

Figure 5

this configuration, as shown in figure 5, increases the average orange: brown ware ratio of *Palaestinian* sites to 1.9, decreases that of *Arabian* to 1.1, and shows Dohaleh fitting neatly into an *Arabian* pattern. As Dohaleh is the only site sampled by the BAP project in this conjectural zone with usable quantities of Byzantine ceramics, the question of the border line must rest until full processing of the site is complete. However, even these preliminary and incomplete results indicate the value in the time-consuming process of intensive cataloguing of body sherds, and the potential data which can be obtained from them.

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ON THE FRINGE: TRADE AND TAXATION IN THE EGYPTIAN EASTERN DESERT

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I. ORGANISATION OF EASTERN TRADE (D. NAPPO)

The aim of this article is to investigate the role of the Egyptian Eastern Desert as a fiscal frontier of the Empire. It is already well known that this area played an important role as a commercial route connecting the Roman World and the Far East.¹ It has also been demonstrated that the fluvial port of Koptos² acted as a hub for collecting taxes on the incoming Eastern goods³ and that tolls were charged there on merchants reaching the Red Sea via the desert caravan routes.⁴ Yet very little is known about

The collections of papyri and ostraka cited in this text are abbreviated following the conventions set out in J.F. Oates et. al. (ed.), Checklist of Editions of Greek Papyri and Ostraka (Atlanta 1992).

S.E. Sidebotham, Roman Economic Policy in the Erythra Thalassa. 30 BC-AD 217 (Leiden 1986); F. De Romanis, Cassia Cinnamomo Ossidiana (Rome 1996); R. Tomber, Indo-Roman Trade: From Pots to Pepper (London 2008).

² On Koptos and its importance, see V.A. Maxfield, 'The eastern desert forts and the army in Egypt during the principate', in D.M. Bailey (ed.), Archaeological Research in Roman Egypt (Ann Arbor 1996), 11–12; D.W. Rathbone, 'Koptos the emporion. Economy and society, I–III AD', in M.-F. Boussac (ed.), Autour de Coptos. Actes du colloque organisé au Musée des Beaux-Arts de Lyon (Lyon 2002), 180; R.S. Bagnall—D.W. Rathbone, Egypt from Alexander to the Copts (London 2004), 280–284.

On this topic the main source of information is still Sammelbuch Griechischer Urkunden aus Ägypten (= SB) 18, 13167, also known as the 'Muziris papyrus'. See H. Harrauer—P. Sijpesteijn, 'Ein neues Dokument zu Roms Indienhandel, P. Vindob. G 40822', in Anzeiger d. Österreichischen Akademie der Wissenschaften, Phil.-Hist. Klasse 122 (1985), 124–155; L. Casson, 'P. Vindob. G. 40822 and the Shipping of the Goods from India', Bulletin of the American Society of Papyrologists 23 (1986), 73–79; L. Casson, 'New light on maritime loans: P. Vindob. G. 40.822', Zeitschrift für Papyrologie und Epigraphik 84 (1990), 195–206; De Romanis 1996, op. cit. (n. 1), 183–196; De Romanis, 'Commercio, metrologia, fiscalità. Su P. Vindob. G 40822 Verso', Mélanges de l'école française de Rome. Antiquité 110 (1998), 11–60; D.W. Rathbone, 'The "Muziris" Papyrus (SB XVIII 13167): Financing Roman trade with India', Bulletin Societé Archéologique d'Alexandrie 46 (2000), 19–50; Rathbone 2002, op. cit. (n. 2), 179–198.

⁴ The toll is attested in the 'Koptos Tariff', OGIS 2, 674; republished in SB 5, 8904. As is now evident from the available evidence, the control of the fiscal system in the

the fiscal organisation of the caravan routes themselves and of the ports on the Red Sea, from which ships would depart towards the East. This gap in our documentation has been reduced dramatically over the last few years, thanks to a number of *ostraka* found in Berenike, a port located in the area of Ras Banas, the southernmost Roman settlement in Egypt and a terminal of the route connecting South India to the Roman Empire. Berenike's general role in the economy of the area has been described in a number of publications⁵ and will not therefore be examined here. Attention will be rather focused on the dossiers of *ostraka* discovered at Berenike and recently published in two volumes by an équipe of scholars led by Roger Bagnall.⁶ It is our belief that these documents can be used to shed a considerable amount of light on the dynamics of taxation on trade as applied in the Egyptian port and on the desert routes at large.

So far 260 ostraka have been published, and most of these documents come from a Roman dump dated to the first century AD.⁷ In this first section only those documents which are connected to the process by

Egyptian Eastern Desert was in the hands of the arabarchs, a powerful corporation, whose origin dated to the Ptolemaic age. On the arabarchs and their organisation, see D. Nappo, 'Il ruolo dell'arabarchia nella fiscalità romana', in E. Lo Cascio—G. Merola, Forme di aggregazione nel mondo romano (Bari 2007), 273–291.

