

# Peoples of the Eastern Desert of Egypt and their Impact on the Red Sea Trade: 1st to 3rd Centuries AD

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## **Abstract**

Studies on Roman participation in the Red Sea trade have tended to focus on wider geopolitical events such the unification of the Mediterranean world or the Antonine Plague to explain fluctuations in the level of activity. While such external factors are an important consideration, it would be a mistake to not also consider in tandem more localised developments in the Eastern Desert and Red Sea region. To this end, the aim of this paper is to explore the impact that the indigenous populations of this region had on the operation of the trade during the 1st to 3rd centuries AD.

In the last few decades many historians, archaeologists and paleoanthropologists have become willing to consider the civilisations they study from a global historical perspective.<sup>1</sup> With good reason some scholars have begun to apply concepts such as archaic globalisation or, as Seland has suggested, “oikoumenisation” to the study of the Indian Ocean trade in Antiquity.<sup>2</sup> Around the late 1st millennium BC to early 1st millennium AD, the monsoon winds of the Indian Ocean were increasingly being exploited to facilitate the movement of goods and people across the Afro-Eurasian world.<sup>3</sup>

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<sup>1</sup> For example, Pitts and Versluys 2015 have recently edited a volume exploring the concept of globalisation with regards to the Roman Empire.

<sup>2</sup> See, in particular, Seland 2008. On the concept of archaic globalisation see Fitzpatrick 2011, 28-31, 42-3.

<sup>3</sup> Henceforth BC will always be specified, but AD only where ambiguity may arise or a specific date is given.

This global historical approach often entails examining issues on a macro scale. Studies on the growth of Roman participation in the Indian Ocean trade have tended to focus on wider geopolitical events such the unification of the Mediterranean world – a process which brought about greater stability, private investment and an increased demand for goods.<sup>4</sup> Likewise, scholars examining fluctuations and downturns in this participation have also tended to explain these developments by pointing to major events such as the Antonine Plague and the so-called Third Century Crisis.<sup>5</sup> As important as this macro perspective is for understanding how external events impacted on developments within the Eastern Desert and Red Sea region, it is important that a more localised (or micro) perspective is considered in tandem.<sup>6</sup>

To this end, the purpose of this article is to explore the impact that the indigenous populations of the Eastern Desert and western Red Sea littoral had on the operation of this trade during the 1st to 3rd centuries. This entails examining two overarching themes: conflict and cooperation. In the case of the former, it is argued that there were increased incidents of violent conflict in the latter 1st and 2nd centuries. One of the main factors behind this seems to have been the high levels of traffic resulting from a booming trade, as well as increased quarrying activity. There is good reason to think that cumulatively these incidents of violence impinged on the level of trading activity over time and may have caused a shift in the routes utilised by some merchants. By the early 3rd century the evidence, although tentative, could suggest a shift to greater levels of conciliation and co-operation between the indigenous and external populations (such as miners, traders, and soldiers).

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<sup>4</sup> On these concepts see Warmington 1928; Tchernia 1997; Tomber 2008; Sidebotham 2011; Gurukkal 2016.

<sup>5</sup> On these theories see Young 2001; Whittaker 2004; McLaughlin 2010.

<sup>6</sup> See Map 1.

## **Exploitation of the Eastern Desert and Red Sea**

Before considering the interactions between the external and indigenous groups, it is necessary to briefly consider what factors encouraged people to enter this region. Since the Pharaonic Old Kingdom (2686-2181 BC) periodic expeditions have been sent into the Eastern Desert, either to acquire mineral resources or to cross over to the Red Sea for trade ventures; by the Late Period (664-332 BC) these activities seem to have become more regular.<sup>7</sup> During the course of the 3rd century BC, under the auspices of the Ptolemies, a more concerted process of settlement and exploitation of the Eastern Desert and the Red Sea region began, motivated by a desire for gold and ivory and the acquisition of live elephants for use in warfare.<sup>8</sup> As a result, a number of ports along the Egyptian Red Sea coast (like Berenike and Myos Hormos) and routes across the Eastern Desert (connecting Nile cities like Apollonopolis Magna (Edfu) and Koptos (Qift) to the Red Sea ports) were established.<sup>9</sup> Over time commercial ventures in the Red Sea and wider Indian Ocean grew in scale, especially once the monsoon winds began to be exploited more systematically (c. late 2nd to 1st century BC).<sup>10</sup>

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<sup>7</sup> The earliest recorded expedition was one sent out by Sahura (2458-2446 BC). Pottery at the Pharaonic period site of Mersa Gawasis suggests trade contacts with cultures in Eritrea and possibly Yemen – Bard and Fattovich 2010, 1-13. For the Late Period see Gates-Foster 2012, 192.

<sup>8</sup> For goldmining activity see Sidebotham, Hense and Nouwens 2008; Klemm and Klemm 2013. For elephant hunting activity and the acquisition of ivory see Casson 1993; Burstein 1996; Gates-Foster 2012; Fischer-Bovet 2014, 58-60, 153-5, 263; Cobb 2016.

<sup>9</sup> For the routes and ports see Bernand 1972; Cohen 2006; Sidebotham 2011; Brun and Reddé 2011a, 9-13; Gates-Foster 2012; Wilson 2015, 13-21.

<sup>10</sup> For a discussion of the development of Ptolemaic commercial interests in the Red Sea, Gulf of Aden and western Indian Ocean see Sidebotham 1986, 8-9, 175; Sidebotham 2011, 37; Gates-Foster 2012, 196-201. For the exploitation of the monsoon winds see Tchernia 1995; Tchernia 1997; Habicht 2013.

The Roman state inherited the Ptolemaic facilities established in the Eastern Desert and Red Sea after Egypt's annexation in 30 BC. Mining for gold and (semi-)precious stones like beryls/emeralds and amethyst mining continued.<sup>11</sup> During the course of the 1st century the hard-stone quarries at Mons Porphyrites (Gebel Abu Dukhan) and Mons Claudianus began to be exploited on a large scale; the former providing porphyry, the latter grey granodiorite.<sup>12</sup> The volume of trade conducted via the Red Sea also grew substantially after 30 BC. Various items such as wine, red coral, glassware, crafted objects, and gold and silver coins were being exported via the Egyptian Red Sea ports, while spices and aromatics, textiles, and precious gems, among other items, were being imported.<sup>13</sup>

In order to facilitate the large amounts of commercial traffic and the mining and quarrying activities, it was necessary for the Roman state to control water resources in the region, and provide safe routes to travel, just as the Ptolemies had done in the preceding centuries.<sup>14</sup> The administration and supervision of the region (at least stretching from Berenike to south of the quarries at Mons Claudianus and Mons Porphyrites) was undertaken by the Prefect of Berenike – Praefectus Montis Berenicidis or Praefectus praesidiorum et Montis

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<sup>11</sup> See Klemm and Klemm 2013, 132-41, 238-49; Sidebotham, Hense, and Nouwens 2008, 277; Tratsaert 2012, 215-25; Sidebotham and Zych 2016, 30-1.

<sup>12</sup> For an overview of these quarries see Peacock and Maxfield 1997; Peacock and Maxfield 2001a; Peacock and Maxfield 2001c; Peacock and Maxfield 2007a. See Map 3.

<sup>13</sup> For an overview of this trade see Sidebotham 1986 and 2011; Young 2001; Tomber 2008; McLaughlin 2010; Mathew 2015; De Romanis and Maiuro 2015; Evers 2017.

<sup>14</sup> The climate of the Eastern Desert was and still is largely arid with irregular rainfall and occasional flashfloods. For discussion of the environment see Cappers 2006, 21-37; Barnard 2009, 16; Tengberg 2011, 205. For earlier Ptolemaic facilities in the Eastern Desert see Wright 2003, 228-9; Cohen 2006, 320-1; Reddé 2006a, 39-49; Reddé 2006b, 237-8; Cuvigny 2012b, 3.

Berenicidis – who answered directly to the Prefect of Egypt.<sup>15</sup> Below this official were centurions, decurions, duplicarii, sesquuplicarii and the curatores (custodians) placed in charge of the praesidia (fortlets or stations) lining the Eastern Desert.<sup>16</sup> These fortlets protected hydreumata (wells) and lakkoï (cisterns).<sup>17</sup> Besides controlling stores of water, soldiers stationed in these fortlets also prevented smuggling and monitored those travelling through the region.<sup>18</sup> Additionally, they conducted patrols and, in some instances, acted as escorts to travellers, though this was usually only one or two soldiers.<sup>19</sup>

The fortlets lining the Koptos-Myos Hormos route (hodos Musormitikē) originally had ramparts (at least from Flavian times) and long curtain walls, with the largest of them possessing circular or semi-circular towers at the corners.<sup>20</sup> The fortlet of Didymoi (Khashm al-Minayh) on the Koptos-Berenike route (hodos Berenikēs) also shows similar features, and is comparable to Maximianon (al-Zarqâ) in its layout.<sup>21</sup> The shortest of the routes – Koptos-

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<sup>15</sup> Cuvigny 2006c, 295-7; Sidebotham 1986, 67 – I. Pan 68. For the area supervised by the Prefect of Berenike see Maxfield 2000.

<sup>16</sup> For reference to these ranks see K3 + K5 + K214 - lines 63-72 Cuvigny 2005, 136.

<sup>17</sup> Cuvigny 2006c, 306-7, 353-7; Cuvigny 2006b, 267-73. In many places fresh water sources can be found just below the surface - Lassányi 2012, 249. On the acquisition of water and its storage in cisterns see, Sidebotham, Hense, and Nouwens 2008, 310, 314; Zitterkopf and Sidebotham 1989, 167; Brun and Reddé 2011b, 20-4.

