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The Camel Drachms of Trajan in Context:
Old Problems and a New Overstrike

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[PLATES 14-15]

INTRODUCTION

In AD 106 the reign of the Nabataean king Rabel II ended, after more than three decades.² His kingdom was annexed by Roman troops under the Syrian governor Cornelius Palma,³ and Trajan (98–117) created the province of Arabia.⁴ Other territorial gains were to follow under this emperor's rule: some lasting, like Dacia, others short-lived, like Armenia and Mesopotamia. All these new provinces were duly commemorated on Trajan's imperial coinage; the subtle linguistic differences in the respective coin legends are telling. While Armenia and Mesopotamia were recorded as '*in potestatem p(opuli) R(omani) redactae*',⁵ Dacia was called '*capta*',⁶ Arabia just '*adquisita*'.⁷

¹ While KB has been working on this material on-and-off as part of a larger project on provincial silver coinage since the late 1980s, research on the topic by BEW goes back to the summer of 2010, when he was a Visiting Scholar in Residence at the American Numismatic Society (New York) for the annual Graduate Summer Seminar. The support by the staff and the curators at the ANS, especially by Peter G. van Alfen and Elena Stoljarik, during that period is gratefully acknowledged, as is the valuable assistance of Gilles Bransbourg and David Hill in obtaining additional images of camel drachms in the ANS collection as well as scans of an article in the ANS library. Furthermore, the authors would like to thank Michel Amandry for providing information on the Eleutheropolis hoard, Cecilia Meir (Eretz Israel Museum, Tel Aviv) for generously granting permission to publish a drachm kept in the Kadman Numismatic Pavilion of this museum, as well as Rachel Barkay, Karl Schmitt-Korte and Oliver Hoover for sharing their expertise in Nabataean coinage in the phase of preparation of this article. Finally, the authors are indebted to Nikolaus Schindel for documenting the 288 camel drachms from the – as yet unpublished – Mampsis hoard, presently kept at the Coin Department of the Israel Antiquities Authority (Jerusalem). Donald Ariel (Jerusalem) and Renate Rosenthal-Heginbottom (Berlin) kindly gave permission for these coins to be photographed.

² It is usually presumed that Rabel died in that year: see G. W. Bowersock, *Roman Arabia* (Cambridge/Mass. – London, 1983; reprinted 1994), p. 82.

³ Cass. Dio 68.14.5: Πάλμας τῆς Συρίας ἄρχων τὴν Ἀραβίαν τὴν πρὸς τῇ Πέτρᾳ ἐχειρώσατο καὶ Ῥωμαίων ὑπήκοον ἐποίησατο.

⁴ On the annexation, see A. Gebhardt, *Imperiale Politik und provinziiale Entwicklung. Untersuchungen zum Verhältnis von Kaiser, Heer und Städten im Syrien der vorseverischen Zeit*. Klio Beihefte N. F. 4 (Berlin, 2002), pp. 87–105. The provincial era began on 22 March, AD 106.

⁵ B. Woytek, *Die Reichsprägung des Kaisers Traianus (98–117)*, Moneta Imperii Romani 14 (Vienna, 2010), no. 590.

⁶ Woytek, *Reichsprägung*, nos 276, 283, 289 and 311 (DAC CAP).

⁷ Woytek, *Reichsprägung*, nos 362 (ARAB ADQVISIT), 363–5, 385–7, 451–3 (ARAB ADQVIS), 396, 436, 454–6 (ARAB ADQ).

The reverse design of the imperial coins celebrating the annexation of Arabia differs markedly from the iconography of the *Dacia capta* coinage, in a structural respect. While the latter shows bound captives or the mourning Dacia as well as heaps of arms, the image of Arabia is a peaceful one: she is depicted standing to the left, holding a branch of a local plant, probably of the myrrh- or frankincense-tree, in the right hand and a bundle of *calamus odoratus* in her left arm. Her attributes, local products widely known and used in the Roman world, convey a notion of the cultural and economic importance of the newly acquired territory. But the coins also depict the region's iconic animal: to the left of the personification, there is a one-humped Arabian camel. This depiction of Arabia and a camel not only occurs on imperial coins displaying some abbreviated form of the legend *Arabia adquisita* in the exergue, but also on Trajanic aureus and denarius types where the personification is unlabelled.⁸ The type seems to have been introduced on these unlabelled issues, which may broadly be dated to the years AD 108–110, while the coins displaying an explanatory legend in the exergue were issued by the mint of Rome from about AD 111 to 112/113. This chronology is in keeping with the observation that on some dies of the aurei, the iconography differs in one detail from all the other representations of Arabia on Trajanic coins: on these dies, the entire camel is to be seen to the left of the personification of the new province (pl. 14, 1), while later the animal is always partly hidden behind Arabia, and only its forepart (and the two forelegs) are visible.