⁵ S.E. Sidebotham—W. Wendrich, Berenike '94. Preliminary Report of the Excavations at Berenike (Egyptian Red Sea Coast) and the survey of the Eastern Desert (Leiden 1995); S.E. Sidebotham-W. Wendrich, Berenike '95. Preliminary Report of the Excavations at Berenike (Egyptian Red Sea Coast) and the survey of the Eastern Desert (Leiden 1996); S.E. Sidebotham-W. Wendrich, Berenike '96. Report of the Excavations at Berenike (Egyptian Red Sea Coast) and the survey of the Eastern Desert (Leiden 1998); S.E. Sidebotham-W.Z. Wendrich, Berenike 1996. Report of the 1996 Excavations at Berenike (Egyptian Red Sea Coast) and the survey of the Eastern Desert (Leiden 1998); S.E. Sidebotham-W.Z. Wendrich, Berenike 1997. Report of the 1997 Excavations at Berenike (Egyptian Red Sea Coast) and the survey of the Eastern Desert, including Excavations at Shenshef (Leiden 1999); S.E. Sidebotham-W. Wendrich, Berenike 1998. Report of the 1998 Excavations at Berenike (Egyptian Red Sea Coast) and the survey of the Eastern Desert, including Excavations in Wadi Kalalat (Leiden 2000); 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 2007); S.E. Sidebotham, 'Late Roman Berenike.' Journal of the American Research Center in Egypt 39 (2002), 217-240.

⁶ R.S. Bagnall—C. Helms—A.M.F.W. Verhoogt, *Documents from Berenike. Volume I. Greek ostraka from the* 1996–1998 seasons (Bruxelles 2000); R.S. Bagnall—C. Helms—A.M.F.W. Verhoogt, *Documents from Berenike. Volume II. Texts from the* 1999–2001 seasons (Bruxelles 2005). The documents cited from these two volumes are hereafter referred to as O. Berenike.

which goods and their transporters passed through the customs gate at Berenike will be discussed. They served as let-pass orders for goods going through the customs station of Berenike, on their way to ships destined for locations along the African or Indian coast. Although some of these goods could have been used for personal consumption by the crew of the ships, most of them were in fact export wares. These receipts of let-pass orders were issued somewhere on the Nile-Berenike route (most likely Koptos) and received by the officials in charge of the customs gate in Berenike; this would mean, according to the editors of the documents, that "the amounts due were collected in the valley [i.e. at Koptos], with the goods then free to pass through the gate in Berenike." It is worth stressing that these documents for the first time attest unequivocally the presence of a customs gate at Berenike. Although the taxes were paid elsewhere (i.e. at Koptos), the last step of the fiscal control took place at Berenike, before the outgoing goods left the Empire to the East.

We will now go through the structure of the *ostraka* to shed some light on the organisation of this control. We can divide the let-passes into four groups, according to their general structure:

- 1. NN to NN, quintanensis, greetings; please, let pass for NN a X amount of some item
- 2. NN to NN (no title given) greetings; please, let pass for NN a X amount of some item
- 3. NN to those in charge of the customs gate, greetings; please, let pass for NN a X amount of some item
- 4. Epaphroditos slave of Delias slave of Aeimnestos slave of Caesar to NN, quintanensis, greetings; please, let pass for NN, slave of Delias slave of Aeimnestos slave of Caesar a X amount of some item

As it can be easily recognised, groups one to three represent only slight variations on a general pattern, which includes a writer, who addresses to an officer to ask a let pass for people carrying some quantities of items (usually wine, but also oil and vinegar). The addressees are sometimes qualified by their name and the title of *quintanensis* (as in group 1); sometimes only by their name (group 2); sometimes they are just called "those at the customs gate", with no name or title given (group 3). Here follows an example for each group. For the first group, we have selected one from the dossier of Andouros (O. Berenike 50–67):

⁷ Bagnall et al. 2000, op. cit. (n. 6), 3.

⁸ Bagnall et al. 2000, op. cit. (n. 6), 8.

Bagnall et al. 2005, op. cit. (n. 6), 5.

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'Ανδουρωι κουιντ(ανησίωι)· πάρες
Τιβερίου Κλαυδ(ίου) ['Αχιλλέως] Δωρίωνος
Παουῶτι Παοῦτος ἰταλικά
δέκα, (γίνεται) ἰταλ(ικὰ) ι.

(O. Berenike 51)

"To Andouros, *quintanensis*, let pass of Tiberius Claudius [Achilleus] Dorion, for Paouos son of Paouos, 10 italika, total 10 ital(ika)."

For the second group, an example from the dossier of Sosibios (O.Berenike 1–35):

"Sosibios to Andouros, greetings. Let pass for Andouros son of Pach() 6 italika of wine."

For the third group, an example from the dossier of Robaos (O. Berenike 36–49):

['P]οβαος τοῖς ἐπὶ τ[ῆ πύλη χα(ίρειν)] πάρετε Ἀρυώθηι [εἰς]

"Robaos to those in charge of the customs gate, greetings. Let pass for Haryothes for outfitting, 8 rhodia."

What we can infer from the first three groups is that, due to the close similarity between their structures, we can identify the *quintanenses* with the 'people at the customs gate'. As pointed out by the editors, ¹⁰ the phrase 'people at the customs gate' was used by a writer who did not know the name of the officer he was addressing, and allows us to understand, on the one hand, that the *ostraka* were used by the merchants as let-passes to go through the customs gate at Berenike, and, on the other hand, that the officer in charge of controlling this process was called *quintanensis*. ¹¹

The fourth group of let-passes can shed some light on different aspects. It presents some quite distinctive characteristics, although within the general pattern seen for the first three: the writer is always an "Epaphroditos slave of Delias slave of Aeimnestos slave of Caesar", addressing the quintanensis Pakoibis, requesting a let-pass for some person belonging to the same group of slaves (O. Berenike 184–188). The first peculiarity is that in these documents the writer is qualified not only with his name, but, more importantly, he appears to belong to a group of slaves, linked

to Aeimnestos, a slave of the *familia Caesaris*. An even more exceptional characteristic of the dossier of Epaphroditos is that all the *ostraka*, apart from O. Berenike 184, are pre-made forms where a blank space is left to add the name of the person transporting the wine and the precise number of *keramia* of wine at a later moment:

Έπαφ[οόδει]τος Δ[ηλίου 'Α]ειμνήστ[ου] Καίσαρος Πακοίβι κοιντανησίωι χ(αίρειν)· πάρες uacat τῶν Δηλίο[υ] 'Αειμνήστου Καίσαρος [οἴ]νου πτολεμμα(ικοῦ). κερά[μα] uacat (Ο. Ber. 186).