<sup>18</sup> The Koptos Tariff (OGIS 674 = IGRR I. 1183 = I. Portes 67) indicates that those travelling through the Eastern Desert needed a pass (ἀποστόλιον). It is also clear from 1st century ostraka found at Berenike that those conveying goods had to pass through customs - Bagnall, Helms and Verhoogt 2000 and 2005; Ast and Bagnall 2016.

<sup>19</sup> Cuvigny 2005, 7, 124 – K523. See also O. Did. 416 – Bülow-Jacobsen 2012, 351.

<sup>20</sup> Zitterkopf and Sidebotham 1989, 166-7; Reddé and Brun 2006, 73-185. The majority of the fortlets on the Myos Hormos route are similar in design with the exceptions of Bi'r Sayyala (possibly a Ptolemaic foundation) and Quseir al-Banat – Maxfield 1996, 12-13; Reddé 2006b, 238. See Map 4.

<sup>21</sup> Brun and Reddé 2011b, 17-19. See Map 2.

Myos Hormos – had stations located roughly every 16-18 kilometers, the Koptos-Berenike route had them only every 30-40 kilometers.<sup>22</sup> Duty rosters for some of the stations seem to indicate an average garrison size of about 15-24 soldiers, although these stations had the capacity to accommodate around 38 (Dawwi) to 116 people (al-Muwayh, ancient Krokodilô).<sup>23</sup> This left space for a small civilian population, which included women and children, as indicated by textual and archaeological evidence.<sup>24</sup>

It is difficult to estimate the size of the population of outsiders, both long-term and seasonal, but it is reasonable to assume that collectively the fortlets contained at least several hundred soldiers and civilians. At the Red Sea ports the excavators have estimated a population roughly of 1,000 for Myos Hormos and around 500-1,500 for Berenike.<sup>25</sup> Also an ostrakon found at Mons Claudianus mentions 917 people at the site, at least 60 of whom were soldiers; while surveys of the structural remains at Mons Porphyrites put the population at around 400-500.<sup>26</sup> With several thousand people needing food, the acquisition of supplies was evidently a major issue. It has been proposed that anywhere between 80-2,000 camel loads of supplies needed to be transported to the port of Berenike every month to sustain the population.<sup>27</sup> Attempts were made to utilise local resources to bolster the food supply, such as fishing in the

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<sup>22</sup> Zitterkopf and Sidebotham 1989, 169; Sidebotham, Hense, and Nouwens 2008, 90-1.

<sup>23</sup> Cuvigny 2006c, 307-10. The number of cavalrymen to a station on the Koptos-Berenike routes seems to have been about two to five – Leguilloux 2011, 174. The soldiers occupied the stations all year round and were not to abandon them except under *force majeure* – Cuvigny 2005, 149 - K3 + K5 + K214 - lines 1-14.

<sup>24</sup> For evidence attesting to a civilian population see Cardon, Granger-Taylor and Nowik 2011, 277-8, 280-1, 292-3, 295-6, 302-8, 314-16 (textile fragments); Cuvigny 2006d, 362-4, 395 (ostraka).

<sup>25</sup> Harrell 1996, 105-8; Sidebotham, Hense, and Nouwens 2008, 247. The population is likely to have been higher at Berenike in the 1st century.

<sup>26</sup> Maxfield 2003, 163 – MC Inv. 0.1538+2921; Sidebotham, Hense, and Nouwens 2008, 232-4.

<sup>27</sup> Lower estimate – Evers 2017, 105-6; higher estimate – Ruffing 1995, 17-42.

Red Sea, raising poultry and pigs at the stations, and setting up temporary kitchen gardens after sporadic rainfalls.<sup>28</sup> Nevertheless, it is clear that these populations were heavily dependent on external supplies (grains, oil, wine, vegetables and legumes, among other items).<sup>29</sup> Clearly a huge logistical effort was undertaken to sustain the populations of outsiders. It seems reasonable to infer that the presence of large numbers of outsiders impacted on local water and food resources, potentially aggravating the indigenous inhabitants. At the same time, this influx of traffic presented opportunities for plunder.

### **The Indigenous Populations of the Eastern Desert**

Assessing the complex relationships between outside peoples entering into the region and the various indigenous groups in the Eastern Desert and Red Sea littoral is greatly complicated by the skewed nature of the evidence – both written and archaeological. In the case of written accounts, information about these nomadic peoples largely derives from Graeco-Roman ethnographies and is supplemented by information which can be obtained from inscriptions,

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<sup>28</sup> For kitchen gardens at Fawakhir see Reddé and Brun 2006, 98. For the raising of pigs and poultry at Krokodilô see Brun 2006a, 65; and Reddé and Brun 2006, 87; at Didymoi see Brun 2011, 119-21; and Leguilloux 2011, 169-70. For fish being brought to the fortlets see Leguilloux 2006, 563.

<sup>29</sup> For the Nikanor archive see Tait 1930; Adams 2007, 224-5. For food remains see Brun 2006a, 61; Leguilloux 2011, 175-6; Tengberg 2011, 205-11. See also O. Ber. 471, 472, 474 – Ast and Bagnall 2016, 173-6; and Cappers 2006.

papyri, ostraka, and graffiti.<sup>30</sup> Unfortunately a more direct voice for these people is lacking, outside a few Late Antique texts relating to the Blemmyes.<sup>31</sup>

Since the descriptions of these various nomadic groups derive from outsiders, it is not surprising that they are often described in generalised or reductive terms. For example, they were often labelled by their (supposed) eating habits, such as the Ichthyophagoi (Fish-eaters), Agriophagoi (Wild Animal-eaters), Moschophagoi (Shoot-eaters), Rhizophagoi (Root-eaters), and Cynamolgoi (Dog-milkers).<sup>32</sup> This is not to completely deny the validity of these ethnographic characterisations, only that they are unlikely to fully reflect the complexity of these societies. Broad labels were sometimes attached to the inhabitants of the region, notably the title Trogodytes (Trogodytai/Trogodytæ), with the geographic space which they inhabited being called Trogodytika.<sup>33</sup> Another broad term used was barbaroi (barbarians) which appears in the Periplus as a sweeping reference to peoples living within the Eastern Desert region, and

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<sup>30</sup> Over 15,000 documents have been unearthed from the ports, quarries and fortlets. Mostly ostraka with Greek text, containing ephemeral information. Only a small portion of these texts allude to the indigenous peoples of the Eastern Desert – see Cuvigny 2014, 166. More generally on problematic accounts of ancient nomadic peoples, see Wendrich and Barnard 2008, 10-11.

<sup>31</sup> Notably inscriptions and papyri from Lower Nubia dating to the 5th century and 6th century papyri from ancient Pathyris in Upper Egypt – see Satzinger 2014.

<sup>32</sup> Periplus 2; Agatharkhides Fragments 5.30-49 – for these fragments see Burstein 1989; also Barnard 2009, 19.

<sup>33</sup> See, for example, Strabo 16.4.4-5; Pliny NH 6.33-34.163-176; for the debate over whether these people were referred to as Trogodytæ or Troglodytæ, see Murray and Warmington 1967, 24-33; Cuvigny 2006c, 347; Pierce 2012, 228-31. These people(s) inhabited the area from Suez to as far south as far as Meroe and the port of Ptolemais - Strabo 2.5.36, 16.4.4, 17.1.25-30, 17.2.2; Pliny NH 6.33.163-64; Plutarch Moralia 410A-B.



is almost exclusively used in the ostraka from the region to describe these peoples (especially from those found in the fortlets).<sup>34</sup>

It is doubtful that peoples living across such a large geographic area can be considered as part of one homogenous cultural group. The ancient literary sources acknowledge as much in their various sub-divisions.<sup>35</sup> Pliny gives names for some of these groups, including the Autaei, Gebadaei, and also the Asarri who, living between Arsinoe (Klyasma) and Myos Hormos, had intermarried with the Trogodytes.<sup>36</sup> The Trogodytes are usually referred to as a mass, but there may be some evidence for sub-divisions, such as the Abylloi and Bolgioi.<sup>37</sup> Cuvigny notes that Pliny located the Asarri at roughly the latitude of Mons Claudianus and Umm Balad. Moreover, he defines them as Arabes who had intermarried with the Trogodytes, indicating that they were seen as different ethnic groups.<sup>38</sup>

The problem with some of the claims about the territories which these groups inhabited is the fact that later authors often relied on earlier Hellenistic accounts, notably the work of Agatharkhides.<sup>39</sup> This is particularly evident with regard to the Blemmyes, a (semi-)nomadic

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<sup>34</sup> The earliest reference to the barbaroi in the ostraka of the Eastern Desert comes from an ostrakon found at the short lived quarry at Umm Balad, which may date to the reign of Domitian or Trajan - Cuvigny 2014, 169; O. Ka. La. inv. 847.

<sup>35</sup> On the issue of classification in the ancient sources, and the use of the terms ethnos and genos, see Pierce 2012.

<sup>36</sup> Pliny NH 6.33.167-68.

<sup>37</sup> Pierce 2012, 231. For the Abylloi see Apollodorus Periegesis Fragment 106. For the Bolgioi see Diod. Sic. 1.37.8.

<sup>38</sup> Cuvigny 2014, 198; Pliny NH 6.33.167-68.