The Nabataean kingdom had had a distinctive coinage of its own since the first half of the first century BC.⁹ Hence, at the time of the Roman annexation, the country's local monetary tradition stretched back more than 150 years, during which mainly drachm-size silver coins (as well as fractions) and bronze coins in various denominations had been issued in the names of the Nabataean kings. It therefore comes as no surprise that the new masters of the country soon struck Roman provincial coins for circulation in the *provincia Arabia*, although their choice of denominations is to some extent noteworthy. Under Trajan, at least six different types of silver coins with Greek legends in two denominations were produced for Arabia: not only two different types of drachms (one of them in three successive issues), which continued the preferred silver denomination of the Nabataeans, but also four types of larger silver coins with a target weight of about 10.6g, probably light tetradrachms.¹⁰ The earliest of all these issues – and indeed the only ‘Arabian’ issue struck during Trajan's fifth consulship (AD 103–111) – were larger silver coins copying the reverse type of the imperial issues celebrating the annexation of Arabia, described above.¹¹ These

⁸ Woytek, *Reichsprägung*, nos 285 and 290.

⁹ See Y. Meshorer (with G. Bijovsky and W. Fischer-Bossert), *Coins of the Holy Land. The Abraham and Marian Sofaer Collection at the American Numismatic Society and the Israel Museum*, 2 vols (New York, 2013), vol. 1, pp. 223f. for an overview of the current state of Nabataean numismatics.

¹⁰ Thus K. Butcher, ‘The silver coinage of Roman Arabia’, in D.M. Jacobson – N. Kokkinos (eds), *Judaea and Rome in Coins 65 BCE – 135 CE. Papers Presented at the International Conference Hosted by Spink, 13th – 14th September 2010* (London, 2012), pp. 203–13, p. 204; these coins have frequently been identified as tridrachms, since they are smaller in size than Syrian tetradrachms, but this comparison is not decisive. On the problem, see also B. Woytek, ‘Die Cistophore der Kaiser Nerva und Traian (mit einem systematischen Anhang zu typologisch verwandtem traianischem Provinzialsilber)’, *RSN* 89 (2010), pp. 69–144, pp. 117–20, and M. Amandry, ‘Monnayages provinciaux en argent sous Trajan’, *CRAI* 2013, II (avril-juin), pp. 825–49, 849, n. 96.

¹¹ E.A. Sydenham, *The Coinage of Caesarea in Cappadocia* (London, 1933; reprinted with a supplement by A.G. Malloy: New York, 1978), no. 182 (no descriptive legend in the exergue).

coins are of fine Roman style and consistently show a die-axis of c. 6 o'clock. The portrait type of the tetradrachms corresponds to portrait type D, according to the nomenclature of Trajanic coin portraits as laid out in one of these authors' recently published systematic study of Trajan's imperial coinage. This portrait type seems to have been introduced in c. AD 109,¹² so that the Arabian tetradrachms featuring the personification of the province can be dated to c. AD 109–11. They may thus be seen to have been issued concurrently with the earliest imperial issues depicting Arabia. Find evidence¹³ proves that these provincial silver coins circulated in the Levant.

All the other Trajanic issues for the province were struck in the emperor's sixth consulship. They comprise three different types of light tetradrachms produced in the period AD 112–114 (COS VI, Trajan not yet *Optimus*) which – in contrast to the issue just described – do not bear direct typological reference to their area of circulation. Strangely enough, these coins copy the reverse images of Latin legend *cistophori* issued by Trajan at the beginning of his reign for circulation in Asia Minor; still, hoard evidence makes it clear that these light tetradrachms with Greek legends circulated in the Arabian territory, despite their 'cistophoric' imagery.¹⁴ Furthermore, two types of Trajanic drachms usually occur in hoards of this region,¹⁵ with reverses of a more local flavour. One of them again depicts Arabia with a camel, just as the light tetradrachms of the COS V period. Three consecutive issues of these most common coins are attested, which were produced in AD 112–114 (*tribunicia potestas* 16–18; pre-*Optimus*). The style of these coins is, however, rather coarse, and so is their fabric: for example, the drachms are frequently not well centred, and die breaks do occur (pl. 14, 2–3). Another conspicuous difference, as compared to the Trajanic tetradrachms circulating in Arabia (or, indeed, to Trajan's imperial silver issues), is the imperial bust type used. On nearly all of these Arabia drachms, we see Trajan's bust to the right, with a cloak on his left shoulder; with the exception of a handful of pieces with an undraped bust, there are no other bust varieties. The features mentioned – style, paucity of bust varieties, and the *tr. p.* dating in the legend – connect these Arabia drachms to Levantine tetradrachms variously attributed to Antioch on the Orontes¹⁶ or Tyre,¹⁷ as well as to a few other Trajanic provincial silver coins.¹⁸

¹² Woytek, *Reichsprägung*, pp. 61f.