"Epaphrodeitos slave of Delias slave of Aeimnestos slave of Caesar, to Pakoibis *quintanensis*, greetings. Let pass for (blank) of those of Delias slave of Aeimnestos slave of Caesar, (blank) keramia of Ptolemaic wine."

The editors suggested that, since all forms ended up in the rubbish heap at Berenike, they might have been used without actually having been filled in. 12 The persons transporting wine, whose names were to be filled later, are all identified as $\tau \tilde{\omega} v \Delta \eta \lambda i \sigma [v]$ 'Ae $\mu v \dot{\eta} \sigma \tau v \kappa (\sigma \alpha \rho \sigma \varsigma)$, "of the men of Delias, slave of Aeimnestos, slave of Caesar". The issuer himself, Epaphroditos, is also qualified as a slave of the same Delias. This dossier allows us to speculate on the role of the imperial administration in the management of trade with the East. Epaphroditos and his men all belong to this group of slaves going back to the emperor himself. Although there are three layers of ownership of slaves, the hypothesis of a direct involvement of the emperor or his entourage in the Eastern trade cannot be ruled out.

In principle, it seems likely that the emperors would be interested in getting involved in such commercial activity, which could entail huge margins for profit. ¹³ This hypothesis becomes even more intriguing if we consider the chronology of the documents. The terminus ante quem for the ostraka is ca. 70 AD, whereas the terminus post quem is 40–45 AD, a period that follows the big trade boom with the East of the Tiberian age, and 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. ¹⁴ This leads us

¹⁰ Bagnall 2000 et al., op. cit. (n. 6), 8-12.

A detailed discussion on the overall function of this officer will be presented infra in the second part of this article.

¹² Bagnall 2005 et al., op. cit. (n. 6), 74.

Plinius Maior, Naturalis Historia 6.101: [...] nullo anno minus HS 50,000,000 imperii nostri exhauriente India et merces remittente quae apud nos centiplicato ueneant. See also the papyrus SB 18, 13167, where it is specified that the total value of a cargo coming back from India at the middle of the second century AD is 1154 talents and 2852 drachmae.

¹⁴ See H. Cuvigny, La route de Myos Hormos, Fouilles de l'IFAO 48/2 (Paris 2003).

to postulate that the possibility of imperial involvement in the trade is very promising, and is unlikely to remain just a hypothesis, although the dossier of Epaphroditos alone is not a sufficient proof to sustain it.

The last group of documents we would like to analyse here is the dossier of Sarapion (O. Berenike 153-183). The reason that this group of documents deserves its own analysis does not depend on its structure, 15 but rather on the texts of the ostraka. It is immediately evident that Sarapion's let-passes are composed by two different subgroups. In the first one Sarapion always addresses the quintanensis Andouros to ask a letpass for people carrying wine. In the second subgroup, Sarapion always addresses the quintanensis Pakoibis, to ask a let-pass for people carrying μαροιπ(). This difference leads us to think that we have here a new particular not present in the documents discussed before: the customs at Berenike might have had a complex articulation, with different 'offices' according to the different merchandise that the traders needed to export. So when Sarapion needs to export wine, he directs his merchants to Andouros, whereas when he needs to export $\mu\alpha\varrho\sigma\iota\pi$ () he addresses Pakoibis. For a complete understanding of this process, it is crucial to solve the abbreviated word $\mu\alpha\varrho\sigma\iota\pi$ (). The editors interpreted it as an abbreviation for μαρσίππια.16 The Greek word μαρσίππιον means 'a (carrying) bag, a container'; something to transport items. So we can interpret μαρσίππιον as a bag, but in no case in the text is the content of these bags specified, as it is clear from the following example:

Σαραπίων Κασίου Πακοίβι χ(αίρειν)· δι(απόστειλον) 'Αντωι Τχαλιου μαρσίπ(πια) σλε. σεση(μείωμαι).

(O. Berenike 162)

"Sarapion son of Kasios to Pakoibis, greetings. Dispatch for Antos son of Tchalios 235 bags. Signed."

The word μαρσίππιον is well attested in the papyri, and its diminutive (μαρσίππιν) appears in the *ostraka* from Mons Claudianus. ¹⁷ The quantities of μαρσίππια involved in the texts from Berenike are impressive, as can be seen in the table below. ¹⁸

Attestation of μαρσίππια in O. Berenike

Text	Number	Text	Number	Text	Number
159	56	165	97*	173	21
160	160	166	160*	174	68
162	235	170	73	177	119*
163	112*	172	160	185	5

The quantities marked with a * are qualified in the ostraka with $\delta\iota\pi(\lambda\bar{\alpha})$, double, which suggests that the word $\mu\alpha\varrho\sigma(i\pi\pi\iota\sigma)$ stands as a standard unit of measurement. So we can say that the $\mu\alpha\varrho\sigma(i\pi\pi\iota\alpha)$ were used to transport items in standard packages and dispatched in very big quantities given the enormous amount of $\mu\alpha\varrho\sigma(i\pi\pi\iota\alpha)$ attested in the documents.

