

Caravans and Long-Distance Trade in Roman Egypt

Matt Gibbs

This is an Accepted Manuscript of a book chapter published by Routledge/CRC Press in *Caravans in Global Perspective: Contexts and Boundaries* on November 30, 2021, available online:

<https://www.routledge.com/Caravans-in-Global-Perspective-Contexts-and-Boundaries/Clarkson-Santoro/p/book/9780367773007>

Permanent link to this version <https://hdl.handle.net/20.500.14078/3141>

License CC BY-NC

Caravans and Long-Distance Trade in Roman Egypt

Matt Gibbs

In 163 AD, Harpagathes, son of Satabous, from the village of Soknopaiou Nesos, a small community on the northern edge of the Fayum in Egypt, reported to the *strategos*—the chief official of the nome—that a camel he owned had been pressed into Imperial service as part of the *poreia*, the supply caravan, which moved along the route that travelled from Berenike on the coast of the Red Sea, some 800 kilometers away (*P.Lond.* 2.328; cf. *BGU* 3.762). Evidently, Harpagathes was not alone; the Roman administration of Egypt requisitioned many animals who were used in the movement of various supplies, ranging from military provisions through to stone, as parts of private and state-sponsored caravans (see Adams 2001, 2007; Cuvigny 2003; Hirt 2010; Russell 2014).

This papyrus reveals the state's interest in overland transport, as well as how some caravans—at least those that supplied remote communities—were created, and the distance that they travelled. More broadly, through the evidence within the Greco–Egyptian papyri and the available archaeological evidence, this chapter considers private and imperial caravans and long-distance trade across the Eastern and Western Desert routes in Roman Egypt (30 BC – c. AD 350). It focuses not only the composition of caravans, but also the distances travelled, the communities and private individuals

involved in the movement of goods, and the Roman state's interest in both the goods transported and the transport system itself.

Introduction

At this point, it is worth briefly considering the evidence used in this chapter. Ancient 'paper', or the papyri, and the collective ostraka, including pieces of pottery, bone, and wood, among other materials, supplemented by inscriptional evidence and archaeology where possible, all form the foundation of the conclusions herein. There are problems, however, that should be considered at the outset. The very nature of the papyri, namely the dry conditions that are necessary for their survival, mean that they are chronologically and geographically constrained: most of our evidence dates to the second and third centuries AD, and comes mainly from the Fayum region and from some of the larger towns and cities of the Nile Valley. While there are some exceptions, such as the documentary material from communities in the Great Oases and from Mons Claudianus, the site of a major Roman quarry in the Eastern Desert, the issue of whether Roman Egypt was a "typical" province or not is still occasionally raised, despite being forcefully refuted (Bowman and Rathbone 1992:107–27). But the discoveries of similar forms of documentary evidence—for example, the Vindolanda and Bloomberg Tablets from the United Kingdom—mean that few would now argue about the significance of the Romano-Egyptian papyri.

The papyri are not only a guide to administrative, economic, and social behavior; they

also provide an opportunity for some quantification (Adams 2007:11). Much more often documentary in nature, rather than literary, the papyri reveal not only various public records such as customs receipts, edicts, official records, and legislation, but also the wide-ranging interests of some of the population in the Roman province, ranging from accounts through to contracts, and from personal letters through to classroom exercises. Importantly for my purposes, the papyri also provide evidence for caravan transport: those involved, the animals and vehicles used, occasionally how much they cost, and both how and where they travelled.

The geography and topography have a profound effect on any form of transport in any given region, let alone caravans, and Roman Egypt was no exception. Described as the “gift of the Nile” by the ancient Greek author Herodotus in the fifth century BC (Hdt. 2.5), Egypt was defined by its relationship to this river: the annual flood, running through June until September, deposited a thick silt on the floor of the Nile Valley, marking the cultivable land south of Delta region, and which runs almost the entire length of the country. This provided significant opportunities for agriculture and irrigation, and the result was that much of the Graeco-Roman population lived along the Nile’s banks. But the Nile offered far more than this; it was a significant trading route and certainly the most convenient means of travel, but while the yearly inundation was good news for agriculture, it was less so for river transport which became perilous, and attempts were made to reduce potential issues. The transport of state grain, for example, was organized around the flood, and there were expectations that those involved would ensure that they would adapt to the rising floodwaters (Adams 2007:19; *P.Oxy.* 18.2182).

As important as the Nile was, however, it is important to note that there were major roads in Egypt that ran its full length (see Figure 2.07.1): from Syene, in the south near the first cataract of Nile, to the Mediterranean coast, some 1,000 km in distance.