¹³ As tabulated by W.E. Metcalf, 'The Tell Kalak Hoard and Trajan's Arabian Mint', *ANSMN* 20 (1975), pp. 39–108, p. 94.

¹⁴ For a detailed study of these coins, see Woytek, 'Cistophore', pp. 111–20 (see p. 115 for a tabulation of the hoard evidence). There are four further types of extremely rare Trajanic tetradrachms with cistophoric reverse images from the same period (they are dated to the 17th *tribunicia potestas*, i.e. AD 112/113), but in a different style, whose area of circulation is not clear: see Woytek, 'Cistophore', pp. 121–4. These coins may well have circulated in the Near East, too.

¹⁵ See Metcalf, 'Tell Kalak', p. 94, Table 1.

¹⁶ K. Butcher, *Coinage in Roman Syria. Northern Syria, 64 BC – AD 253*. RNS SP 34 (London, 2004), p. 87f.

¹⁷ R. McAlee, *The Coins of Roman Antioch* (Lancaster – London, 2007), p. 191 (nos 437–449, 458–467 etc.).

¹⁸ Especially to the rare tetradrachms with cistophoric reverse images mentioned in n. 14 – see Woytek, 'Cistophore', pp. 121–4 –, as well as to bilingual drachms struck for circulation on Crete: B. Woytek, 'Die bilingualen Münzen Traians. Eine Fallstudie zu numismatischen Erscheinungsformen des Bilingualismus im römischen Reich', *Chiron* 41 (2011), pp. 417–59, esp. 419–24 (these drachms, however, lack the *tr. p.* dating).

The final issue of Trajanic silver coins struck for circulation in Arabia are the camel drachms. Before we proceed to discuss the dating, typology, style and technical features as well as the mint of these coins in detail, we will provide a catalogue of all the varieties of the camel drachms known to us.

CATALOGUE

Type A: Camel to the left

*Obv.*¹⁹

- d** Laureate bust of Trajan right, with cloak on left shoulder, in a half-frontal view
AYTOKP KAIC NCP TPAIANΩ APICTΩ CCB ΓCPM ΔAK
- f** Laureate bust of Trajan right, in cuirass (with *pteryges* visible at the shoulder) and *paludamentum*, which is held together on the shoulder with a *fibula*, seen from behind
AYTOKP KAIC NCP TPAIANΩ APICTΩ CCB ΓCPM ΔAK
- h1** Laureate bust of Trajan right, in cuirass (with *pteryges* visible at the shoulder) and *paludamentum*, which is held together on the shoulder with a *fibula*, in a half-frontal view
AYTOKP KAIC NCP TPAIANΩ APICTΩ CCB ΓCPM ΔAK
- h2** Laureate bust of Trajan right, in cuirass (with *pteryges* visible at the shoulder) and *paludamentum*, which is held together on the shoulder with a *fibula*, in a half-frontal view
AYTOKP KAIC NCP TPAIANΩ APICTΩ CCB ΓCPM ΔAK
- m** Laureate bust of Trajan left, in cuirass (sometimes with *pteryges* visible at the shoulder) and *paludamentum*, which is held together on the shoulder with a *fibula*, seen from behind
AYTOKP KAIC NCP TPAIANΩ APICTΩ CCB ΓCPM ΔAK
- v** Laureate bust of Trajan right, in *paludamentum*, which is held together on the shoulder with a *fibula*, seen from the side
AYTOKP KAIC NCP TPAIANΩ APICTΩ CCB ΓCPM ΔAK

Rev.

Two-humped Bactrian camel to the left on exergual line.

ΔΗΜΑΡΧ ΕΞ ΥΠΙΑΤΟ C

*Select References*²⁰

- A-d:** Private collection “Kained but Able” (2.87g: **pl. 14, 4**). The only specimen of this variety we have encountered so far. <<http://www.forumancientcoins.com/gallery/displayimage.php?pos=-66650>> [accessed 15 November 2014]

¹⁹ This catalogue uses the codes for Trajanic bust varieties as established in Woytek, *Reichsprägung*, pp. 76–90. Regardless of the perspective of the bust, Trajan’s head is, of course, always shown in profile.

²⁰ For fuller listings, see M. Amandry – A. Burnett et al., *RPC* vol. 3: *From Nerva to Hadrian (AD 96–138)* (London – Paris, 2015). For the relative frequency of the bust varieties, see also the hoard tables in this article below.