As it happens, the most popular Roman export to India was Roman coins, 19 indeed a perfect content for our $\mu\alpha\varrho\sigma(\pi\pi\iota\alpha)$. This interpretation is supported by the papyrological evidence. In fact in the papyri the word $\mu\alpha\varrho\sigma(\pi\pi\iota\alpha)$ is often used as the equivalent of the English wallet, a container for coins. 20 When used with this meaning, it is sometimes attested in the phrase $\mu\alpha\varrho\sigma(\pi\pi\iota\alpha)$ esquarkous, 21 'sealed marsippia', which might give a new hint to understand the nature of the documents we are dealing with.

To understand why these 'sealed *marsippia*' were necessary, we need to explain how the actual system of transporting merchandise and coins over the desert worked. The cargoes would leave Alexandria, the big *emporion* on the Mediterranean, to be convoyed to Koptos on the Nile and from there overland to Berenike. As far as we know, the merchants would borrow the money for their commercial expeditions from wealthy people willing to finance such trade, and who reaped huge profits from these loans.²² It is reasonable to imagine that these financers would also have provided the merchants with the coins to trade in India. At this point it is worth remembering that Roman coins found in India are virtually all *denarii* or *aurei*, i.e. types of coins officially forbidden from circulation in Roman Egypt.²³ In fact, although the excavations at Berenike yielded Roman bronze coins and Ptolemaic *tetradrachmai*, not

¹⁵ In terms of structure, the dossier of Sarapion can be considered as an example of what is listed above as group 2.

¹⁶ Bagnall 2005, op. cit. (n. 6), 63.

¹⁷ O. Claud. 227; 231; 248.

¹⁸ As pointed out by the editors, see Bagnall 2005 et al., op. cit. (n. 6), 64, the median of the quantity of *marsippia* falls between 112 and 117, a huge amount, if compared to the median of *ladikena* of wine, which falls between 4 and 6.

¹⁹ See Tomber 2008, op. cit. (n. 1), 30-37; S. Suresh, Symbols of trade (New Dehli 2003).

²⁰ See for example P. Sarap., 55; P. Tebt., 337; 797; 1151; P.Mert., 113; P.Oxy 1670; 2728; P.Cair Zen, 59010; 59069; P. Petr., 107.

Attested for example in P.Mert. 3, 113; P.Oxy., 2728; P.Cair Zen, 59010; 59069.

This practise is attested in SB 18, 13167. See also the works cited at n. 3.
 K.W. Harl, Coinage in the Roman Economy (Baltimore 1996), 117-124.

a single *denarius* or *aureus* was found. However, as the Roman *denarii* found in India did indeed arrive from Egypt, we are confronted with a seemingly insoluble contradiction. The answer to such a puzzle is, in our opinion, represented by the μαρσίππιον ἐσφραγίσμενος. The coins necessary for the trade with the Indians would be collected in sealed bags with a standard number of coins (and, consequently, of standard weight). This would form a guarantee for both financer and merchant: the financer would be sure that the traders could not open the bags and try to steal some coins, and the traders would be able to count the coins faster (bag by bag, rather than one by one).

A comparative example to support this hypothesis exists through a recent discovery made on the shores of Italy, the so-called 'tesoretto di Rimigliano'. The 'tesoretto' comes from a wreck and is supposed to represent the standard way in which coins were circulating on commercial ships around the Mediterranean. It is a block of ca. 3,600 coins, originally contained in small leather bags of circular shape and then put together into a larger basket. The small bags contain a standard number of silver coins, split in groups of ten units, in order to facilitate the process of counting. A similar organisation to the one attested in the 'tesoretto di Rimigliano' can be postulated for the Eastern Desert, and this is the situation to which the $\mu\alpha\rho\sigma$ would then refer. The dossier of Sarapion, if our interpretation is correct, sheds new light on the organisation of trade in the Eastern Desert, telling us how the delivery of the Roman coins to India was actually organised.

We have seen, then, how the documents from Berenike provide new evidence on a very specific type of fiscal and commercial organisation with regards to the Eastern trade. From what we have seen so far, it appears evident that a central role in this process was played by the quintanenses.

II. QUINTANENSES AND THE QUINTANA (A. ZERBINI)

As must be clear by now, Berenike acted as a fiscal frontier with regards to the taxation on the Eastern commerce. Yet the functioning of taxation on trade seems to have been much more articulated, including a specific form of taxation on commercial activities inside the desert routes

linking Koptos to the Red Sea ports. As for the customs gate procedures witnessed by the let-pass orders, much of the taxation on internal trade seems to have been structured around the figure of the *quintanensis*. Despite the relevance of this official in the Berenike documents, light has yet to be shed on his duties and responsibilities: so far, we have only learnt that the *quintanenses*, while presumably in charge of the customs gate at Berenike, were not responsible for the collection of the taxes applied on outgoing goods but only for controlling the receipts that allowed such goods to be shipped overseas. In what follows, we aim to concentrate on the *quintanensis* in order to assess how the evidence of his role can be used to illuminate the organisation of taxation on trade in the Eastern Desert.