<FIGURE 2.07.1 HERE>

The archaeological evidence is not particularly enlightening—there are, for instance, only two examples of Roman milestones—but the documentary and literary evidence is a little more informative. The Antonine Itinerary contains names of waystations that existed along roads between communities, which have either long been lost or are yet to be found. There was then an effective transportation network in Egypt for land transport, and it was used both by the Roman administration and also private individuals and groups.

The caravan trade in Egypt had a long history: Harpagathes' experience, or more likely that of his camel, with which this chapter began was hardly novel, as other chapters in this volume would suggest. As early as the fifth century BC historian Herodotus considered the trans-Saharan route that passed through Siwa and linked Niger to Thebes, or perhaps, more correctly, Memphis (Hdt. 4.181–84), and even earlier during the Old Kingdom, caravans had travelled into upper Nubia to trade for ivory (Burstein 1996:803). The caravan trade continued under the Ptolemies from the late fourth century BC; in fact, there is an archive of documents—the archive of Zenon, who worked directly for Apollonius the *dioiketes*, or the chief finance minister, of the king Ptolemy II Philadelphus—that depicts attempts to generate income for the Ptolemaic administration

through trade flows, as were Ptolemy II's expansion into the Western and Eastern Deserts, the Red Sea coast, and west of Cyrenaica generally (Manning 2011:5; Reden 2006:168). In 30 BC, however, Egypt became part of the Roman Empire; the failure of the last Ptolemaic queen Cleopatra and her Roman consort Marcus Antonius to secure their position in the Mediterranean in the face of the ever-growing onslaught of Roman imperialism and propaganda left Egypt in the hands of Octavian, who became Augustus a few years later. The province, replete with its economic opportunity, including the existing caravan routes that had been established and used by the Ptolemaic monarchy, now fell under Roman dominion.

The incorporation of Egypt into the Roman Empire, and in accordance with Rome's general practice, meant that the some of the earlier, established administrative bureaucracy continued and did in fact intensify, but given such economic opportunity, it should be no surprise that the state made a range of investments, while at the same time establishing taxes that covered the transactions and transport not only through Egypt's deserts and Nile valley, but also throughout the empire. It was not just the revenue drawn from taxation that appealed to the Romans, however: the natural resources of the Eastern Desert and more accessibility to them, were also attractive; these mainly took the form of mines of gold and emerald, and quarries of granite and porphyry, notably, for instance, used for the columns inside the Pantheon at Rome. In the Western Desert, the oases of Bahariya, Dakhla, and Kharga flourished under Roman rule; the Roman period saw not only the greatest agricultural expansion in those areas, but the largest population increase, which waned after the fourth century AD. Their importance to the Romans was in part

strategic: the region might serve as a buffer zone. But the Romans' key was likely economic: the production of dates, olives, olive oil, and wine, alongside the exploitation of alum, ochre, and salt, were all important commodities. In time new trade routes were created, linking the deserts and the Red Sea coast to the Nile, providing further opportunities for both private individuals and the state itself.

Where Were the Caravan Routes, and Why Were They Used?

There were several routes that could be used by caravans and other forms of transport in Egypt under the Romans, in both the Eastern and Western Deserts. While it would be fair to say that far less is known about trade in the Western Desert, in part, as can be seen, due to the agents involved, it was still certainly important. It was the Eastern Desert, however, that appears to have been the focus of much of the Romans' interest, due to the trade conveyed over the Red Sea. In fact, it is impossible to talk about the caravan trade in the Eastern Desert without considering the Red Sea trade.

Our major source of evidence for the Red Sea trade is the *Periplus Maris Erythraei* ("Circumnavigation of the Red Sea") which dates to the first century AD, but which sets the stage well; for instance, by this period, trade between the Roman province of Egypt, Africa, and India, was already of a significant scale. In fact, by the time of Rome's annexation (ca 30 BC), Egypt had been an important hub for some time, as trade passed through the Eastern Desert, up the Nile, linking the Red Sea to the Mediterranean. But the routes that existed in the Eastern Desert often made up sections of larger transport

networks. For example, on Egypt's eastern coast lay Berenike, a major port. From here, goods from India and Arabia were transported across the Eastern Desert to Edfu and Koptos, which provided access to the Nile. Imported goods were mainly "luxuries" it seems, such as hardwoods, ivory, spices, precious stones, perfumes, and textiles (for instance, Chinese silk), while exports were mainly in the form of gold and silver coin and bullion, alongside some produce, wine, and textiles.

To support this, and the transporters and caravans that used it, the administration created new and reinforced older infrastructure. Roads, of course, were a given, but the Romans also built *hydremata*, fortified watering stations. Furthermore, this infrastructure was clearly planned: for instance, those stations on the roads between Nile Valley and the quarries in the Eastern Desert appear to be closer together than those on the routes between Koptos and the Red Sea coast; this is likely because caravans transporting stone would travel much more slowly than those on the other routes, and given the products transported, more animals and men and, therefore, more facilities would be required to support them (Adams 2001:173; Sidebotham 1986:62).

