of the Andhra dynasty, the western Kṣatrapas, the Traikūṭaka dynasty, and the “Bodhi” dynasty*, London, British Museum, 1967 (1st print 1908).
- Sidebotham 2011a: S.E. Sidebotham, *Berenike and the ancient maritime spice route*, Berkeley/Los Angeles/London, University of California Press, 2011.
- Sidebotham 2011b: S.E. Sidebotham, “Coins”, in S.E. Sidebotham, I. Zych (ed.), *Berenike 2008-2009. Reports on the excavations at Berenike, including a survey in the Eastern Desert*, Warsaw, Polish Centre of Mediterranean Archaeology University of Warsaw, 2011, pp. 79-82.
- Sidebotham et al. 2019: S.E. Sidebotham, I. Zych, M. Hense, R. Ast, O.E. Kaper, M. Bergmann, M. Osypinska, A. Carannante, “Results of the winter 2018 excavation season at Berenike (Red Sea coast), Egypt. The Belzoni bicentennial report”, *Thetis* 24, 2019, pp. 7-19, pl. I-XXVIII.
- Sidebotham, Wendrich 2007: S.E. Sidebotham, W.Z. Wendrich, *Berenike 1999-2000. Report on the excavations at Berenike, including excavations in Wadi Kalalat and Siket, and the survey of the Mons Smaragdus region*, Los Angeles, University of California Press, 2007.
- Whitcomb 1996: D.S. Whitcomb, “Quseir al-Qadim and the location of Myos Hormos”, *Topoi* 6/2, 1996 pp. 747-772, https://www.persee.fr/doc/topoi_1161-9473_1996_num_6_2_1693 (accessed 18/01/2021).
- Zeymal 1975: E.V. Zeymal, “Western Kshatrapa coins in the hermitage”, in E.I. Lubo-Lesničenko (ed.), *Kul'tura i iskusstvo Indii i stran Dal'nego Vostoka: sbornik statei*, Leningrad, Avrova, 1975, pp. 4-20.