<sup>39</sup> On the confusion between Nubia and the Eastern Desert and the problem with ancient ethnographies see Barnard 2009, 19. On the terminology relating to pastoral nomads and relationships between settled and mobile groups see Wendrich and Barnard 2008, 7-11. Strabo (17.1.44) reports that Koptos was inhabited by Egyptians and Arabs alike.

peoples.<sup>40</sup> The earliest reference to them comes from the early Hellenistic period.<sup>41</sup> By the 2nd century, Claudius Ptolemy places the Blemmyes near Avalites (in Somaliland), but he may be following an outdated Hellenistic tradition.<sup>42</sup> But the main testimony relating to the Blemmyes comes from the Late Antique period, where they are usually connected to the Nile Valley in Lower Nubia (alongside the Noubades) rather than the Eastern Desert.<sup>43</sup> In fact, whether these people should be seen as primarily inhabitants of the Nile Valley or the Eastern Desert is a contentious issue, although one reconstruction holds that they occupied Lower Nubia (and attacked into Upper Egypt) in the latter 3rd to 4th centuries, only to be pushed back into the Eastern Desert again in the 5th century.<sup>44</sup> However, Dijkstra is almost certainly right to note that these peoples were a ‘heterogeneous ethnic group’, that included pastoral nomads in regular contact with settled people, as well as tribes that were themselves settled – a situation which is likely reflective of the Ptolemaic, Roman, and Late Antique period.<sup>45</sup>

Indeed, we should be cautious about assuming that a “homogenous” indigenous culture existed in the Eastern Desert across a long period of time.<sup>46</sup> We should also be cautious about

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<sup>40</sup> Strabo (17.1.53) certainly presents the Blemmyes as nomadic.

<sup>41</sup> The group is also mentioned in Meroitic sources – Gates-Foster 2012, 197; Pierce 2012, 232. The 3rd century BC Eratosthenes (Strabo 17.1.2) and Theocritus (Idyll 7.111-14) mention them.

<sup>42</sup> Claudius Ptolemy Geog. 4.7.31; Pierce 2012, 234-5.

<sup>43</sup> Dijkstra 2012, 239-40.

<sup>44</sup> On the idea that the Blemmyes originally lived in central Sudan in the Ptolemaic to early Imperial period, migrated to the Nile Valley area of Lower Nubia by the 4th century, but with their defeat by the Nobatai in the 5th century, were forced back into the Eastern Desert, see Burstein 2008b, 256-7, 260-1. See also Dijkstra 2012, 241-2, 246.

<sup>45</sup> Dijkstra 2012, 246. See also Pierce 2012, 237.

<sup>46</sup> Lassányi 2012, 267, takes this view and refers to a ‘Beja culture’ spanning from the 1st century up until the medieval period.

assuming that the Blemmyes and Trogydytes were one and the same people.<sup>47</sup> In fact, as Burstein notes, no ancient literary author ever equates the Trogydytes with the Blemmyes.<sup>48</sup> Moreover, a study of indigenous names by Satzinger from 96 ostraka, from the fortlet Xeron (Koptos-Berenike route), shows that none of the names directly match any known Blemmy name appearing in Late Antique sources — although some elements do look similar. The language may be similar in structure to Blemmy, but is not identical to it.<sup>49</sup>

Given the difficulties posed by the evidence just outlined, as well as the fact that we are dealing with multifaceted tribal societies, it is necessary to be cautious in assessing the types of relationships these groups had among themselves, as well as with outsiders. It is also best not to automatically characterise incidents of conflict as wars between whole peoples.<sup>50</sup> Nevertheless violence does seem to have been a common facet of these societies and their relationships with outsiders. This is apparent from a range of Graeco-Roman sources. For example, a fair number of inscriptions from the Ptolemaic period at el-Kanais on the Edfu-Berenike route give thanks to Pan for sparing their dedicators from attacks by the Trogydytes.<sup>51</sup> Also, in the mid-1st century, the author of the Periplus mentions that those who wished to trade with Adulis (Eritrea) needed to be weary of the barbaroi.<sup>52</sup>

Agatharkhides notes that many of these groups use bows and spears and fight each other for pasturage rights, although the Megabarioi (whom he describes as a tribe of Trogydytes)

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<sup>47</sup> Pierce 2012, 237, takes this view.

<sup>48</sup> Burstein 2008, 253.

<sup>49</sup> Satzinger 2014, 199-212.

<sup>50</sup> Dijkstra 2012, 245.

<sup>51</sup> I. Kanais 3, 8, 13, 18, 43, 47, 62, 82, 90. Young 2001, 71-2; Pierce 2012, 229.

<sup>52</sup> Periplus 4.

carry circular shields and clubs.<sup>53</sup> Conversely the peaceable nature of a southern group of Ichthyophagoi (beyond the Bab-el-Mandeb) is commented upon – supposedly they did not get angry even when struck.<sup>54</sup> Such fantastical notions aside, it is clear that not all indigenous individuals had hostile relations with outside peoples, as is apparent from an ostrakon found at Myos Hormos which mentions a Pukubis (described as an Ichthyophagos), who sought a permit to move his small fishing boat north to Philoteras.<sup>55</sup> Strabo also downplays the threat of these groups, asserting that ‘the remaining areas to the south are inhabited by Trogodytes, Blemmyes, Noubai, Megabaroï and the Ethiopians above Syene. These people are nomads, lack numbers and are not warlike, but were considered to be so by men of former times because often as brigands they attacked those without protection.’<sup>56</sup> However, it should be noted that this statement fits into a wider pattern of praise for Augustus’ ability to pacify Egypt and prevent threats to its security.

Whatever we make of Strabo’s dismissal of the potential threat posed by the indigenous populations of the Eastern Desert, a significant number of the ostraka found at Krokodilô (AD 102-118) indicate that at least by the early 2nd century they were considered a threat. Among the reports are references to barbaroi menacing travellers, murdering people and stealing 18 camels; the latter incident resulted in the injury or death of the cavalryman Lucretius Priscus who had taken part in the subsequent pursuit. Other ostraka include warnings about a roaming band of 61 barbaroi and even more audaciously an attack by 60 barbaroi on the praesidium of Patkoua (near the Myos Hormos route) in which an infantryman (and possibly a horseman)

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<sup>53</sup> Agatharkhides Fragments 62-64. Strabo (16.4.17) calls them Megabarian Aethiopians. References to the Megabaroï are limited and mostly confined to Hellenistic literature or later derivative work – Pierce 2012, 228.

<sup>54</sup> Agatharkhides Fragment 5.41a = Photius Cod. 250.50, 451b.

<sup>55</sup> Thomas 2007, 150-1 – O512 (Ichthyophagos), see also Ostrakon O543 which mentions a Trogodyt( ).

<sup>56</sup> Strabo 17.1.53. On the syntactical and interpretive problems of this passage see Pierce 2012, 234.

was killed and a woman and two children were abducted. The indigenous nomads, however, were by no means the sole perpetrators of aggression. From the Krokodilô ostraka we have a report stating that Roman troops had attacked and killed 61 barbaroi and that those in the stations should be on the lookout, presumably for reprisals.<sup>57</sup> Besides the ostraka from Krokodilô a few other texts from stations on the Koptos-Myos Hormos and Koptos-Berenike routes also mention hostilities in the 2nd century. A private letter from Dios (Abu Qurayya) on the Koptos-Berenike route include Apollonios' warning to Melanas to wait two days before going out to collect wood, so that fresh news concerning the barbaroi can arrive.<sup>58</sup> An ostrakon from Didymoi (c. AD 140-150) also refers to an incident on the Koptos-Myos route involving barbaroi.<sup>59</sup>

Other evidence indicates larger, potentially more systematic, attacks on these indigenous groups. One fragmentary papyrus which has been dated on palaeographic grounds to the second-half of the 1st century mentions a Roman military campaign against the Ethiopians and Trogodytes.<sup>60</sup> Another example of such attacks is a Hadrianic period dedication in both Greek and Latin set up by Sulpicius Serenus, possibly to be identified with Servius Sulpicius Serenus, who had been tribune of the Legio XXII and also prefect of the ala Voconces. In this inscription he celebrates the speedy victory over the infamous Agriophagoi who were massacred and had their camels and booty seized. The reference to booty has led

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<sup>57</sup> O. Krok. 6; K693, column III lines 33-46 – Cuvigny 2005, 94.

<sup>58</sup> O. Dios inv. 687.

<sup>59</sup> O. Did. 27.

<sup>60</sup> Turner 1950, 57-9.

Cuvigny to suggest it implies a retaliatory attack.<sup>61</sup> However, this is by no means certain, and there is nothing to preclude this act of aggression being planned and unprovoked.

### **Major Phase of Fortification in the Eastern Desert**

The ostraka from the fortlets (particularly Krokodilô), quarries and ports provide a snapshot of relations between the Roman military and the indigenous nomads of the Eastern Desert. The picture is one of very real danger, especially in the early 2nd century, and is quite at odds with the comments of Strabo over a century earlier. This has led Cuvigny to argue that these nomads had become more dangerous by the Flavian period.<sup>62</sup> Her argument is partly based on the findings derived from the excavations (conducted under the auspices of the Institut français d'archéologie orientale or IFAO) of the stations lining Koptos-Myos Hormos route. Prior to this many had assumed that the fortlets were built during the Julio-Claudian period (30 BC-AD 68) because a significant amount of the graffiti from the region dates to this dynasty, particularly the reign of Tiberius.<sup>63</sup> However, IFAO excavations have shown that most of the material remains and written evidence from these sites date from the Flavian period onwards. Indeed, the absence of any references in the ostraka from Krokodilô and Maximianon to the stations at Quseir al-Banat, Bi'r al-Hammamat and al-Hamra, suggest that they did not yet exist

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<sup>61</sup> I.Pan. 87; Cuvigny 2006c, 348-9, believes the action took place around the date of the engraving (AD 122/123) written on the Colossus of Memnon by Serenus – see I.Memnon 20. Cuvigny 2014, 177-8, notes that it is possible that the Agriophagoi associated with areas south of Berenike (Periplus 2; Historia Alexandri Magni 1.2.2) may have begun to raid further north, attracted by the caravan traffic. See also O. Dios inv. 90.