- A-f:** *BMC*²¹ *Caesarea Cappadociae* 66 (3.29g; 6h) / *SNG von Aulock* 6408 / *SNG ANS 6 (Palestine – South Arabia)* 1158 / *SNG Hunterian Museum, part II*, 3630 / Meshorer, *Sofaer Collection*, Bostra 2 / ANS 1992.41.46 / ANS 1956.127.2241 / ANS 1965.127.2246 / NFA Mail Bid Sale 18 Oct. 1990, 2062 = Hirsch 249 (7 Feb. 2007), 1894 / Hirsch 175 (23 Sept. 1992), 838 / Vinchon 27 Oct. 2000, 298 / Münz Zentrum Rheinland 110 (2 May 2002), 490 / Gorny & Mosch 142 (10 Oct. 2005), 2044 / Lanz 128 (22 May 2006), 394 / CNG Electronic Auction 158 (14 Feb. 2007), 186 (**pl. 14, 5**) / Hirsch 253 (27 Sept. 2007), 2543 / Gorny & Mosch 160 (8 Oct. 2007), 2042 = 181 (12 Oct. 2009), 1879 / Gorny & Mosch 190 (11 Oct. 2010), 417 / NAC 59 (4 Apr. 2011), 983 (**pl. 14, 6**) / Roma Numismatics, 21 May 2013, 767 (**pl. 14, 7**) / Gorny & Mosch 225 (14 Oct. 2014), 1903 (**pl. 14, 8**)
- A-h1:** *SNG Hunterian Museum, part II*, 3631 / ANS 1956.127.2249 / Amsterdam, Schürmann coll. / Better Auction Co. (Haifa, Israel) 8 (5 Dec. 1974), 188 / CNG electronic auction 207 (25 Mar. 2009), 321 / Peus 409 (25 Apr. 2013), 701 (3.49g) (**pl. 14, 9**)
- A-h2:** ANS 1956.127.2250 (3.15g) (**pl. 14, 10**) / Israel Antiquities Authority, Mamphis hoard inv. no. 128413 (3.39g; 7h). The variety is known from these two coins only, which were struck from the same obverse die.
- A-m:** ANS 1956.127.2251 (3.39g) (**pl. 14, 11**) / ANS 1992.41.45 (3.28g) / Amsterdam, Schürmann coll. (2 specimens) / MMAG List 244 (July 1964), 35 / Sotheby's (Zurich) 7 May 1975, 313 / Kovacs FPL 15 (May 1982), 72 / Lanz 42 (23 Nov. 1987), 513 / CNG 47 (16 Sept. 1998), 993 / Goldberg 5 (6 Apr. 2000), 3339 / Kölner Münzkabinett 92 (20 Oct. 2009), 153 / Künker 226 (11 Mar. 2013), 821
- A-v:** *BMC* *Caesarea Cappadociae* 65 (3.65g; 8h) / *SNG Hunterian Museum, part II*, 3632 (2.92g) / ANS 1956.127.2026 (3.30g) / Goldberg 41 (27 May 2007), 2916 (2.97g) (**pl. 14, 12**) / Ponterio 151 (12 Nov. 2009), 8119 (3.33g)
- Sydenham, *Caesarea* 204 (A-v), 205 (A-f) /
Metcalf, 'Tell Kalak' 18 (A-f), 19 (A-h1), 20 (A-m) /
RPC 4076 (A-f), 4077 (A-h1), 4078 (A-v), 4079 (A-d), 4080 (A-m)

Type B: Camel to the right

Obv.

- f** Laureate bust of Trajan right, in cuirass (with *pteryges* visible at the shoulder) and *paludamentum*, which is held together on the shoulder with a *fibula*, seen from behind
AYTOKP KAIC NCP TPAIANΩ APICTΩ CEB ΓCPM ΔAK

Rev.

Two-humped Bactrian camel to the right on exergual line.
ΔHMAPX ΕΞ ΥΠΙΑΤΟ C

References

- B-f:** *SNG ANS 6 (Palestine – South Arabia)* 1159 (3.32g; 6h) / ANS 1956.127.2254 (3.01g) (**pl. 14, 13**) / ANS 1956.127.2255 (3.10g) (**pl. 14, 14**) / ANS 1992.41.47

²¹ W. Wroth, [*A Catalogue of the Greek Coins in the British Museum.*] *Catalogue of the Greek Coins of Galatia, Cappadocia and Syria* (London, 1899).

(3.31g)²² (pl. 14, 15) / Israel Antiquities Authority, Mamispis hoard inv. nos 128483–128492 (ten specimens) / one specimen mounted as jewellery in modern times, offered on the internet by a Jerusalem dealer²³

These fifteen specimens were all struck from the same reverse die.