Outside the dossier of documents from Berenike, quintanenses are seldom present in the sources. The only other references come from two inscriptions from Italy and Germany and from the papyrus P.Gen.Lat. 1,25 The context is always a military one: in a funerary inscription from the ager Albanus, the late Aurelius Crysomallos is referred to as a quintanesis legionis, while an inscription found in the area of the fort of Niederbieber (Germania Superior) was set up to the Genius horreorum of the numerus Brittonum by at least two soldiers, one of whom is referred to as quintane(n)sis.26 Both inscriptions can probably be dated to the late second or early third century, while the third document, the well known P.Gen.Lat.1 is dated to the reign of Domitian.27 The verso of this text-which comes from the archives of the legio III Cyrenaica or XXII Deiotariana stationed at Alexandria—records part of a brevis, i.e. a text listing the services and duties of the soldiers of a century, over a period of ten days from the first to the tenth of October. Of the forty soldiers whose duties are known from the text, the vast majority were employed in the camp, but some were sent off to detached fortlets and perhaps temples. More importantly, four soldiers (nos. V, X, XVI, XVIII) were allocated for a time varying between four and five days to a service defined as pro quintanesio, which could mean they had to serve as

²⁴ It was found in 2002 near Livorno, in Tuscany. See A. De Laurenzi, Un Tesoro dal Mare: il Tesoretto di Rimigliano dal Restauro al Museo (Pisa 2004).

²⁵ CIL 14, 2282 (ager Albanus); CIL 13, 7749 (Germania Superior). P.Gen.Lat.1 = Doc.Eser.Rom.10 = Chartae Latinae Antiquiores (= ChLA) I 7 = Corpus Papyrorum Latinarum (= CPL) 106. The different documents borne by this piece of papyrus are edited separately in R.O. Fink, Roman Military Records on Papyrus (Cleveland 1971) (= RMR) 9, 10, 37, 58, 68.

²⁶ Zangemeister understood *quintane* $\langle n \rangle$ sis as a cognomen, a possibility that remains obviously open.

²⁷ See the commentary in ChLA I 7 (esp. col. V 1–10).

quintanenses or in the stead of the quintanensis or perhaps also, with a locative meaning, by the quintanenses (safeguarding the security of the officials).

While these documents clearly show that the *quintanenses* were soldiers, their responsabilities remain to be identified. A look at the etymology of the word *quintanensis* immediately shows a derivation from the *uia quintana*, a thoroughfare of a Roman camp which, according to Polybius, was named after the $\pi \dot{\epsilon} \mu \pi \tau \alpha \tau \dot{\alpha} \gamma \mu \alpha \tau \alpha$ who had their quarters in this area of the *castra*. For Pseudo-Hyginus, who wrote in the second century AD, the *uia quintana* and the two *quintanae portae* in which it ended up at either side of the camp were only laid out when the fort was built to accommodate five or more legions (hence the name *quintana*). ²⁹

Interestingly, from early times onwards, the *uia quintana* or the *quintana porta* seems to have been associated with the presence of a market: the identification of the military forum and the *uia quintana* was already implied in Livy and later made clear by Suetonius. ³⁰ Finally, Festus locates the *forum rerum utensilium* by the *quintana porta*, though the position of the latter *post praetorium* seems to suggest that the author was referring to the whole of the *uia quintana* rather than just its gates. ³¹

If the *uia quintana* was connected with the military forum, the official named after this area of the castra, the *quintanensis*, must bear some relation with the market as well. This assumption seems to be supported not only by the role of the *quintanenses* which emerges in the let-pass orders, but more importantly by a dossier of documents from Berenike which were published in 2005 under the heading "receipts for Quintana". These documents span over a period going from the latter part of the reign of Augustus (O.Berenike 136 1 BC/AD 1) to the reign of Vespasian (O.Berenike 141, AD 71/2). The core information provided by these documents can be gauged by looking at O.Berenike 138, which is one of the best preserved texts:

²⁸ Polybius 6.30.5-6.

²⁹ Pseudo-Hyginus (A. Grillone (ed.), *De munitionibus castrorum* (Leipzig 1977))

³² O.Berenike 105 (= O.Berenike 140a); 136–141; 219.

Γερμανός κουτανίσ(ιος) Γαειανῷ Ἱμέρου χ(αίρειν)· ἔχωι κουτάνας Παονηω ῖς Πασχωι ῖς (ἔτους) ιβ Νέρ(ω)νος τοῦ κουρί(ου).

"Germanos, *quintanensis*, to Gaianus son of Himeros, greetings. I have the *quintana* for Pauni, 16 (dr.) and Pachon 16 (dr.) Year 12 of Nero the lord"

In this document a *quintanensis* is writing to acknowledge the receipt of the κουτάνα, clearly equivalent to the Latin *quintana*, for the months of Pauni and Pachon. The sum received amounted to 16 drachmae a month or 32 drachmae in total. The text is then dated to the twelfth year of Nero (AD 66). Further additions to the format of this document include:

- The presence of two quintanenses as the senders of the receipts (O.Berenike 140).³³
- The specification that the *quintanensis* is in charge for a certain year (O.Berenike 140, 141)
- The signature of the *quintanensis* attesting receipt of the money (O.Berenike 137, 140, 140a, 141)
- The *quintana* is specifically said to be "on two donkeys" (O.Berenike 140).