<sup>62</sup> Cuvigny 2006b, 267-73; see also Cuvigny 2006c, 353-7; and Lassányi 2012, 249-50.

<sup>63</sup> Sidebotham 1986, 54, 64; Zitterkopf and Sidebotham 1989, 165; for the graffiti see Bernard 1972, 15; Young 2001, 41 – I. Koptos 3, 38-39 (Augustus); 40-49 (Tiberius); 1 (Claudius); 50 (Nero); 51 (Titus); 52-53 (Domitian); 4-5, 54-55 (Hadrian); 56 (Antoninus); 57 (Maximinus Thrax).

by the reign of Trajan.<sup>64</sup> It also seems that the station Dios replaced another presidium at Bi'r Bayza (6 kilometers north) around AD 114/115, as indicated by a dedication celebrating the stations (re)foundation.<sup>65</sup>

The fortified stations on the Koptos-Berenike route also seem to indicate a significant degree of Flavian-era building activity. An inscription at Siket describes how in the ninth year of Vespasian (AD 76/77), the prefect of Egypt (Iulius Ursus) ordered the construction of a well there. This inscription parallels almost word for word another found at Aphrodito (I.Pan 68), suggesting that it likely dates to the same period.<sup>66</sup> An inscription from the praesidium of Didymoi similarly reveals a foundation date around AD 76/77, with a further large cistern (added to the two existing ones), being built on the orders of Mettius Rufus, Egypt's prefect from AD 89-92.<sup>67</sup> These are the earliest epigraphic references to praesidia, although Pliny does refer to the stopping-point Trogodyticum hydreuma (Koptos-Berenike route) as a praesidium (which may be pre-Flavian, see below).<sup>68</sup> This activity, along with that on the Koptos-Myos Hormos route, has been used to suggest increasing insecurity.

This activity is contrasted with a purportedly less dangerous Julio-Claudian period. Brun has suggested that the lack of evidence for fortifications in the Wadi al-Hammamat in

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<sup>64</sup> Reddé and Brun 2006, 86, 90-91 (Krokodilô), 94 (Bi'r al-Hammamat), 98-9 (Fawakhir - Persou II), 126 (Maximianon), 137 (Bi'r al-Nakhil); Brun (2006b): 187 (al-Hamra), 200 (Dawwi).

<sup>65</sup> Cuvigny 2010, 245.

<sup>66</sup> Bagnall, Bülow-Jacobsen and Cuvigny 2001, 325-8; Cuvigny 2006c, 356.

<sup>67</sup> I. Did. 1; I. Did. 2; Bagnall, Bülow-Jacobsen and Cuvigny 2001, 328-9; Brun 2006b, 197; Brun 2011, 115-23; Brun, Cuvigny and Reddé 2011, 157-63; Cuvigny 2012c, 39-42.

<sup>68</sup> Pliny NH 6.26.103; Bagnall, Bülow-Jacobsen and Cuvigny 2001, 331. The ostraka from the fortlets which refer to the stations always call them praesidia rather than hydreumata.

this period confirms Strabo's remark about the limited threat posed by the nomads.<sup>69</sup> Cuvigny also supports this argument on the basis of a partially surviving inscription (two of six slabs remain) which records Roman military personnel who, over the course of some months, constructed lakkoi at Apollonos Hydreuma, Compasi and Berenike, and a camp (castrum) at Myos Hormos. They also record the soldiers' names, and the centuries and cohorts to which they belonged.<sup>70</sup> The date of the inscription is not certain. Some argue for an Augustan or Tiberian date due to a number of Galatian soldiers being mentioned – implying they belong to the XXII Deiotariana (based in Egypt at this time), a legion originally raised by Deiotarus of Galatia.<sup>71</sup> On the basis of a Julio-Claudian date, Cuvigny has argued that since the inscription refers to the creation of lakkoi rather than praesidia it shows that unfortified cisterns were all that was required at this time.<sup>72</sup>

However, as stated above, the date of this inscription is uncertain and some of the methods used to determine it have generated rather contradictory results. Both Syme and Alston used onomastics to offer Augustan and Flavian dates respectively. The former citing the presence of two Lollii, both from Ancyra – assumed to have been enlisted when M. Lollius was legate of Galatia (25-22 BC); the latter cited the presence of P. Flavius son of Publius to suggest a Flavian date.<sup>73</sup> This approach appears rather unsatisfactory and cannot offer a firm

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<sup>69</sup> Brun 2006b, 196.

<sup>70</sup> ILS 2483 = CIL III 6627; for discussion of this inscription, see Kennedy 1985, 156-7; Young 2001, 44; Alston 1995, 30; Syme 1995, 249; Bagnall, Bülow-Jacobsen and Cuvigny 2001, 330; Cuvigny 2011b, 5.

<sup>71</sup> Kennedy 1985, 157.

<sup>72</sup> Cuvigny 2006b, 267-73; Cuvigny 2006c, 353-7; Cuvigny 2014, 182-4.

<sup>73</sup> Syme 1995, 249; Alston 1995, 30 – contra Alston 2007, 3.



date, although, contrary to Cuvigny's view, it would be unsurprising if the dedication dated to the Flavian period given the construction at Siket, Iovis, and Didymoi.<sup>74</sup>

Whatever the actual date of the inscription, the notion of an apparently peaceful Julio-Claudian period should be treated with some skepticism, especially as security seems to have been a significant issue in the Ptolemaic period.<sup>75</sup> On the Koptos-Berenike route Pliny refers to the existence of stopping-points (*masiones*) which are probable continuations of the στρατόπεδα which Strabo noted were established by Ptolemy II. Indeed, it is hard to believe that the *masiones* are entirely the result of less than a decade's worth of Flavian rule (Pliny's list may, in fact, be based on information from the Map of Marcus Agrippa).<sup>76</sup> Nevertheless, the evidence does suggest greater problems with security in the Flavian period and 2nd century. The evidence for (re)construction in this period is apparent and the Krokodilô ostraka indicate a very real threat of violence in the early 2nd century.

### **Factors Contributing to a Rise in Conflict**

The question arises: what factors contributed to this apparent rise in tensions in the Flavian period and early 2nd century? Murray and Warmington suggest that the increasing acquisition of camels by nomadic groups enabled much more effective raiding. The fact that Artemidorus (c.100 BC) says that the Trogodytes possess cattle and sheep, but mentions nothing of camels, has been taken by them as evidence that these animals were not commonly possessed at this

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<sup>74</sup> See also Sidebotham 2011, 154.

<sup>75</sup> For stations along the Edfu-Berenike and Edfu-Marsa Nakari routes see Cohen 2006, 320-1; Reddé 2006b, 237-8; Wright 2003, 228-9. For the inscriptions at el-Kanais see Bernard 1972. For the Ptolemaic era fortifications at Berenike see Sidebotham and Zych 2016, 21-2.

<sup>76</sup> Pliny NH 6.26.102-3; Sidebotham 1986, 61; Sidebotham 2011, 158.

time, only becoming a more fundamental part of their lifestyle by the Roman Imperial period.<sup>77</sup> Cuvigny further theorises that increasing pressure from the Blemmyes to the south and high levels of traffic exacerbated this situation.<sup>78</sup> Murray and Warmington's notion is plausible, but speculative. The Blemmyes arose as a major threat in the 3rd and 4th centuries, but insufficient evidence makes it difficult to know how they were interacting with the more northerly nomadic populations of the Eastern Desert in the 1st and 2nd centuries.<sup>79</sup>

It is argued here, however, that evidence for direct Roman participation in the Indian Ocean trade (via the Red Sea) shows a high peak of activity in the latter 1st century and this is likely to have been an important factor underlying problems of security in the Eastern Desert. Nappo and Zerbini have argued that the evidence points to a trade boom in the reign of Tiberius, followed by a revival under Vespasian due to the major provision of infrastructure.<sup>80</sup> Though, it seems more probable that the reverse is the case. The major (re)fortification of the Eastern Desert is a response to high levels of trade rather than being the cause of it. The increased traffic probably exacerbated the issue of the region's limited resources. Something which no doubt irritated the indigenous population, but, at the same time, offered many tempting targets for plunder.

The ports of Berenike and Myos Hormos both show a high point of activity in the 1st century followed by a downturn – quite marked in the case of Berenike – from the early 2nd century. Likewise, recent interpretation of the archaeological and numismatic evidence relating

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<sup>77</sup> Artemidorus cited by Diodorus Siculus 3.32 - Murray and Warmington 1967.

<sup>78</sup> Cuvigny 2006c, 349-50; Cuvigny 2014, 183-4.

<sup>79</sup> For the Blemmyes and the Noubai see Procopius History of the Wars 1.19.27-33; Olympiodorus – Fragment 35.2 (Bibl. Cod. 80, p.182); Priscus – Fragment 27.1 (Exc. De leg. Gent. 2).