Sydenham, *Caesarea* – /
Metcalf, ‘Tell Kalak’ 21 /
RPC 4081

WEIGHT AND DIE-AXIS

The largest group of camel drachms available for study by far are the 288 specimens from the hitherto unpublished Mamispis hoard.²⁴ This hoard, discovered in August 1966 during controlled archaeological excavations in Kurnub in the eastern Negev and now kept in Jerusalem, contained one imperial denarius, at least 2045 drachms (nearly all of them Trajanic) and 8275 tetradrachms from Vespasian to Elagabalus (AD 218–222).²⁵ Since the hoard closes more than one hundred years after Trajan’s demise, many of the camel drachms in this hoard are unfortunately quite worn, which is to be taken into account when analysing the metrological evidence provided by the group (see *Figure 1*).²⁶

The greatest concentration of weights is to be observed in the range between 3 and 3.09g, although the range 3.10–19g is nearly as well represented. The average weight of the Mamispis coins is 3.06g. What does that imply for the original target weight of the camel issue? Work done by Richard Duncan-Jones on imperial silver coins may provide some useful indications regarding this problem. He tried to calculate the annual weight loss in Roman denarii of the first and second centuries AD and arrived at a rate of c. 0.06% per year (according to his calculation for the denarius 0.002025g).²⁷ If we assume that the circulation behaviour of the camel drachms was comparable to that of contemporary denarii and apply these results to the Mamispis evidence, we should expect the camel drachms to have been roughly at least 0.2g

²²This specimen was first published by D. Jeselsohn, ‘A drachm of the two-humped camel of Trajan. A new variant’, *ALON*. *Internal Quarterly of the Israel Numismatic Society* 5, no. 4 (April 1976), pp. 68–73, fig. 5 [article in Hebrew; translation of the title taken from R. Rosenthal-Heginbottom, ‘The Mamispis hoard – a preliminary report’, *INJ* 4 (1980), pp. 39–54, p. 40, note 3].

²³<<http://thebaidunshop.com/index.php/baidun/by-category/coins/a-silver-denarius-coin-of-the-roman-emperor-trajan-set-in-an-18-k-gold-swivling-pendant.html>> [accessed 19 November 2014].

²⁴The final publication of the hoard is currently being prepared; see R. Rosenthal-Heginbottom, ‘A forgotten treasure – the secrets of the Mamispis hoard’, in *Hoards and Genizot as Chapters in History*. Exhibition Catalogue, Hecht Museum, University of Haifa (Catalogue no. 33), 2013, pp. 49–55, esp. 49. The number of camel drachms in the hoard is usually given as 204; see A. Negev, ‘Notes on some Trajanic drachms from the Mamispis hoard’, *JNG* 21 (1971), pp. 115–20, p. 116, as well as Rosenthal-Heginbottom, ‘Mamispis hoard – preliminary report’, p. 41. However, 84 more drachms of this type belong to the hoard, as Donald T. Ariel recently found out when preparing the material kept at the Israel Antiquities Authority for documentation.

²⁵See Rosenthal-Heginbottom, ‘Mamispis hoard – preliminary report’, p. 40.

²⁶Data kindly collected by Nikolaus Schindel.

²⁷R. Duncan-Jones, *Money and Government in the Roman Empire* (Cambridge, 1994), pp. 183ff., esp. 183 and 191.

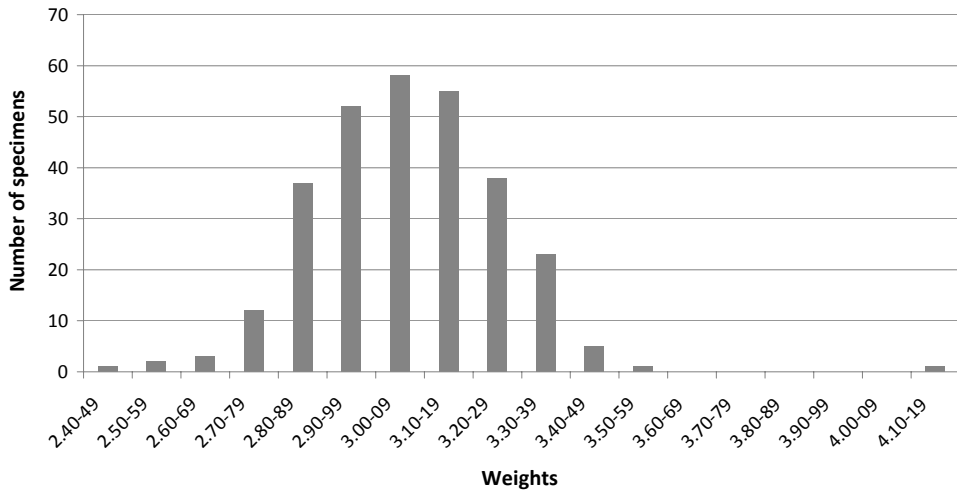


Figure 1. The weights of 288 camel drachms from the Mampsis hoard.
Average weight 3.06g.