As to why the Romans made such investments in the Eastern Desert, one must consider the evidence. In the last quarter of the first century BC, the ancient geographer Strabo suggested that the money to be made in the Red Sea trade could be and was significant (17.1.13), and Pliny the Elder some fifty years or so later remarked that India made 50 million Roman sesterces from its trade with the Empire (6.101). But the figures here, particularly that of the Elder Pliny, are hardly reliable and are more than likely half-

truths. Nevertheless, the Red Sea trade was arguably at the heart of the Romans' investment in the Eastern Desert. That this trade could be profitable is made abundantly clear by a papyrus highlighting the return cargo of one ship from India in the mid-second century AD, after payment of the import duty in kind at a staggering twenty-five percent; at Alexandria, the cargo was worth seven million sesterces. Modern comparable figures are difficult, but ancient ones are less so; this figure, at the contemporary median price represents more than 23,000 tons of wheat, and almost one percent overall of the productive arable land in the province (Rathbone 2007:711). Even if this text represents an outlier in terms of values, the data are telling.

On the other side of the province, while the papyri and ostraka offer little insight concerning trade and travel in the Western Desert, there is little doubt that it occurred regularly in the region; in fact, there is strong archaeological evidence for consistent and well-organized traffic between the Western Oases, the communities therein, the Fayum, and the Nile valley in the Roman period. Watering stations existed along the *Ain Amur* and *Ghubari* routes between the Dakhla and Kharga Oases; there were also several water stations that were apparently found on the route connecting the Kharga oasis with Farshut, and on the route from Girga (Roe 2005-2006:128). These installations appear to reflect those that exist along the routes in the Eastern Desert.

The trans-Saharan caravan route linking Lycopolis and the Kharga Oasis to Darfur in Sudan through the Darb al-Arbein illustrates the importance of the links between the Western Desert, the Nile valley, and ancient Nubia; while it thrived in the Late Antique

period, supplying Egypt with ivory and elephants in exchange for luxury goods, during the earlier Roman period the evidence from the papyri found at the site of Kellis, a community in the Dakhla oasis, confirms that the route was used regularly. There were also routes from the oases to other nomes: to the Panopolite in the Thebaid, the Hermopolite, and to the Antaiopolite nome. The most important in this region was perhaps the link between the oases and Oxyrhynchus; one surviving text refers to a load of 150 artabas—an artaba represented a dry measure of ca. 39 liters—of barley and 300 artabas of wheat that would have required a caravan of at least 75 camels (*P.Oxy.* 36.2766). This would have represented a significant endeavor in terms of organization.

As was the case in the east of Egypt, the communities in the Western Desert situated some distance from the Nile valley necessitated an extensive land transportation industry from the oases to the valley, and the system certainly appears to have flourished. Again, however, the Roman administration had interests in the region, namely the alum upon which it owned a monopoly; one text reveals a shipment transported from the oases to the Arsinoite nome (*BGU* 3.697 = *W.Chr.* 321). There were soldiers in the region too, protecting such interests, and this in turn likely protected the state's interests, perhaps even guarding caravans and transports as they made their way through the region (although currently, evidence for static military installations dates to around AD 300 and later).

Distances for Caravans and Transporters

While there were certainly routes throughout Egypt, a major concern for any caravan or transporter is the distance that needs to be travelled. There is evidence relating to the major routes in particular areas of Egypt, with those leading from the major ports on the eastern coast and the sites of imperial interest in the Eastern Desert (such as Mons Claudianus) as good cases in point.

The importance of the starting point for any consideration of distance in Roman Egypt is subjective at best, but in respect to routes in the Eastern Desert which are perhaps the best preserved and best known, Koptos, as the main emporium on the Nile under the Romans and the community through which the Red Sea trade was funneled, seems as good a place as any to start. From here, the imports from the ports on the Red Sea were moved upriver, some 650 kilometers north to Alexandria, and from the ports of Roman Egypt's capital city onto other major markets in the Mediterranean. Exports, of course, moved down the Nile and were transported from Koptos to the eastern coast in the same manner.

The route between Berenike and Koptos was developed in the early first century AD and continued into the sixth. Notably, given the port's position on the southern edge of Roman territory, the distance—and, of course, any journey overland—was considerable: it took around 12 days for caravans to move through the desert and to travel the 370 km from emporium to port. A little further north lay Myos Hormos, another major Roman Red Sea port, which was c. 180 km, or six- or seven-days' journey, from Koptos. To make movement through and around the Eastern Desert possible, the *hydreumata* were

set up at 32–km intervals; these eventually became fortified posts to protect travelers from raids by the desert inhabitants.