These receipts record the fulfilment of payments of a previously unknown tax, the *quintana*, which appears to have been gathered at a fixed rate of 16 dr./month and remained unchanged throughout the seventy-year period covered by our documents. The *quintana* could also be collected for two months together (as suggested by O.Berenike 138) or in partial instalments (O.Berenike 219 l. 5), but it remained essentially a capitation tax, rather than an *ad valorem* one as the *tetarte*, the 25% tax on incoming goods that was applied to imports from the East.³⁴

Regarding the function of this duty, the editors have tended to overestimate the importance of O.Berenike 140, which by bearing the expression thin point (ánan) toũ Mex(eiq) ỗnω(n) β has been interpreted as evidence that the *quintana* was a tax levied solely on transporters of goods. ³⁵ If that

³⁶ The passage in Livius (41.2.11), though not establishing an identification of the quintana with the market, suggests that forum and the uia quintana were located in the same area of the camp (i.e. below the praetorium, as the other sources also confirm). It is in this area that the plundering enemies found omnium rerum paratam expositamque copiam (Id. 41.2.12). Suetonius, Nero 26.1-2.

³¹ Paulus ex Festo (W.M. Lindsay (ed.), Sexti Pompei Festi. De uerborum significatu quae supersunt cum Pauli Epitome (Leipzig 1913)), p. 309.

³³ This is a particularly interesting aspect as it mirrors what we know from P.Gen.Lat. 1 where the soldiers on duty as pro quintanesio are chosen in pairs.

M On the tetarte, see the bibliography cited at n. 3.

³⁵ Bagnall 2005, op. cit. (n. 6), 6–7. The editors liken the *quintana* to similar charges known from the Koptos tariff, i.e. the *apostolion* and the *pittakion*, but see below. This opinion has been recently expressed also by H. Cuvigny: H. Cuvigny (ed.), *La route de Myos Hormos* (Le Caire 2006, 2nd ed.), 693. On the Koptos tariff, see n. 4.

was the case, we would expect the number of animals involved to differ according to the amount paid. Yet, that does not seem to apply to our evidence, unless we assume $\Tilde{o}v\omega(\nu)$ β to be a standard formula otherwise omitted in the receipts, an explanation which appears to be unlikely. It is more convenient to tie the quintana more strongly to its etymology, i.e. the area of a military market and to its collector, who was the official in charge of the military market. In this respect, we would suggest that the quintana be interpreted as a capitation tax charged on those who were engaged in commercial transactions specifically involving the army. As the quintana was a fixed amount, there was no need to specify the profession or commercial activity of the persons liable to pay it, as such details were not relevant when assessing the tax.

This explains why the only evidence for the quintana being levied on a specific activity comes from a completely different type of document. The recently published collection of ostraka from the military praesidium of Krokodilo provides important information on military life along the desert routes leading to Myos Hormos and Berenike.³⁶ More importantly, some of these documents have led to the identification of the tax quintana, here charged on the monthly lease of prostitutes to the military detachments of the desert.³⁷ Such texts have been dated to the reign of Trajan and record the correspondence of kyrioi of prostitutes with their agents located in the different praesidia of the desert.38

The fact that prostitution was likened to other forms of trade and taxed as such should not come as a surprise, as evidence of this abounds from the rest of Egypt. In particular, O.Wilb. 33 (Elephantine, AD 144) refers to a tax-farmer styling himself as mistôthês cheirônaxiou mêniaiou kai hetairikou, i.e. collector of the monthly tax on trade and prostitution.39

36 The documents are referred to as O.Krok. and have been published in: Cuvigny 2003, op. cit. (n. 14); H. Cuvigny, Ostraca de Krokodilo (Le Caire 2005).

See especially Cuvigny 2006, op. cit. (n. 35), 689-694. See also Cuvigny 2003, op.cit. (n. 14), 384 where the author points out that these documents also represent the first attestation of prostitution in a military context.

As a commercial activity, taxation of prostitution in the Eastern desert was subject to the payment of the quintana. Such procedure is described in O.Krok. 252, which reads as follows:

[....]ς Πτολεμᾶ [πλεῖστ]α χαίρειν [..].. eu mod..[..] Πο[ό]κλαν είς πραισίδιον Μαξιμιανὸν ξ σὺν τῆ κουιντανᾶ. διὸ καλῶς ποιήσεις πέμψαι αὐτὴν μετὰ τοῦ [δ] νελάτου τοῦ δώ-[σον]τὸς σ[ο]ι τὸ ὀσ[τ]οά-

"NN to Ptolema, very many greetings I have let Procla to the praesidium of Maximianon for 60 drachmas with the quintana. Please send her with the donkey driver who brings you this ostrakon. I have received the deposit of 12 drachmas out of which I have paid the fare of 8 drachmas. Receive from the donkey driver [...] drachmas. Give her the cloak. I shall give her the tunic. Do not do otherwise. Greetings"

As we can see, the sender requests a certain Ptolema, probably the agent of the 'pimp' in Krokodilo, to send Prokla to the praesidium of Maximianon (further down towards Myos Hormos) to which the author states to have leased (misthoun) the prostitute for a rate of 60 dr. σύν τῆ κουιντανą̃. As Cuvigny informs us, this expression stands in opposition to that found in the unpublished O.Krok. 614, where a prostitute is leased for 72 dr. χωρίς τῆς κουιντανῆς. 40 From O.Krok. 252, 544 and 614, along with other unpublished documents from the praesidium of Didymoi, it appears that 60 drachmae was regarded as the standard monthly amount at which the prostitutes were leased out.41 To this we should add the quintana. Although the exact amount of the tax is not given in the letters from Krokodilo (we are not dealing with receipts as in the case of the documents from Berenike), a figure can be deduced by simply comparing the rates given in O.Krok. 252 and 614. In the first, the 60 drachmae σύν τῆ κουιντανᾳ represent the net amount that the kyrios cashed after