<sup>80</sup> Nappo and Zerbini 2011, 65 – ‘...includes the age of Nero and part of the age of Vespasian, when the Eastern trade experienced a new revival, also thanks to the infrastructures built in the Eastern Desert by Vespasian.’

to Roman finds in East Africa, southern Arabia, and India demonstrate a strong 1st century concentration in terms of exports, and a downturn (more marked with regard to the archaeologically visible goods, but less so with the numismatic evidence).<sup>81</sup>

The major quarries at Mons Porphyrites and Mons Claudianus also seem to show a major upsurge in activity around the late 1st to early 2nd century. At Mons Claudianus an upsurge of activity occurs under Domitian and peaks under Trajan, followed by a break and then resumption of activity under Antoninus Pius. The earliest inscription for the main fort complex at Mons Claudianus dates to the twelfth year of Trajan (AD 108/9). The ceramic assemblage at a hydreuma just north of the main complex is largely Trajanic in date (but with one ostrakon of Nero, AD 68), and a gateway seems to have been set up in the fifth year of Domitian's Tribunician powers (AD 85/6).<sup>82</sup> It was also the case that a series of hydreumata were established along the route to Mons Claudianus by the Prefect Sulpicius Similis (AD 108/9).<sup>83</sup> The first reference to Mons Porphyrites comes from Pliny and the ceramic assemblage in the sebakhs outside the fort at Wadi Abu Ma'amel indicate activity from the mid-1st to early 3rd century, but with much of the material belonging to the 2nd century, and only a comparatively limited amount to the 1st century. Indeed, the general impression of the excavators is that the main fort was established in the latter-1st to early-2nd century with the settlement growing outside it.<sup>84</sup>

The correlation between the increasing activity at the quarries and the high levels of traffic through the Eastern Desert, Flavian period (re)construction of fortlets, the insecurity

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<sup>81</sup> For a summary see Cobb 2015.

<sup>82</sup> CIL III 24 = ILS 5741 = I. Pan 37 = SEG XXXVI. 1399 – Maxfield 1997, 34-41, 111; Peacock and Maxfield 2001b, 423-45.

<sup>83</sup> I. Pan. 37; Bagnall, Bülow-Jacobsen and Cuvigny 2001, 329-30.

<sup>84</sup> Pliny NH 36.11.57; Peacock and Maxfield 2001d, 12-13, 19; Peacock and Maxfield 2007b, 417-9.

implied by the Krokodilô ostraka (early 2nd century), and the series of sorties/campaigns against the indigenous populations (latter 1st to early 2nd century), seem to suggest a causal link. Whether the Roman state was doing more than simply reacting to an increase in attacks by the nomadic groups of the Eastern Desert, and deliberately (re)fortified some of these areas, especially the Koptos-Hormos route, as part of a coherent policy is hard to say. If the latter was the case, part of the motivation may have been to maintain strategic access to the Red Sea, where the (patchy) evidence suggests some form of naval force there.<sup>85</sup> No doubt the Roman state wished to maintain unfettered access to the Red Sea to allow for diplomatic communications with polities in East Africa, southern Arabia, and India, as well as allowing for occasional joint-military operations (as seen in the Late Antique period).<sup>86</sup>

Given the potential dangers posed by the nomads of the Eastern Desert during the latter 1st and 2nd centuries, Young's assertion that the stations lining these routes were not primarily defensive but more to do with the prevention of smuggling needs to be reassessed.<sup>87</sup> Part of his argument rests on the fact that merchants and travellers employed private security. This is certainly indicated by the Muziris papyrus (mid-2nd century), which records arrangements for the provision of private escorts to protect the high value consignments being transported to Koptos; similarly evinced by the Koptos Tariff which records a charge of five drachmas for

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<sup>85</sup> For the evidence for this see Strabo 17.1.45; P.004 – Van Rengen 2011, 335-6; Villeneuve 2007, 24-5; Speidel (2015): 89.

<sup>86</sup> For examples of diplomatic contact see Res Gestae 5.31; Strabo 15.1.4, 73; Suetonius Augustus 21; Cassius Dio 54.9, 68.15; Paulus Orosius History Against the Pagans 6.21.19; Periplus 23; SHA Hadrian 21; Florus 4.2; Hou Han Shu 88; I-Wen Lei-Chu 76; Nan-Fang Tsao-Ma Chuang 9; Itinerarium Egeriae 6.4.7. For an Axumite military expedition against the Kingdom of Himyar (in Yemen) assisted by the Byzantines see Martyrium Sancti Arethae 27-9.

<sup>87</sup> Young 2001, 69-74.

guards ([φυλ]ιάκου δραχμὰς πέντε) crossing the Eastern Desert.<sup>88</sup> However, given the number of soldiers that appear to man the fortlets (c. 15-24 on average) it would have been beyond the capacity of the Prefect of Berenike to provide large escorts to most travellers, especially at peak travelling seasons. Those soldiers who did act as escorts probably would have sought help from the nearest fortified station in case of attack. Private security would have been necessary to protect travellers and caravans crossing between the stations. Indeed, the security function of the fortlets is apparent from an inscription set up to dedicate the creation of the Via Nova Hadriana, a route running from Antinopolis (Sheik ‘Ibada) across the Eastern Desert and down the Red Sea coast to Berenike.<sup>89</sup> It states explicitly that the route was designed to be level, run through safe-county, and be equipped with plentiful wells, stations and guard-posts.<sup>90</sup>

### **Impact on the Red Sea Trade**

It has been argued that the rising levels of traffic crossing the Eastern Desert, and the increased presence of “external peoples” at the stations, quarries, and ports, encouraged more attacks by groups of indigenous nomads. Greater access to camels also afforded more potential for swift and wide-ranging raids. This raises the question: did these increased attacks impinge on the operation of the Red Sea trade over time? This is a distinct possibility. As noted above, the archaeological evidence reveals a notable decline in activity at Berenike during the 2nd century, and to a lesser extent at Myos Hormos as well. The number of archaeologically visible goods at sites in East Africa, southern Arabia, and India also show a marked downturn in the

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<sup>88</sup> Muziris Papyrus – P. Vindob G 40822 Recto, Column 2 Line 2-4; Koptos Tariff – OGIS 674 = IGRR I. 1183.

<sup>89</sup> Sidebotham and Zitterkopf 1998, 353-66; Sidebotham, Zitterkopf and Helms 2000, 115-26.

<sup>90</sup> Young 2001, 78-9 – ‘(Hadrian) Built the new Via Hadriana from Berenike to Antinoe, through safe and even places by the Red Sea, and equipped at intervals with plentiful wells, stations and guard-posts.’

2nd century. This certainly does not mean trade ceased. Pieces of evidence like the Muziris Papyrus and some inscriptions at sites connected with the trade suggest that commercial activity continued into the 2nd and 3rd centuries. Nevertheless, the broad trends suggested by the archaeological evidence and, to some extent, Roman coin finds in India, point to a 1st century peak followed by a 2nd century downturn.<sup>91</sup>

Explaining this downturn solely in terms of attacks by indigenous nomads would be a mistake, but this does not mean it was not an important factor. Indeed, the decline appears to be more dramatic in terms of archaeologically visible goods (wine amphorae, metal wares, and glass wares) than coinage (a fair portion of aurei were still being exported in the early to mid-2nd century) which may be explained by the responses of merchants. It perhaps became less profitable to have large caravans transporting numerous goods in kind. Conversely, a smaller number of more easily guardable caravans transporting high-value, low-weight coins (and other similar items) would have been cheaper. One of the key targets of nomadic raids seems to be the camels themselves, as indicated by one of the Krokodilô ostraka which refers to a group of barbaroi stealing 18 of these animals.<sup>92</sup>

The establishment of the Trajan's Canal (*Amnis Traianus*) – which ran from the Nile at Babylon (south of Old Cairo) and along the Wadi Tumilat to the port of Klysma at the head of the Heroopoliticus Sinus (Gulf of Suez) – and the aforementioned Via Nova Hadriana (early-mid 2nd century) may, in part, have been a response to the danger posed by the nomads.<sup>93</sup> The

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<sup>91</sup> Cobb 2015.

<sup>92</sup> Cuvigny 2005, 36 – K534.

<sup>93</sup> The canal had been established, or re-dug, on the route of earlier canals at least by AD 112 – Posener 1938, 259-73; Mayerson 1996, 119; De Romanis 2002, 22. A number of Classical authors report that the canal had its origins in the Pharaonic period – Arist. *Mete.* 1.14.20-28; Strabo 17.1.25-26; Pliny *NH* 6.33.165 (Sesostris); Hdt. 2.158-59; Diod. Sic. 1.33.7-12 (Necho II). It is claimed that Darius I restored it, followed by Ptolemy II –

canal would have allowed cargo to reach the port of Klysma on barges and then to be loaded onto ships for a south-bound journey with the wind behind them. The return journey northwards, however, would have been more challenging. This is due to the prevailing northerly winds which ships needed to beat against. A harder challenge for large, more unwieldy ships, but more feasible for smaller, maneuverable vessels.<sup>94</sup> The Via Nova Hadriana, as noted from the inscription, was explicitly set up to offer security. The fact that it ran parallel to the coast for the best part of 500km until the far north of the Eastern Desert where it ran across towards the Nile, may have left travellers less exposed to the nomadic populations of the region.

It is difficult to say how frequently either route was in use during the 2nd century. In the case of the Via Nova Hadriana, there is little evidence to substantiate its regular use, leading to a debate about whether it was intended for civilian or administrative purposes.<sup>95</sup> Given that use of this route entailed a much greater overland travel time (and the attendant costs involved), it may have proved unattractive for commercial use, despite Hadrian's intention. The commercial use of the canal has proven more contentious. Aubert has expressed doubt about its use and suggests that it was difficult to navigate, except around the period of the Nile flood; though others have criticised this view.<sup>96</sup> Indeed, while the canal seems to show more evidence for use in the Late Antique period, the literary and papyrological evidence, nevertheless, suggests it was sufficiently navigable from the period of the Nile flood (summer) to at least

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seemingly confirmed, in the latter case, by the Pithom stele (270/69 BC) – Cohen 2006, 308; Sidebotham 2011, 179.