It has been argued that the Roman administration was proactive in promoting trade in the Eastern Desert, through the construction of the *Via Hadriana*. This new road left from the city of Antinoöpolis (a new city founded on an earlier Pharaonic necropolis in 130 AD by Hadrian in memory of his lover Antinous), heading northeast for some 150 km before heading east-southeast for a further 75 km; nearing the coast the road takes a dramatic turn running south-southeast and arriving at Myos Hormos after about 120 km; from here, the road apparently passed through all of the major ports until reaching Berenike (Sidebotham and Zitterkopf 1997, 1998). The reasons for the construction of this road, however, are not entirely clear. It has been suggested that the road linking Antinoöpolis to the Red Sea ports was an attempt to use that trade to foster the growth of the city (Young 2001:70); others believe that the city was supposed to become a rival to Koptos (see Adams 2007:42, n.8). Yet there is no real evidence for either, and moreover, the lack of the numerous *hydreumata* that appear to have supported other trade routes in the Eastern Desert, and which offered protection, seems telling. While it is certainly possible that trade occurred along the *Via Hadriana*, between the various port cities, this was not the road's primary purpose; it is more likely to have served an administrative or military function (Adams 2007:43).

The communities and oases of the Western Desert were very different in that they were not the focus of such intensive trade. It is clear, however, that they were linked to the Nile

valley, and that travel back and forth was common. But the Western Desert is very different in character to the Eastern, both in terms of environment and navigation; while the trails and roads of the Eastern Desert move through easily navigable, dry riverbeds, those in the Western Desert move through rolling dunes and plains as well as areas of gravelled ground, and were more of a challenge (Paprocki 2019:192).

The distances to be navigated around the region appear to have been generally longer than in the East. They were certainly considerable—around 350 km, although a more direct route across the desert could be taken which would cut the distance to some 200 km—and the products that moved from the oases to the valley were likely quite bulky (for example, olive oil). Each round trip on these long routes may have taken up to four weeks; of course, this varied according to the route.

In the west of the province, the *Ain Amur* and *Ghubari* routes between the Dakhla and Kharga oases can be found; travel along the former would have taken between two and three days, while the latter between two and four days, depending both on the speed of the caravan and the animals used (Ikram 2019:139–40). Moreover, the trans-Saharan caravan route that linked Darfur, in Sudan, with Lycopolis (modern Asyut) on the Nile in Middle Egypt, via the Kharga Oasis was known as the *Darb al-Arbein*, the “road of forty days”, which presumably referred to the time to travel along its route (Roe 2005-2006:119–20). The Small, or Bahariya, Oasis, lying to the north of the Great was located closer to the Nile Valley, and four major routes connected it to other parts of Egypt. The

most important was that which connected the area to the regional capital Oxyrhynchus and was a 190 km trip.

While the distances could vary considerably, one can be sure that many of those involved in the caravan trade were away from home for long stretches. It is likely that they were away for half of the time, or perhaps even more, and the evidence from communities in the oases suggest, moreover, that apart from those involved in the transportation business, many of those who lived in the oases inevitably spent a considerable amount of time in the valley on all sorts of other business. Absence then, due to the very nature of the caravan traffic to and from the Nile Valley, must have been a key characteristic of society in the oases (Bagnall 2015:175); the situation was likely the same in the Eastern Desert.

Practical Matters: Animals and Vehicles

Having considered where the caravan routes were and their respective distances, it is time to turn to more practical matters, before considering those individuals involved in the trade itself. While there is evidence for the existence of oxen and horses in Roman Egypt, bearing in mind that members of caravans could walk too, the papyri suggest that animals most commonly used in caravans, and in fact throughout the province generally, were camels and donkeys. The domestication of the donkey and camel provided the inhabitants of Egypt with a means of transport that allowed travel throughout the country, provided that there were adequate water and fodder supplies for the needs of the animals. Horses and oxen also appear in the evidence but their usefulness, and more significantly their

fodder and water needs, in a desert environment renders them largely impractical; while oxen were used to transport goods in many parts of the Mediterranean, in the Eastern and Western Deserts of Egypt as well as the desert fringes camels were used (Adams 2007:49–56).

Camels became common in Egypt during the Roman period, following the introduction of larger numbers of them under Ptolemy II in the third century BC (Bagnall 1985:3). By the first century AD, these animals were used in the Eastern Desert as pack animals, as the archive of Nikanor and other textual evidence makes clear; several Nabataean inscriptions refer to the use of camels by individuals who identified themselves as cameleers (Paprocki 2019:69), and this situation appears to have continued into later periods; notably in the late fourth century AD, camels had been adopted by Roman cavalry units, as the *Ala III dromedariorum* stationed at Kaine/Maximianopolis in the Thebaid clearly illustrates (*Not. Dign. [or.]* 31.48). There were good reasons for using camels: in the Saharan deserts, while their propensity for requiring little water is well-known, less well known is the fact that they usually browse and graze in desert environments (Ikram 2019:138). While other animals are suited for use in regions such as the Delta or the Nile Valley with more abundant fodder, the camel is better suited to regions where desert fodder is scarce. Camels can carry between 200–300 kg, but a general rule of thumb is that the heavier a camel, the more it can bear (Paprocki 2019: 71–75). The papyri from the Fayum reveal that camels usually carried around 180 kg (Adams 2007:80–81). Camels can also walk ca.50 km daily, and more, of course, if they trot or gallop. But for all of these benefits however, camels had one significant drawback:

they were almost exorbitantly expensive.