40 Cuvigny 2006, op. cit. (n. 35), 388.

³⁸ In one unpublished document from Didymoi (O.Did. inv. 430) on the Berenike route the sender is the curator of the praesidium of Aphrodites Orous requesting that the pimp send one of his paidiskê to oi ek tou praisidou, i.e. the soldiers. The text was circulated by H. Cuvigny at the 13th congress of the Fédération internationale des Associations detudes classiques, Berlin 24-29 August 2009 (hereafter FIEC 2009). It is now discussed in H. Cuvigny, 'Femmes tournantes: remarques sur la prostitution dans les garnisons romaines du désert de Bérénice', Zeitschrift für Papyrologie und Epigraphik 172 (2010),

See also O. Edfou I 171 where the tax on prostitutes is defined as merismou hetairikou. C.A. Nelson, 'Receipt for tax on prostitutes', Bulletin of the American Society of Papyrologists 30 (1995), 30 and passim for further references on taxation on prostitution.

⁴¹ For other evidence on the standard leasehold rate see: Cuvigny 2003, op. cit. (n. 14), 388-389; that the amounts referred to are indeed monthly canons is confirmed by several documents among which the unpublished O.Did. inv. 390 (for the text see Cuvigny 2010, op. cit. (n. 38)).

having paid the *quintana*, while in the second case the monthly fare was raised to 72 dr. $\chi\omega\varrho\dot{\iota}\zeta$ the countant so that the *kyrios* could then pay the tax without eating into his profit. In this respect, our view differs from that of Cuvigny's, for whom ξ oùn the countant would represent the gross rate from which the *quintana* had yet to be deducted. 42

The quintana applied to the monthly lease of prostitutes seemed, therefore, to be calculated at 12 drachmae. This figure is different from that found in Berenike (16 dr.), a fact that could perhaps be explained by a change in the assessment of the tax that occurred between the reign of Vespasian and that of Trajan, a gap for which we do not have any evidence for the quintana. Despite this, it seems apparent that we are dealing with the same duty, a monthly capitation tax that at Krokodilo as well as Berenike was charged on those engaged in any kind of commercial activity directly involving the army. In the case of prostitution, the person charged would obviously be the prostitute herself, although her 'pimp' would eventually be responsible for the payment of the tax. However, it is possible (as in O.Krok. 614) that the canon could be raised so that the clients (i.e. the soldiers) would pay for the tax as part of the monthly fare.

Interestingly, the two known figures for quintana (16 and 12 dr. per month), when compared to capitation taxes on trades known from other areas of Egypt, strike as high rates. Documents from comparable periods, providing figures for the tax on prostitution, give much smaller amounts (1–4dr per year) while other trade taxes range between 6 to 50 dr./year.⁴⁴ The higher rates of the quintana in comparison to figures for cheironaxia,

and its being a fixed tax rather than depending on the type of activity and the central role of the *quintanensis*, strongly suggest that taxation on internal trade in the Eastern Desert received an organisation that differed from what is known for the rest of Egypt. The structure of the *quintana* was based on a simpler form of assessment, i.e. an invariable amount to be paid for all trades, and higher taxation rates could perhaps be countered by the comparatively higher profitability of commercial activities in the desert.

Since the *quintana* appears to have been levied in all the outposts of the desert as well as in Berenike, it is somewhat surprising that no reference is made to the *quintanenses* in the *ostraka* from the *praesidia*. It is possible that each detachment had its own *quintanensis* or perhaps that soldiers could be put on duty as *pro quintanesio* for a certain number of days (see above, P.Gen.Lat. 1), though the evidence from Berenike tends to suggest that the *quintanenses* were appointed for a fixed term of one year. Some light on this point could be shed by an unpublished *ostrakon* from Didymoi (O.Did. inv. 430, AD 100–110) written by Longinus, curator of the *praesidium* of Aphrodites Orous to the *kyrios* Apollinaris. In this text, Longinus requests Apollinaris to send a certain girl "who makes him (Apollinaris) 60 dr." and concludes by saying that τὸ τοῦ κονδούκτορος πρὸς ἡμᾶς ἐστι, i.e. the "part of the *conductor* will be paid for by us (= the soldiers)".

Conductor, much in the same way as quintana and quintanensis, was a Latin word which, though transliterated into Greek, must have retained its original meaning, i.e. that of private contractor. In this context both Cuvigny and Bülow-Jacobsen have argued that the conductor would be a tax-farmer collecting the quintana, raising the issue of whether the quintanensis himself should be regarded as a private tax-farmer rather than as a military official. Yet, this is not an either-or situation. A certain conductor Porcius, who appears in P.Gen.Lat. 1 in a list of soldiers opera uacantes, may very well be a soldier holding an unspecified contract, while in RMR 70 the auxiliary Pantarchus uses money to buy the contract (pro contuctione) for something unknown. Texts from Vindolanda seem to show that soldiers could act as private contractors to supply their

⁴² Cuvigny 2006, op. cit. (n. 35), 689–690. Cuvigny cites N. Lewis, 'The meaning of sun hemiolia and kindred expressions in loan contracts', Transactions and Proceedings of the American Philological Association 76 (1945), 126–139, when arguing that the use of syn te kuintane should be likened to that of syn hemiolia in loan contracts, where the sum preceding the expression with syn included also the interest or penalty to be paid. However, there is no obvious reason why loan contracts and taxation on commercial transactions should employ the same formulas. In fact, just after this article was written, Hélène Cuvigny has revised her interpretation of the use of syn/chôris with regard to the quintana. Her new insights on this topic can be found in Cuvigny 2010, op. cit. (n. 38).