<sup>94</sup> Young 2001, 76; Aubert 2015, 40-1; Whitewright 2007, 77-87.

<sup>95</sup> Young 2001, 78-9 (civilian use); Sidebotham and Zitterkopf 1997, 226; Sidebotham and Zitterkopf 1998, 354 (administrative use).

<sup>96</sup> Aubert 2015, 40. For a critique see Sidebotham 2016, 916-17.

January, while comments by Ptolemy and Lucian make it clear that it was in use during the 2nd century.<sup>97</sup>

While it is difficult to state in absolute terms the degree to which overall Roman participation in the Indian Ocean trade declined during the 2nd century, or how many merchants shifted their trading patterns to make greater use of the port of Klysmā (by-passing the nomad problem), there is little reason to doubt that increased acts of violence caused a shift in trading activity. It is interesting to note that there is possible evidence for the temporary abandonment of Didymoi in the third quarter of the 2nd century, being reoccupied around AD 176-177; while there also appears to be the violent destruction of a shrine in phase 6 at Dios, which possibly occurred around the second quarter of the 3rd century.<sup>98</sup> While merchant activity was not dependent upon the operation of these stations, it seems reasonable to infer that evidence of conflict in the region is hardly likely to be conducive to trade.

By the mid to late 2nd century, perhaps because of an emboldened attitude, and possibly because there were sparse pickings along the Koptos-Berenike and Koptos-Myos Hormos routes, some of the nomadic groups turned their attention to traffic further north in the Eastern Desert, although we may be dealing with different groups of “barbarians”.<sup>99</sup> Ostraka found at Mons Claudianus and Umm Balad record the threat posed by these nomads, who will have been interested in the camels and the supplies (not the quarried stone objects).<sup>100</sup> It seems they

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<sup>97</sup> Ptolemy *Geog.* 4.5; Lucian *Alexander the False Prophet* 44. De Romanis (2015) suggests that smaller ships sailing to ports like Adulis (southern Red Sea) will have more easily been able to make use of the port of Klysmā.

<sup>98</sup> Brun 2011, 128; Brun, Cuvigny and Reddé 2011, 159-60; Cuvigny 2012b, 2; Cuvigny 2012c, 43-6; *I. Did.* 3 (Didymoi); Cuvigny 2010, 249 (Dios).

<sup>99</sup> Cuvigny 2014, 184; Power 2012.

<sup>100</sup> *O. Claud.* Inv. 4888 (AD 145), 7309 (AD 152/53), 7226 (c. AD 150-90), 7255 (AD 189), IV 851 (end of 2nd century); *O. Ka.La.* inv. 31. See also *P. Bagnall* 8 (AD 186/87). See Cuvigny 2014, 179-82.



were threatening enough to disrupt supplies and hindered work by making it dangerous to leave the main settlements/fortified stations. The evidence certainly suggests that by the 3rd century direct Roman participation in the Indian Ocean trade was at a lower ebb compared to 1st century levels of activity. Wilson has suggested that one of the reasons why the duty rate for eastern imports went from 25% (tetarte) to 12.5% (octava) by the reign of Alexander Severus (r. AD 222-235) is that private traffic had declined considerably. The Roman state was no longer able to offer the same level of protection.<sup>101</sup> However, it may be the case that a lower tax rate was intended to entice merchants to participate in the Red Sea trade.<sup>102</sup>

### **Co-operation**

So far the main focus of the paper has been on hostile relations between the indigenous nomads and the “external peoples” traversing or inhabiting parts of the Eastern Desert and Red Sea littoral. It is important to note, however, that not all attacks were committed by indigenous groups – economic pressures, plague and social tensions led some people to abandon the Nile region and take up a life of banditry.<sup>103</sup> More importantly, there are incidents of co-operation, cohabitation and accommodation (or at least appeasement) between some of the indigenous peoples and the travellers, soldiers and inhabitants originating from outside the region. Some of the indigenous peoples may have found it profitable to seek employment in the protection

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<sup>101</sup> Wilson 2015, 27-8 – the latest date for the tetarte is AD 174, and the earliest for the octava is AD 227 (Codex Justinianus 4.65.7).

<sup>102</sup> Sidebotham 2016, 915-16, notes that it is a ‘chicken-and-egg’ argument as to whether lucrative tax revenue from private trading activity encouraged the Roman state to promote it further or whether state interest encouraged participation. He also notes that this lowered tax rate may reflect a decline in overall trade levels by this period.

<sup>103</sup> Young 2001, 85; Sidebotham 2011, 163. Part of the plot of Xenophon of Ephesus’ Ephesian Tale (3.11.4.3) rests on an Indian caravan being attacked by bandits.

of caravans. For example, in the Ptolemaic period, some Blemmyes appear to have been involved in the supervision of the roads to judge from an inscription at Bir ‘Iayyan (c. 97 km east of Edfu).<sup>104</sup> Moreover, some indigenous peoples may have chosen to (temporarily) reside in the Nile region.<sup>105</sup>

As we have observed with Pukubis, the Ichthyophagos, some indigenous peoples lived at Myos Hormos.<sup>106</sup> He may have been one of the Arabaigyptioi Ichthyophagoi which Claudius Ptolemy locates near Myos Hormos.<sup>107</sup> A Greek dipinto on an Egyptian amphora from Myos Hormos may also be evidence of this sort of cohabitation. It mentions an individual designated as a Trogodytes.<sup>108</sup> Similarly an ostrakon from Didymoi appears to refer to a “barbarian” craftsman making buckets in Koptos.<sup>109</sup> A number of indigenous peoples seem to have engaged in minor commercial transactions with non-indigenous inhabitants. An ostrakon from Xeron specifies the price to charge the barbaroi for a chous (= 12 kotylai or 3.12 litres) of oil,

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<sup>104</sup> Gates-Foster 2012, 197.

<sup>105</sup> This appears to have been the case with some Blemmyes during the 3rd-2nd centuries BC – Dijkstra 2012, 246.

<sup>106</sup> Thomas 2007, 151, 158 – Ostrakon O512. See also O. Krok. 49 (dating to AD 109), a fragmentary text which Cuvigny interprets as referring to an indigenous fishmonger Alabites who reports on robbers – Cuvigny 2014, 174-5.

<sup>107</sup> Cuvigny 2014, 172-3. The term Arabaigyptioi Ichthyophagoi may indicate either a cross-cultural influence or intermixing between Egyptians and Ichthyophagoi.

<sup>108</sup> Cuvigny 2014, 171.

<sup>109</sup> O. Did. 40 – Brun and Reddé 2011b, 20.

specifically 24 drachmae.<sup>110</sup> Likewise two Trajanic period ostraka from Mons Claudianus refer to individuals called Arabes who were involved in bringing fresh fish to the quarry.<sup>111</sup>

Besides private transactions, there is evidence for payments made by the state. The aforementioned series of 96 ostraka from Xeron, mentioning individuals with indigenous names, record orders for the distribution of wheat to them. They date to the 3rd century, either to the reign of Alexander Severus or the reign of Gallienus. It is difficult to know the purpose of these payments, since this is not specified. Two logical suppositions are that some of these nomads were being paid off (not to cause problems) or that they were being paid for services rendered, potentially caravan guards. Both ideas are speculative and, as yet, unprovable.<sup>112</sup> Similarly, an ostrakon from Didymoi refers to a dekanos with a groups of five barbarians – sent by Baratit – receiving one kolophonion (of wine) and 12 pairs of loaves, probably as part of a work party (c. late 2nd to early 3rd century).<sup>113</sup>

The process of ‘acculturation’ is apparent from correspondences, which from the Severan period onwards, show indigenous peoples who had adopted “foreign” names receiving military allowances in Roman camps.<sup>114</sup> The aforementioned Baratit, who is referred to as a hupotyranos (sub-tyrant) of the barbaroi, even had a letter in Greek written to one of the curators on the Berenike route. Lassányi suggests that these “barbarian” tribes effectively

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<sup>110</sup> Cuvigny 2014, 178-79, 185-88 – O. Xer. Inv. 465 (c. AD 115-130).

<sup>111</sup> O. Claud. Inv. 529, 830. This term need not necessarily denote a specific designation of “Arab” ethnicity, but may simply mean, more broadly, desert dwelling nomads – Cuvigny 2014, 169-71.

<sup>112</sup> For these distributions see Cuvigny 2014, 188-94.

<sup>113</sup> O. Did. 41 – Cuvigny 2014, 187.

<sup>114</sup> Lassányi 2012, 251. It is possible that there are at least eight Roman, three Greek and six Egyptian names mentioned in the 96 ostraka from Xeron, potentially indicating that some “barbarians” had acculturated, adopting “foreign” names – Cuvigny 2014, 192. See also Satzinger 2014, 204-9.

controlled the desert routes in the 3rd century.<sup>115</sup> It is tempting to suggest that these payments could be tied into a shifting policy of appeasement.<sup>116</sup> The sporadic conflicts of the latter 1st and 2nd centuries perhaps giving way to a more conciliatory approach by the Roman state in the 3rd century. This is, of course, not to say that acts of violence ceased.<sup>117</sup> No doubt, incidents of conflict and co-operation took place across the centuries.<sup>118</sup> Nevertheless, in broad terms, it seems reasonable infer from the available evidence that quite frequent acts of violence gave way to a great degree of co-operation by the 3rd century.