Donkeys and mules were used by both tradespeople and the State. There is a good deal of papyrological evidence for donkeys' use in Egypt, and for mules in Italy and the western provinces (Adams 2007:56–58, 60–62). In Egypt at least, donkeys were an obvious choice as pack animals used in caravans: they were the cheapest and most adaptable pack animal available. They are obedient, easy and quick to train, have good spatial memories (they can even remember roads), and are able to return home without a guide. Moreover, they are long-lived, living for thirty or forty years if looked after, they have a long working life of between twelve and fifteen years, and they are simple to breed. Donkeys can, in theory, travel up to 40 km a day, although a recent study suggests that it is more likely they would walk between 25 and 30 km a day, and would need to be watered every three days. Moreover, their ability to haul between twenty-five and forty per cent of their body weight is also significant.

As to what these donkeys and camels were hauling, when they were required to undertake such duties beyond pack animals, that is, the vehicles used within the context of a caravan, the evidence is not particularly clear. For some time, it was believed that wagons were used only sparingly in Egypt, and more recently that the camel replaced the wagon as a mode of transport under the Romans in North Africa. The reality is rather more complex and seemingly has little to do with the use of wagons: the topography of Egypt and the scarcity of timber led, in part, to the high cost of wagon construction. First, wagons were generally poorly suited to the topography of Mediterranean countries; of

course, Egypt was no exception. The main requirement for these vehicles was flat and easy terrain, and so it was likely the case that state roads, major desert routes, and perhaps even roads and tracks associated with irrigation channels would have provided adequate thoroughfares. Second, it has been suggested that this significant outlay resulted in wagons being borrowed or hired as required, rather than owned (Adams 2007:66).

While the use of these vehicles is not well documented, largely because they never superseded pack animals as a method of transport, the papyri do confirm that wagons were used. There are also inferences throughout the papyrological evidence that suggest certain vehicles were used with particular animals (Adams 2007:66–67); in one letter from the third century AD, the sender mentions that he has purchased a wagon (perhaps a light cart or a chariot?) that would only be “drawn by mules” (*BGU* 3.814). Generally, however, there were apparently several different terms used to designate these vehicles—the *hamaxa*, *karnon*, and *kopregos* are cases in point—but whether or not this terminology referred to different wagons used for different purposes is not entirely clear. The *hamaxa* was likely used for carrying goods and supplies, and for both cumbersome loads and heavy farm work: there is one text from the late first century BC noting that a *hamaxa* was necessary to collect a large load of timber (*BGU* 16.2607). But there are also examples of vehicles that differ by size and which clearly have different uses: ostraca from Mons Claudianus mention a twelve-wheeled wagon that must have been used to transport stone columns and blocks, and two two-wheeled wagons that appear to have been used for light loads (*O.Claud.* 4.871, 874).

It was not just the state that had access to these transport vehicles. The Koptos Tariff inscription records the costs accrued for the use of the roads between the Red Sea coast and Koptos itself (*OGIS* 674 = *IGRR* 1.1183 = *SEG* 20.668). The cost of a pass which would have allowed one to use a wagon on these routes was four drachmas: twelve times that of the cost of a donkey on the same roads. This speaks to the fact that privately-owned transporters using wagons would have been present on these roads; state transporters had not been liable for duties and tolls since the early second century AD (*Dig.* 39.4.9.7–8; 49.14.6.1). The fact that “wagoneer” appears as a professional identifier and occupation in the papyri also suggests that such transport was regularly seen, if not commonplace in Egypt by the second century AD (see e.g., *O.Faw.* 1 = *CPL* 303). But the presence of such individuals should not be a surprise to us; earlier evidence from the third or second century BC suggests that wagons were used in caravans in the Eastern Desert (*O.Oslo* 2), and there are a series of receipts for a tax on wagons, the *telos hamaxôn*, from the Thebaid that date to the mid-first century AD (*O.Wilck.* 2.392, 395, 1054, 1057, 1261). One group of transporters paid a significant amount in relation to this tax which, as the tax was levied on the possession of wagons, must have meant that they owned a large number of these vehicles.