⁴³ The same amount seems to be also confirmed by unpublished documents from Didymoi: see Bagnall et al. 2005, op. cit. (n. 6).

⁴⁴ Tax on prostitution: O.Berol. inv. 25474 (AD65); WO 83 (AD110); O.Wilb. 33 (AD144). These documents are discussed, along with much other evidence in Nelson 1995, op. cit. (n. 39), 23–33; R. Bagnall, 'A trick a day to keep the tax man at bay? The prostitute tax in Roman Egypt', Bulletin of the American Society of Papyrologists 28 (1991). For a general discussion on capitation taxes on trades see especially: S. Wallace, Taxation in Egypt from Augustus to Diocletian (Princeton 1938), 191–213.

⁴⁵ See n. 38. We only cite those parts of O.Did. inv. 430 which were made available by Cuvigny in the course of the *FIEC 2009* conference.

⁴⁶ A. Bülow-Jacobsen and H. Cuvigny, Les Ostraca de Didymoi (O.Did.) (forthcoming). Cuvigny 2006, op.cit. (n. 35), 690 ff.

camps with goods. 47 If soldiers could be contractors, it is perhaps possible that some would have bought the contract to farm the taxes on the *uia quintana*.

This could be the case for Domitius Germanus (ChLA III 200, AD 166), who styles himself as *misthôtês kuintanês*, an expression which may overlap with the title of *quintanensis*. In this document, as rightly suggested by Cuvigny, the fact that Germanus is collecting the *dekatê* (corresponding to the *enkyklion* in Egypt) on the sale of a slave suggests that *kuintana* should be interpreted again as the *uia quintana*, the area of the military market. 48 Germanus was, then, the farmer of all taxes concerning the *uia quintana*, i.e. all the commercial transactions involving the fleet stationed at Seleukia of Pieiria (the document is an *emptio-venditio* between two soldiers). This document is particularly important because, although not directly referring to either the *quintanensis* or the *quintana* as a tax, it proves that a specific mode of organisation of trade taxes involving the army extended beyond the boundaries of the Egyptian Eastern Desert and, in time, beyond the period covered by the documents of Berenike and the *praesidia*.

III. CONCLUSIONS (D. NAPPO AND A. ZERBINI)

The documents from the Red Sea port of Berenike and the military posts of the Egyptian Eastern Desert show how the southernmost frontier of the Empire came to be structured as a military, administrative and commercial frontier between the first and second century AD. As such, it is our opinion that the entire area acted as a buffer zone clearly open to exchange with the East, but also closely monitored by the Empire. The Empire's control was exerted through the army via a combination of incentives and restrictions: the militarisation of the Eastern Desert meant that safer routes could be granted for the highly profitable Eastern trade but also that the entire area from Koptos to the Red Sea ports came to be organised as one huge military camp. Inside it, commercial transactions

⁴⁷ C. Whittaker, Rome and its Frontiers: the Dynamics of Empire (London 2004), 96; C. Whittaker, 'Supplying the Roman army. Evidence from Vindolanda', in P. Erdkamp (ed.), The Roman Army and the Economy (Amsterdam 2002), 216; R. Alston, Soldier and Society in Roman Egypt (London—New York 1995), 96–97.

⁴⁸ Cuvigny 2006, op. cit. (n. 35), 691. On ChLA III 200 see also P.M. Meyer, *Juristische Papyri* (Berlin 1920), no. 37, who tentatively proposed to regard Germanus as the lease-holder collecting taxes on the *quintana uia* conceived as the market place of a military camp. On *telos enkyklion* see Wallace 1938, op. cit. (n. 44), 227–231.

would be regarded as if taking place in the *uia quintana* and therefore be subject to the supervision and taxation exerted by the *quintanenses*, the yearly-appointed collectors of the *quintana*, a monthly capitation tax on different kinds of trade (and probably other duties on commercial transactions as ChLA III 200 seems to suggest). How the money gathered in this way was invested is a matter for some speculation. Most likely the funds would have been used to maintain the desert routes.

On the other hand the taxation of external trade, both outbound and incoming, was left unaffected by the introduction of this peculiar system of taxation. In this respect, the Romans preferred to borrow the preexisting system introduced by the Ptolemies and centred on the role of the arabarchs. As the Koptos tariff and the Muziris papyrus show, it was through the arabarchs and their agents that the Roman state gathered the funds derived from taxation of the Eastern trade. Nor does the fact that quintaneses were in charge of controlling the let-pass orders on outgoing cargoes at Berenike challenge this argument: as the taxmen on the commercial activities taking place within the Eastern desert, the quintanenses would be regarded as the best men on the territory to check the let-pass orders coming from Koptos and probably issued by agents of the arabarchs. It is also likely that at Berenike the quintana receipts/taxes on internal trade and the let-pass orders would have been checked in the same place, a customs-house operated by quintanenses and covering a wide range of tasks.

In conclusion, the combined analysis of both new and old documents clearly shows the high level of control of the Roman State of this frontier area. We can only speculate that a similar set up was to be found in other frontier zones, but the lack of comparable documentation from other parts of the Empire prevent us from assessing such a thing. Nevertheless, it is safe to say that the Egyptian frontier represents a useful case study to comprehend the Roman attitude toward fiscal and military frontiers.

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