## Conclusion

The desire for the mineral resources and access to the Red Sea induced “external peoples” to intrude into the Eastern Desert. These activities meant that supplies needed to travel unhindered across the region and for the Ptolemaic and Roman governments to manage water supplies. Periodic violent confrontations with the indigenous populations also required the presence of

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<sup>115</sup> Lassányi 2012, 251. The praesidia seem to be abandoned during the course of the 3rd century. Ceramic evidence suggests that indigenous peoples began to occupy some of these sites – Brun, Cuvigny and Reddé 2011, 162; Power 2012, 287.

<sup>116</sup> Cuvigny 2014: 194-7, is of the opinion that the barbaroi mentioned in the 3rd century ostraka from Xeron (relating to grants of supplies) are Blemmyes. As evidence of this she points to the fact that they are reported as being active in Upper Egypt in this period, as well as noting that the title ὑποτύραννος (sub-tyrant) is often connected to the Blemmyes, and that their the names show no obvious Arab connection (though similarity with later Blemmyan names is also limited).

<sup>117</sup> One ostrakon from Didymoi dating to the beginning of the 3rd century refers to a monomachos (messenger) who reports that he and his group were attacked by some barbaroi known to them (Iekoun being their leader) - Q. Did. 44.

<sup>118</sup> A papyrus from Berenike broadly dating to the latter 1st century records the distribution of bread to some barbaroi – P. Ber. 266 – Ast and Bagnall 2016, 56-8.

soldiers and a certain number of fortified stations to protect travellers and residents of the ports, quarries, and mines. That the Ptolemies needed to protect travellers from the depredations of the nomads should caution us against assuming the Julio-Claudian period was distinctly more peaceful than the periods preceding or following it. However, it does seem reasonable to connect the major building activity taking place from the Flavian period with increasing security problems. It seems very likely that the contributing factors to this were the high levels of commercial traffic and intensified exploitation at the quarries of Mons Porphyrites and Mons Claudianus. However, during the course of the 2nd century the increased depredations may have impinged upon the level of Roman trade, or at least encouraged some merchants to use more northerly ports like Klysma. By the 3rd century the evidence may, very tentatively, suggest that a more conciliatory approach was adopted by the Roman state (of course conflict and cooperation with the nomadic populations existed throughout various periods). By the latter part of the 3rd century the Roman military abandoned the fortlets.

## **Bibliography**

Adams, C. 2007: Land Transport in Roman Egypt (Oxford).

Alston, R. 1995: Soldiers and Society Roman Egypt a Social History (London).

----. 2007: 'Fraying Round the Edges: Models of Change on the Margins'. In R. Alston and S.N.C. Lieu (eds.), Aspects of the Roman East (Turnhout), 1-32.

Ast, R. and Bagnall, R.S. 2016: Documents from Berenike Volume 3 (Brussels).

Aubert, J.-J. 2015: 'Trajan's Canal: River Navigation from the Nile to the Red Sea?'. In De Romanis and Maiuro 2015, 33-42.

Bagnall, R.S., Bülow-Jacobsen, A. and Cuvigny, H. 2001: 'Security and Water on the Eastern Desert Roads: The Prefect Ursus and the Construction of praesidia under Vespasian', JRA 14, 325-33.

Bagnall, R.S., Helms, C., and Verhoogt, A.M.F.W. 2000: Documents from Berenike Volume 1 (Brussels).

----. 2005: Documents from Berenike Volume 2 (Brussels).

Bard, K.A. and Fattovich, R. 2010: 'Spatial use of the Twelfth Dynasty Harbour at Mersa/Wadi Gawasis for Seafaring Expeditions to Punt'. Journal of Ancient Egyptian Interconnections 2.3, 1-13.

Barnard, H. 2009: 'The Archaeology of Pastoral Nomads between the Nile and the Red Sea'. In J. Szuchman (ed.), Nomads, Tribes, and the State in the Near East (Chicago), 15-41.

Barnard, H. and Duistermaat, K. (eds.), 2012: The History of the Peoples of the Eastern Desert (Los Angeles).

Bernand, A. 1972: De Koptos á Cosseir (Leiden).

- Brun, J.-P. 2006a: 'Méthodes et conditions de fouille des fortins et des dépotoirs ou les affres d'un Gallo-Romain en Égypte'. In Cuvigny 2006a: 61-71.
- . 2006b: 'Chronologie de l'équipement de la route à l'époque gréco-romaine'. In Cuvigny 2006a: 187-205.
- . 2011: 'Le dépotoir'. In Cuvigny 2011a: 115-55.
- Brun, J.-P. and Reddé, M. 2011a: 'Le cadre géographique'. In Cuvigny 2011a, 9-16.
- . 2011b: 'Le fort'. In Cuvigny 2011a, 17-113.
- Brun, J.-P., Cuvigny, H. and Reddé, M. 2011: 'De Vespasien à la crise du III<sup>e</sup> siècle: Chronologie générale de Didymoi'. In Cuvigny 2011a, 157-63.
- Bülow-Jacobsen, A. 2012: 'Private Letters'. In Cuvigny 2012a, 233-399.
- Burstein, S.M. 1989: [Translation and editing of] Agatharchides of Cnidus On the Erythraean Sea (Cambridge).
- . 1996: 'Ivory and Ptolemaic Exploration of the Red Sea: The Missing Factor'. Topoi 6.2, 799-807.
- Cappers, R.T.J. 2006: Roman Foodprints at Berenike (Los Angeles).
- Cardon, D., Granger-Taylor, H. and Nowik, W. 2011: 'What did they Look Like? Fragments of Clothing Found at Didymoi: Case Studies'. In Cuvigny 2011a: 273-409.
- Casson, L. 1993: 'Ptolemy II and the Hunting of African Elephants'. TAPA 123, 247-60.
- Cobb, M.A. 2015: 'The Chronology of Roman Trade in the Indian Ocean from Augustus to the Early Third Century CE'. JESHO 58, 362-418.
- . 2016: 'The Decline of Ptolemaic Elephant Hunting: An Analysis of the Contributory Factors'. GrRom 63.2, 192-204.

- Cohen, G.M. 2006: The Hellenistic Settlements in Syria, the Red Sea Basin, and North Africa (California).
- Cuvigny, H. 2005: Ostraca de Krokodilô: La correspondance militaire et sa circulation (Cairo).
- . (ed.), 2006a: Le route de Myos Hormos: L'armée romaine dans le désert Oriental d'Égypte. Volumes 1 and 2. 2nd Edition (Cairo).
- . 2006b: 'Les documents écrits de la route de Myos Hormos à l' époque gréco-romaine (inscriptions, graffiti, papyrus, ostraca)'. In Cuvigny 2006a, 265-94.
- . 2006c: 'Le fonctionnement du réseau'. In Cuvigny 2006a, 295-359.
- . 2006d: 'La société civile des praesidia'. In Cuvigny 2006a: 361-97.
- . 2010: 'The Shrine in the praesidium of Dios (Eastern Desert of Egypt): Graffiti and Ostraka'. Chiron 40, 245-99.
- . (ed.), 2011a: Didymoi: une garnison romaine dans le désert oriental d'Égypte. I – les fouilles et le materiel (Cairo).
- . 2011b: 'Le cadre historique'. In Cuvigny 2012a: 3-7.
- . (ed.), 2012a: Didymoi: une garnison romaine dans le désert oriental d'Égypte. II – les textes (Cairo).
- . 2012b: 'Introduction'. In Cuvigny 2012a, 1-37.
- . 2012c: 'Les inscriptions de Didymoi'. In Cuvigny 2012a, 39-56.
- . 2014: 'Papyrological Evidence on 'Barbarians' in the Egyptian Eastern Desert'. In Dijkstra and Fisher 2014, 165-98.



- De Romanis, F. 2002: 'Τραϊανὸς ποταμὸς. Mediterraneo e Mar Rosso da Traiano a Maometto'.  
In R. Villari (ed.), Controllo degli stretti e insediamenti militari nel Mediterraneo  
(Rome), 21-70.
- . 2015: 'Trajan's Canal and the Logistics of Late Antiquity India Trade'. In V. Christides  
(ed.), Interrelations between the Peoples of the Near East and Byzantium in Pre-Islamic  
Times (Córdoba), 49-60.
- De Romanis, F. and Maiuro, M. (eds.), 2015: Across the Ocean: Nine Essay on Indo-  
Mediterranean Trade (Leiden).
- Dijkstra, J.H.F. 2012: 'Blemmyes, Noubades and the Eastern Desert in Late Antiquity:  
Reassessing the Written Sources'. In Barnard and Duistermaat 2012, 239-47.
- Dijkstra, J.H.F. and Fisher, G. (eds.), 2014: Inside and Out: Interactions between Rome and the  
Peoples on the Arabian and Egyptian Frontiers in Late Antiquity (Leuven).
- Evers, K.G. 2017: Worlds Apart Trading Together: The Organisation of Long-Distance Trade  
between Rome and India in Antiquity (Oxford).
- Fischer-Bovet, C. 2014: Army and Society in Ptolemaic Egypt (Cambridge).
- Fitzpatrick, M.P. 2011: 'Provincializing Rome: The Indian Ocean Trade Network and Roman  
Imperialism'. Journal of World History 22.1, 27-54.
- Gates-Foster, J. 2012: 'The Eastern Desert during the Ptolemaic Period: An Emerging Picture'.  
In Barnard and Duistermaat, 191-203.
- Gurukkal, R. 2016: Rethinking Classical Indo-Roman Trade (New Delhi).