Sizes of Caravans

While the evidence is not entirely clear, it is possible to make some observations on the size of caravans in Roman Egypt. Much depended, of course, on the goods that were to be transported and, perhaps more importantly, who was doing the transporting; Adams’

point is undeniably correct in that “the everyday needs of a farmer were different from that of the state” (Adams 2007:83), and the same can surely be said of the individual trader, too. Some caravans could be very large: one early fourth century AD papyrus refers to a caravan hauling 450 artabas of wheat and barley from Oxyrhynchus to the Small Oasis in the Western Desert; given that other evidence provides us with average loads for camels, this caravan was either made up of 75 camels, 150 donkeys, or some combination of these animals (*P.Oxy.* 36.2766). Others could be much smaller: one caravan transporting wheat that originated in early third century AD Soknopaiou Nesos was made up of twelve animals—five camels, four camel foals, and three donkeys (*SB* 12.10912).

These smaller caravans are those that generally appear in the evidence. In one region of Egypt, namely the Fayum, the papyri suggest that around 75 per cent of camel caravans and more than 90 per cent of donkey caravans were made up of four or fewer animals (Drexhage 1982:76–77; Sijpesteijn 1987:56–57), but smaller caravans may also have travelled together and formed larger ones for various reasons, ranging from protection from bandits through to company (see perhaps *P.Customs* 131–132; 300–302; 433–434).

The Roman state inevitably had more muscle—and certainly access to more animals through requisition—and could move considerable quantities of materials; Harpagathes’ camel, with which this chapter began, was likely part of a much larger caravan, given that it was involved with the *poreia*, the supply caravan service, which travelled between Kainopolis and Mons Claudianus (*P.Lond.* 2.328). The size of the *poreia*, however, can

only be vaguely estimated. The most plausible estimation suggests that 150 camel loads per month, and 1800 per annum, would be required (Adams 2007:209). When considered alongside the distances in question here between the Kainopolis and Mons Claudianus, and the 10-day round trip, one may posit that—even though several journeys could be made, and the animals that made up the *poreia* could vary—that the relative size of the supply caravan cannot have been much smaller than 75 camels, if at all. In support of this, it should be noted that other camels were pressed into service in other caravans hauling products that themselves imply considerable size, such as the caravan to which one camel was sent to transport a porphyry column from the Eastern Desert in the mid-second century AD (*BGU* 3.762). While this was a return journey from Mons Porphyrites (some fifty km from Mons Claudianus), the number of necessary camels has been estimated at 100.

Who Was Involved?

As has been shown, the documentary evidence reveals details about the practical matters of caravan transportation, but what about those individuals involved? These animals needed to be cared for and guided, and in the evidence there is a broad swathe of individuals engaged in transportation, ranging from Roman state officials through to private business owners. It is possible to say that there were many donkey- (*onelatai*) and camel- drivers (*kamelitai*) in the Western and Eastern Deserts, and in the Nile Valley itself. Moreover, given the distances that these individuals had to travel, they may well have spent a significant proportion of time away from their homes working as

transporters and in caravans. But while sometimes it is possible to see where they were going, what they were carrying, and how they carried their goods, it is not always possible to know much about who they were.

In most cases, only a name remains. One good example of an individual who may have been involved and who was likely engaged in the transport of supplies to Mons Claudianus was the wagon-driver Kol. In one document he is identified as a “wagon-driver” (*hamaxeus*), and was asked to bring a small chiton, a blanket, and a cloak to the community in the Eastern Desert (*O.Claud.* 1.177).

In other instances, there are small sets of documents that concern an individual more deeply connected to the business of caravan transportation: two texts refer to a man called Kametis, son of Pachates, who owned a transport company working the routes through the Thebaid during the mid-first century AD; he not only paid a significant amount of tax—150 drachmas in a year—for the use of donkeys and wagons, but also used donkeys either as pack animals or to haul the vehicles (*O.Wilck.* 392 and 395). There are also instances of people making use of regular transport caravans: in two letters, a woman called Sarapias who was living in a community in the Eastern Desert (perhaps Philotera) writes to a man called Ammonios, who was among the guards living in the fort at Maximianon, one of the *hydreumata* on the road between Koptos and Myos Hormos: in the first, she says that she will travel to Myos Hormos; in the second, she has left that community and returned home (*SB* 22.15453–15454). The texts are not simply interesting for the fact that she has travelled some distance, but that Sarapias refers not only to

deliveries of fish sauce, but also to receiving items perhaps from the caravan transport, to future items that she will send to him, and to the “first donkeys.” The implication throughout both letters is that regular caravans moved along this route and transported both goods and people to and from the coast of the Red Sea (see also *P.Thomas* 9 and Bülow-Jacobsen 2001:121–22).