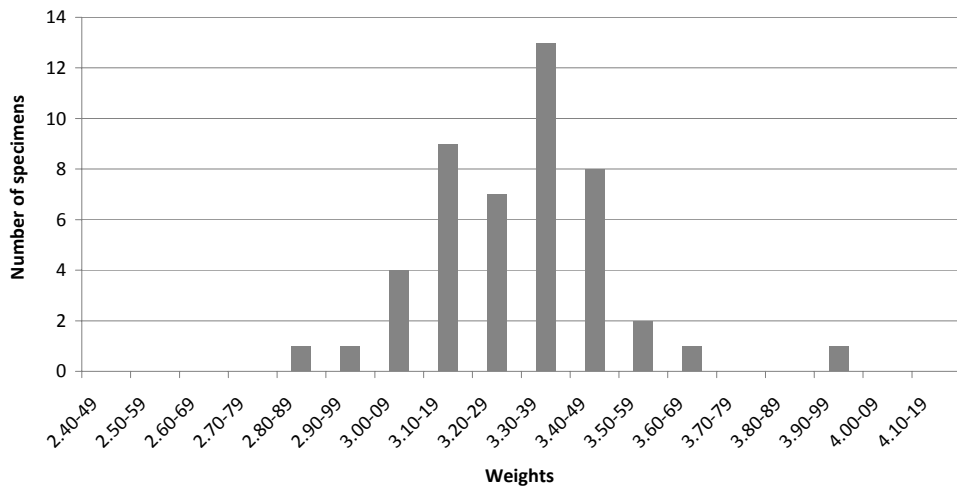


Figure 2. The weights of 47 camel drachms from the coin trade.
Average weight 3.29g.

heavier at the time of production than at the time of the burial of the Mampsis hoard, around 100 years later. For this issue, Duncan-Jones's calculations – which, needless to say, attracted a lot of criticism²⁸ – can be put to the test by comparing the Mampsis evidence with the weights of 47 well-preserved specimens from the coin trade (see *Figure 2*).²⁹

The average weight of these coins, for the most part hardly worn and selected for their condition, is 0.23g higher than the average weight of the Mampsis drachms; hence, Duncan-Jones was not too far off the mark in this case. Among the coins from auction catalogues, the peak in distribution may be observed for the range between 3.30 and 3.39g, and no fewer than 12 of the 47 specimens are heavier than 3.39g. Hence, despite the relatively small size of this sample of well-preserved camel drachms, we may state with confidence that the issue was manufactured on the very same weight standard as contemporary denarii. Imperial denarii of Trajan were struck on a weight standard of 96 to the Roman pound (c.3.41g target weight); well preserved pieces of the late Trajanic period peak in the range 3.30–39g, too, when a frequency table is constructed.³⁰

It has long been known that the die-axis of the camel drachms is not random, but consistently around 6 o'clock. The large pool of data derived from the Mampsis hoard allows us to go into more detail on this point.

Die-axis	Specimens
6h	129
7h	124
8h	31
9h	4

Table 1. The die-axes of the Trajanic camel drachms from the Mampsis hoard (288 coins)

It is, at first sight, surprising that 7h is almost as well represented as 6h, and that a few coins have an axis of 8h or even 9h, but that there is no deviation anti-clockwise, to 5h or 4h. Altogether, the data seem to indicate that the mint did not use a mechanical device in order to align the dies precisely at 6 o'clock, but that the mint workers tried to achieve this die-axis just by holding the upper die approximately in the correct position. Why they deviated from 6 o'clock just clockwise remains a matter for conjecture. However, the distribution of die-axes to be observed on the drachms of the Mampsis hoard has a striking parallel on contemporary denarii from the mint of Rome. For a common denarius type of the years AD 114–116, the very same values of 6h, 7h, 8h and 9h are attested, in a very similar distribution: see *Table 2*. A double check with the material of the Bibliothèque nationale (Paris) makes it clear that this distribution was not limited to single imperial silver types, but that it applies to the entire denarius output of the period (see *Table 3*). The denarius coinage is

²⁸ W.E. Metcalf, in his review article in *RSN* 74 (1995), pp. 145–59, was extremely sceptical: 'more needs to be done before one will want to put confidence in an annual weight loss of .002025 gm./year for the denarius' (p. 156).

²⁹ The data are taken from the website <<http://pro.coinarchives.com>> as well as from the card file of the Institute for Numismatics, Vienna University ('Numismatische Zentralkartei' = NZK).