- Habicht, C. 2013: 'Eudoxus of Cyzicus and Ptolemaic Exploration of the Sea Route to India'. In K. Buraselis, M. Stefanou and D.J. Thompson (eds.), The Ptolemies, the Sea and the Nile (Cambridge), 197-206.
- Harrell, J.A. 1996: 'Geology'. In S.E. Sidebotham and W.Z. Wendrich (eds.), *Berenike 1995* (Leiden), 99-126.
- Kennedy, D. 1985: 'The Composition of a Military Work Party in Roman Egypt (ILS 2483: Coptos)'. JEGÄ 71, 156-60.
- Klemm, R. and Klemm, D. 2013: Gold and Gold Mining in Ancient Egypt and Nubia (Heidelberg).
- Lassányi, G. 2012: 'On the Archaeology of the Native Population of the Eastern Desert in the First-Seventh Centuries CE'. In Barnard and Duistermaat 2012, 249-69.
- Leguilloux, M. 2006: 'Les animaux et l'alimentation d'après la faune: les restes de l'alimentation carnée des fortins de Krokodilô et Maximianon'. In Cuvigny 2006a: 549-88.
- . 2011: 'Les animaux à Didymoi: d'après les restes fauniques du dépotoir extérieur'. In Cuvigny 2011a, 167-204.
- McLaughlin, R. 2010: Rome and the Distance East (London).
- Mathew, K.S. (ed.), 2015: Imperial Rome, India Ocean Regions and Muziris (Oxon).
- Maxfield, V. 1996. 'The Eastern Desert Forts and the Army in Egypt during the Principate'. In D. Bailey (ed.), Archaeological Research in Egypt (Ann Arbor), 9-19.
- . 1997: 'The Central Complex: A Description of the Visible Remains'. In Peacock and Maxfield 1997, 17-138.

- . 2000: 'Stone Quarrying in the Eastern Desert with particular reference to Mons Claudianus and Mons Porphyrites'. In D. Mattingly and J. Salmon (eds.), Economies Beyond Agriculture in the Classical World (London), 143-70.
- . 2003. 'Ostraca & the Roman Army in the Eastern Desert of Egypt'. Bulletin of the Institute of Classical Studies 46, 153-73.
- Mayerson, P. 1996: 'The Port of Clysma (Suez) in Transition from Roman to Arab Rule'. JNES 55.2, 119-26.
- Murray, G.W. and Warmington, E.H. 1967: 'Trogodytica: The Red Sea Littoral in Ptolemaic Times'. The Geographical Journal 133.1, 24-33.
- Nappo, D. and Zerbini, A. 2011: 'On the Fringe: Trade and Taxation in the Egyptian Eastern Desert'. In T. Kaizer and O. Hekster (eds.), Frontiers in the Roman World (Leiden), 61-77.
- Peacock, D. and Maxfield, V. (eds.), 1997: Surveys and Excavations: Mons Claudianus, volume 1: Topography and Quarries (Cairo).
- . (eds.), 2001a: Surveys and Excavations: Mons Claudianus, volume 2: Excavations Part 1 (Cairo).
- . 2001b: 'The Phasing and Dating of the Complex: An Interim Discussion'. In Peacock and Maxfield 2001a, 423-55.
- . (eds.), 2001c: The Roman Imperial Quarries: Survey and Excavations at Mons Porphyrites 1994-1998, Volume 1 (Exeter).
- . 2001d: 'The Central Complex'. In Peacock and Maxfield 2001c: 11-56.

- . (eds.), 2007a: The Roman Imperial Quarries: Survey and Excavations at Mons Porphyrites 1994-1998, Volume 2 (Exeter).
- . 2007b: 'Discussion and Conclusion'. In Peacock and Maxfield 2007a: 413-431.
- Pierce, R.H. 2012: 'A Blemmy by Any Other Name... A Study in Greek Ethnography'. In Barnard and Duistermaat 2012, 227-37.
- Pitts, M. and Versluys, M.J. (eds.), 2015: Globalisation and the Roman World (Cambridge).
- Posener, G. 1938: 'Le Canal du Nil á la Mer Rouge Avant les Ptolémées'. Extrait de la Chronique D'Égypte 26, 259-73.
- Power, T. 2012: "'You Shall Not See the Tribes of Blemmyes or of the Saracens": On the Other 'Barbarians' of the Late Roman Eastern Desert of Egypt'. In Barnard and Duistermaat 2012, 283-97.
- Reddé, M. 2006a: 'Le Paysage de la Route'. In Cuvigny 2006a, 39-49.
- . 2006b: 'Les fortins du désert Oriental d'Égypte et l'architecture'. In Cuvigny 2006a, 235-53.
- Reddé, M., and Brun, J.-P. 2006: 'L'architecture des praesidia et la genèse des dépotoirs'. In Cuvigny 2006a, 73-185.
- Ruffing, K. 1995: 'Einige Überlegungen zu Koptos: Ein Handelsplatz Oberägyptens in römischer Zeit'. MBAH 14, 17-42.
- Satzinger, H. 2014: 'The 'Barbarian' Names on the Third-century Ostraka from Xeron'. In Dijkstra and Fisher 2014, 199-212.
- Seland, E.H. 2008: 'The Indian Ocean and the Globalisation of the Ancient World'. AWE 7, 67-79.

Sidebotham, S.E. 1986: Roman Economic Policy in the Erythra Thalassa 30 B.C. - A.D. 217 (Leiden).

----. 2011: Berenike and the Ancient Maritime Spice Route (London).

----. 2016: review of F. De Romanis and M. Maiuro (eds.), Across the Ocean, 2015. JRA 29, 915-19.

Sidebotham, S.E., Hense, M., and Nouwens, H.M. 2008: The Red Land (Cairo).

Sidebotham, S.E. and Zitterkopf, R.E. 1997: 'Survey of the Hinterland by the University of Delaware: the 1996 Season'. BIFAO 97, 221-37.

----. 1998: 'Survey of the Via Hadriana: The 1997 Season'. BIFAO 98, 353-65.

Sidebotham, S.E., Zitterkopf, R.E. and Helms, C.C. 2000: 'Survey of the Via Hadriana: The 1998 Season'. JARCE 37, 115-26.

Sidebotham, S.E. and Zych, I. 2016: 'Results of the Winter 2014-2015 Excavations at Berenike Egypt & Related Fieldwork in the Eastern Desert'. Journal of Indian Ocean Archaeology 12, 1-34.

Syme, R. 1995: Anatolica: Studies in Strabo (Oxford).

Tait, J.G. (ed.), 1930: Greek Ostraka in the Bodleian Library at Oxford and Various Other Collections: Volume 1 (London).

Tchernia, A. 1995: 'Moussons et Monnaies: Les Voies du Commerce Entre le Monde Gréco-Romain et L'Inde'. Annales Histoire, Sciences Sociales 50.5, 991-1009.

----. 1997: 'Winds and Coins: From the Supposed Discovery of the Monsoon to the Denarii of Tiberius'. In F. De Romanis and A. Tchernia (eds.), Crossings (New Delhi), 250-76.

- Tengberg, M. 2011: 'L'acquisition et l'utilisation des produits végétaux à Didymoi: Analyse archéobotanique'. In Cuvigny 2011a: 205-14.
- Thomas, R. 2007: 'The Arabaegypti Ichthyophagi: Cultural Connections with Egypt and the Maintenance of Identity'. In J. Starkey, P. Starkey and T. Wilkinson (eds.), Natural Resources and Cultural Connections of the Red Sea (London), 149-60.
- Tomber, R. 2008: Indo-Roman Trade (London).
- Tratsaert, B.J.M. 2012: 'Roman Gold Mining in the Eastern Desert: The Mining Settlement in Wadi Bakariya'. In Barnard and Duistermaat 2012, 215-25.
- Turner, E.G. 1950: 'Papyrus 40 'della Raccolta Milanese''. JRS 40, 57-9.
- Van Rengen, W. 2011: 'The Written Material from the Graeco-Roman Period'. In D. Peacock and L. Blue, assisted by J. Whitewright (eds.), Myos Hormos - Quseir al-Qadim Roman and Islamic Ports on the Red Sea: Volume 2 (Oxford): 335-8.
- Warmington, E.H. 1928: The Commerce between the Roman Empire and India (London).
- Wendrich, W. and Barnard, H. 2008: 'The Archaeology of Mobility: Definitions and Research Approaches'. In H. Barnard and W. Wendrich (eds.), The Archaeology of Mobility (Los Angeles), 1-21.
- Whitewright, J. 2007: 'Roman Rigging Material from the Red Sea Port of Myos Hormos'. IJNA 36.2, 282-92.
- Whittaker, C.R. 2004: Rome and Its Frontiers (London).
- Wilson, A. 2015: 'Red Sea Trade and the State'. In De Romanis and Maiuro 2015, 13-32.
- Wright, H.T. 2003: 'Archaeological Survey in the Eastern Desert Conducted by the University of Michigan and the University of Assiut: Interim Report'. In S.C. Herbert and A.

Berlin (eds.), Excavations at Coptos (Qift) In Upper Egypt, 1987-1992 (Rhode Island),  
224-31.

Young, G.K. 2001: Rome's Eastern Trade International Commerce and Imperial Policy, 31 BC  
- AD 305 (London).

Zitterkopf, R.E. and Sidebotham, S.E. 1989: 'Stations and Towers on the Quseir-Nile Road'.  
JEG 75, 155-89.

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