Very occasionally, however, luck provides us with several documents that refer to a person or a group of people who are engaged in the daily business of caravan transportation, and the Archive of Nikanor of Koptos, dating to the late first century BC through to the third quarter of the first century AD (most cluster in the first half of the first century), is a good case in point. Based in the city of Koptos, Nikanor, his family, and several associates ran what appears to have been a private transport business that actively engaged in the caravan trade in the Eastern Desert, and which had perhaps 30 camels and likely other animals at its disposal (Ruffing 1993; *O.Bodl.* 2.1968–71, *O.Brux.* 7; *O.Petr. Mus.* 112–206). The individuals who were responsible for the running of Nikanor’s firm were all Egyptianized Greeks, Graeco-Romans, or Hellenized Egyptians, who resided in Koptos. But this archive also mentions other interesting figures of various origins: Alexandrians, Hellenized South Arabs, Roman citizens, Imperial slaves and freedmen (Sidebotham 1986:83–84). This attests not only to the broad swathe of interest in the trade between the Red Sea ports and Koptos, but also to the multicultural nature of the region and the varied statuses of those involved at this time.

While Nikanor’s business was clearly private, he was also likely contracted by the state

administration to deliver provisions to sites of Roman interest in the Eastern Desert. The goods that Nikanor transported generally included consumables and other items like clothing, medicine, mats, and rope; but given the valuable goods that were imported into the Red Sea ports and then moved through the Eastern Desert by caravan, one wonders why there is no evidence to suggest that Nikanor's business was involved in the transport of such luxury items. This can perhaps be explained by the fact that there were separate caravans operating on the routes in the Eastern Desert: such a situation is implied in one important text, where the writer deliberately refers to "*your* camel driver;" it seems likely that the driver in question was either under permanent employment, or had been engaged specifically for this trip (*SB* 18.13167.2.2 and Young 2001:58). While businesses such as Nikanor's transported regular goods and products between Koptos and the Red Sea ports, large caravans that carried luxury goods from the East were organized whenever necessary, that is, when the ships carrying these types of goods arrived in the Red Sea ports.

Nikanor's firm was not the only one involved in this trade, however; at around the same time as Nikanor, at least eighteen other individuals or firms can be identified in the available evidence from Koptos (Sidebotham 1986:83 n.17). Moreover, evidence in the form of ostraka and inscriptions, found on mainly on transport routes, at Leukos Limen, and at Maximianon, suggest that Nabataens were involved in the transporting of goods on these roads, as camel and donkey drivers, and as part of caravans that travelled along the Red Sea coast and into the Eastern Desert. While dating largely to first and second centuries AD, these inscriptions take the form of greetings or columns of figures (Toll

1994, 381–82), but many of them also include the word for camel driver; it appears that the people who scratched these inscriptions were members of the caravans that travelled these routes (Mohamed 2012:9).

Conclusion

The evidence from Roman Egypt reveals that caravan transports were not uncommon in the Eastern and Western Deserts. This is, in truth, hardly a surprise: the caravan trade in Egypt had a long history, and following Egypt's incorporation into the Roman Empire, the routes were supported and fortified, while new routes were created. Much of this may reveal Rome's interest in taxation and regulation, but while requisitions of animals for supply caravans were made (like the one with which this chapter began), state transportation was largely limited to the resources that the Eastern Desert offered and to the basic supply of military installations. Instead, it seems that the transport routes were used by various independent traders and groups, some apparently working for the state as well as for themselves. Practically speaking, the routes throughout Egypt were long and would have meant at least several days of travel for those involved; donkeys and camels were the most commonly used animals in transport, both as pack animals and to haul wagons which were apparently used, too. Caravans in Egypt appear to have varied dramatically in size, but a general trend seems to have been that those used by the state—the *poreia*, for example, created through requisition—were typically much larger; smaller private caravans, however, appear to have been the norm, and these could occasionally join together to form larger caravans for various reasons. The evidence suggests that the

people involved in caravans were diverse, in terms of their ethnicity, identity, and status, and could work not only as individual traders, but also as members of larger groups or firms, pooling resources and labor. In all, the caravans of Roman Egypt were the continuation of a long-storied, dynamic tradition.

References Cited

Adams, Colin E.P.

- 2001 Who Bore the Burden? The Organization of Stone Transport in Roman Egypt. In *Economies Beyond Agriculture in the Classical World*, edited by David J. Mattingly and John Salmon, pp. 172–191. Routledge, London and New York.

Adams, Colin E.P.

- 2007 *Land Transport in Roman Egypt: A Study of Economics and Administration in a Roman Province*. Oxford University Press, Oxford.

Bagnall, Roger S.

- 1985 The Camel, the Wagon, and the Donkey in Later Roman Egypt. *Bulletin of the American Society of Papyrologists* 22:1–6.