³⁰ See B.E. Woytek, K. Uhlir et al., 'The denarius under Trajan: New metallurgical analyses', *NC* 167 (2007), pp. 147–63, p. 157.

characterised by the curious prominence of pieces with a die-axis of 7h, alongside the pieces with 6h, and at the same time by the absence of values of 5h or 4h, just like the camel drachms.

Die-axis	Specimens
6h	26
7h	22
8h	2
9h	1

Table 2. The die-axes of 51 Trajanic denarii *MIR* 526 (rev. FORTuna REDux, struck in the ‘*Optimus*’-phase, AD 114–116) as recorded in the card file of the Institute for Numismatics, Vienna University.

Die-axis	Specimens
6h	10
7h	12
8h	2

Table 3. The die-axes of Trajan’s denarii of the ‘*Optimus*’-phase (AD 114–116) in the Bibliothèque nationale de France (6 different types, 24 specimens)³¹

ANCIENT IMITATIONS OF TYPE A-f

Obv.

f Laureate bust of Trajan right, in cuirass and *paludamentum*, which is held together on the shoulder with a *fibula*, seen from behind
] KAIC NCP TPAIANΩ APICTΩ CE[and
]AIC NCP TPAIANΩ APICTΩ CEB ΓCPMA

Rev. Two-humped Bactrian camel to the left on exergual line.
ΔHMAPX CΞ YΠIATO C and
ΔHMAPX CΞ Y[

References

Numismatica (Vienna) 13 (9 Nov. 1976), 314 (pl. 15, 16)
<https://www.cointalk.com/attachments/trajancamel1000-jpg.345975>
[accessed 19 November 2014] (pl. 15, 17)

DISCUSSION

The imperial titulature of these drachms features the name *Optimus* (ἄριστος) which had been conferred on Trajan in June 114.³² On the other hand, the emperor is not yet called *Parthicus* here, so that the coins cannot have been issued after February 116:³³ the camel drachms were thus produced between the summer of 114 and early

³¹ Data taken from P.-A. Besombes, [Bibliothèque nationale de France.] *Monnaies de l’Empire romain IV. Trajan (98–117 après J.-C.)* (Paris - Strasbourg, 2008), pp. 99–103.

³² K. Strobel, *Kaiser Traian. Eine Epoche der Weltgeschichte* (Regensburg, 2010), p. 366.

³³ Strobel, *Kaiser Traian*, p. 373.

116. The above mentioned drachms with Arabia on the reverse, dated to the sixth consulate and the *tribuniciae potestates* 16, 17 and 18, were all issued in the pre-*Optimus* period, hence from AD 112 to mid-114. The camel drachms may be seen to have been struck in the period immediately following.

The reverse type of these coins, an unbridled two-humped camel (probably *Camelus bactrianus*, the domesticated variety of *Camelus ferus*), has caused controversy in scholarship for quite some time. One of the first more detailed early modern comments on the image, in the final edition of Vaillant's *Numismata imperatorum Romanorum praestantiora*, contains a mistake, but still serves to highlight the problem: the author awkwardly asserts that the coin type shows the symbol of the new *provincia Arabia* and that Arabian camels had *at most* ('ut plurimum') two humps.³⁴ As already set forth by, e.g., Pliny in his natural history (8.67), this is wrong: *Camelos inter armenta pascit oriens; quarum duo genera, Bactriae et Arabiae. Differunt, quod illae bina habent tubera in dorso, hae singula et sub pectore alterum, cui incumbant.* The Arabian camel or dromedary (*Camelus dromedarius*) had just one hump, while the 'Bactrian' camel, which originated in Central and Eastern Asia, has two.³⁵ The animal symbolising Arabia on coins was, of course, primarily the one-humped *Camelus dromedarius*: it appeared as early as 58 BC on the famous Roman Republican denarii recording the submission of the Nabataean REX ARETAS,³⁶ is pictured next to the personification of Arabia on Trajanic aurei (pl. 15, 1), as pointed out above, and was also used as a reverse type on local bronze coins of the mint of Bostra, for example.³⁷

Hence, the presence of the Bactrian camel on the Trajanic silver coins circulating in Arabia needs explaining, as William E. Metcalf was the first to recognize. He assumed that the two-humped camel 'must have been a familiar sight in Arabia, through which many important caravan routes to the East passed' and that 'the employment of the Bactrian camel as a type may thus have symbolized the position of the new Provincia Arabia as a secure link between Near and Far East'.³⁸ Glen W. Bowersock concurred with Metcalf in postulating that the two-humped *Camelus bactrianus* was intended to convey a rather specific political message: 'it seems more than likely that the issue of drachms displaying a Bactrian camel [...] is programmatic. By 114 there was no doubt that the emperor intended to march farther east, against the great empire in the Iranian heartland.'³⁹ However, it seems doubtful whether the subtle morphological differentiation regarding the kind of camel depicted really can have