Bagnall, Roger S. and Nicola Aravecchia

- 2015 Economy and Society in the Roman Oasis. In *An Oasis City*, edited by Roger S. Bagnall, Nicola Aravecchia, Raffaella Cribiore, Paola Davoli, Olaf E. Kaper, Susanna McFadden, pp. 149–178. ISAW/NYU Press, New York.

Bowman, Alan K. and Dominic Rathbone

- 1992 Cities and Administration in Roman Egypt. *Journal of Roman Studies* 82:107–127.

Bülow-Jacobsen, Adam

- 2001 Drinking and Cheating in the Desert. In *Essays and Texts in honor of J. David Thomas*, edited by Traianos Gagos and Roger S. Bagnall, pp. 119–124.
American Society of Papyrologists, Oakville, Connecticut.

Burstein, Stanley

- 1996 Ivory and Ptolemaic exploration of the Red Sea. The missing factor. *Topoi* 6.2:799–807.

Cuvigny, Hélène

- 2003 *La route de Myos Hormos: l'armée romaine dans le desert oriental d'Egypte*.
Institut français d'archéologie orientale du Caire, Cairo.

Drexhage, Hans-Joachim

- 1982 Beitrag zum Binnenhandel im römischen Ägypten aufgrund der
Torzollquittungen und Zollhausabrechnungen des Faijum. *Münstersche
Beiträge zur antiken Handelsgeschichte* 1:61–83.

Hirt, Alfred M.

- 2010 *Imperial Mines and Quarries in the Roman World: Organizational Aspects, 27
BC–AD 235*. Oxford University Press, Oxford.

Ikram, Salima

2019 The North Kharga Oasis Ain Amur Survey (NKODAAS): Surveying the Tracks between the Two Oases. In *The Great Oasis of Egypt: The Kharga and Dakhla Oases in Antiquity*, edited by Roger S. Bagnall and Gaëlle Tallet, pp. 135–151. Cambridge University Press, Cambridge.

Manning, Joseph G.

2011 The Capture of the Thebaid. In *Perspectives on Ptolemaic Thebes: Occasional Proceedings of the Theban Workshop: Papers from the Theban Workshop 2006*, edited by Peter Dorman and Betsy M. Bryan, pp. 1–16. The Oriental Institute of the University of Chicago, Chicago.

Mohamed, Rageh Z.

2012 Nabataeans in the Eastern Desert During the Roman Period. In *The History of the Peoples of the Eastern Desert*, edited by Hans Bernard and Kim Duistermaat, pp. 205–214. Cotsen Institute of Archaeology Press, Los Angeles.

Paprocki, Maciej

2019 Roads in the Deserts of Roman Egypt: Analysis, Atlas, Commentary. Oxbow Books, Oxford.

Rathbone, Dominic

2007 Roman Egypt. In *The Cambridge Economic History of the Greco-Roman world*, edited Walter Scheidel, Ian Morris, and Richard Saller, pp. 698–719. Cambridge University Press, Cambridge.

Reden, Sitta von

2006 The Ancient Economy and Ptolemaic Egypt. In *Ancient Economies, Modern Methodologies: Archaeology, Comparative History, Models and Institutions*, edited by Peter F. Bang, Mamoru Ikeguchi, and Hartmut G. Ziche, pp. 161–177. Edipuglia, Bari.

Roe, Alan

2005–2006 The Old ‘Darb al Arbein’ Caravan Route and Kharga Oasis in Antiquity. *Journal of the American Research Center in Egypt* 42:119–129.

Ruffing, Kai

1993 Das Nikanor-Archiv und der römische Süd- und Osthandel. *Münstersche Beiträge zur antiken Handelsgeschichte* 12.2:1–26.

Russell, Ben

2014 *The Economics of the Roman Stone Trade*. Oxford University Press, Oxford.

Sidebotham, Steven E.

1986 *Roman Economic Policy in the Erythra Thalassa, 30 BC–AD 217*. Brill, Leiden

and New York.

Sidebotham, Steven E. and Ronald E. Zitterkopf

1997 Survey of the Via Hadriana by the University of Delaware: the 1996 Season. *Bulletin de l'Institut Français d'Archéologie Orientale* 97:221–237.

Sidebotham, Steven E. and Ronald E. Zitterkopf

1998 Survey of the Via Hadriana: the 1997 Season. *Bulletin de l'Institut Français d'Archéologie Orientale* 98:353–365.

Sijpestijn, Pieter J.

1987 *Customs Duties in Graeco-Roman Egypt*. Terra, Zutphen.

Toll, Christopher

1994 Two Nabataean Ostraca from Egypt. *Bulletin de l'Institut Français d'Archéologie Orientale* 94:381–382.

Young, Gary K.

2001 *Rome's Eastern Trade: International Commerce and Imperial Policy, 31 BC–AD 205*. Routledge, London and New York.