³⁴ J. Vaillant, *Numismata Imperatorum Romanorum praestantiora a Julio Caesare ad Tyrannos usque*. Vol. 2: *De aureis et argenteis* (Rome, 1743), p. 128: 'Camelus Arabiae symbolum est, quod is in ea frequens est, sed Arabicus ut plurimum duo habet in dorso tubercula, unde a quibusdam dromedarius appellatur: ille enim in Trajani nummis repraesentatur, ad indicandam Arabiam ab eo in provincia redactam.'

³⁵ In a numismatic context, this differentiation had already, in fact, been correctly made by Ezechiel Spanheim: see *Dissertationes de praestantia et usu numismatum antiquorum*, second ed. (Amsterdam, 1671), p. 135.

³⁶ *RRC* 422. On this coin type, see W. Hollstein, *Die stadtrömische Münzprägung der Jahre 78–50 v. Chr. zwischen politischer Aktualität und Familienthematik* (Munich, 1993), pp. 249–55.

³⁷ Cp., for example, Meshorer, *Sofaer Collection*, Bostra nos 11, 21, 22, 25, 26, 40.

³⁸ Metcalf, 'Tell Kalak', p. 96.

³⁹ Bowersock, *Roman Arabia*, p. 84.

served to present Trajan's programme of military expansion to an audience in the Near East. Hence, more recently, one of the present authors argued that the choice of the Bactrian camel as a coin type for drachms circulating in Arabia may have been the result not of political considerations, but of a simple mistake by the Roman official responsible for the design of these coins, who was probably working in the central mint administration in the empire's capital and who was not aware of zoological subtleties.⁴⁰ Admittedly, this radical re-evaluation has not gone unchallenged. There seems to be archaeozoological evidence for the presence of Bactrian camels on various Roman sites in Europe,⁴¹ and Diodorus Siculus specifically mentions that among the different kinds of camels occurring on the Arabian Peninsula in his day, i.e. in the first century BC, there were also two-humped camels.⁴² It may thus be presumed that Bactrian camels were present in Arabia for breeding purposes in the High Principate, too.⁴³ Still, in view of the fact that there was an indigenous camel variety in Arabia with one hump which normally featured as the region's mascot, the choice of a two-humped animal as a coin type for Trajanic coins circulating in Arabia continues to be perplexing, in our opinion.

The reason why an involvement of some sort of the mint of Rome in the production of these coins may be regarded as certain is above all their style. Apart from the two imitative pieces catalogued above – which are stylistically quite diverse between themselves, by the way –, the dies used for the production of these drachms are uniformly characterised by very fine engraving.⁴⁴ Some of the obverse dies used for the camel drachms show exactly the same sublime Trajan portraits as the very best dies used for imperial aurei of the same period, struck at the Roman mint: see, e.g., **pl. 14, 5**. In the obverse legends of the dies used to produce the camel issue, both the traditional and the w-shaped omega occur. This is, however, not without parallel in Rome-style provincial silver coins of Trajan: examples from the series for Caesarea in Cappadocia may be adduced.⁴⁵

The style of the reverse dies is coherent, too, with just a moderate degree of variety in the depiction of the camels: sometimes, the two humps are more pointed (e.g. **pl. 14, 7, 8, 12**), in other cases, more rounded (e.g. **pl. 14, 6**); the shaggy fur is clearly in evidence on the best dies. As is apparent from the above catalogue, there are two basic varieties of the reverse type. Apart from the standard type with the camel to the left, a single reverse die showing a camel to the right is attested. William Metcalf, who first published this variety (from the Tell Kalak hoard), suggested that it 'may simply result from an engraver's blunder'.⁴⁶ This could well be true. Still, we

⁴⁰ K. Butcher, 'Bactrian camels in Roman Arabia', *Berytus* 42 (1995–1996), pp. 113–6, esp. 114.

⁴¹ Butcher, 'Bactrian camels', p. 115.

⁴² Diod. 2.54.6; see especially D.T. Potts, 'Camel hybridization and the role of *Camelus bactrianus* in the Ancient Near East', *Journal of the Economic and Social History of the Orient* 47 (2004), pp. 143–65, 159f.

⁴³ See also the bibliography in Butcher, 'Silver coinage of Roman Arabia', p. 207, n. 26.

⁴⁴ Both of the imitations unfortunately are known to us through images only. A parallel to the occurrence of imitations of 'local' style in large issues of Trajanic 'Rome' style provincial silver is provided by an ancient imitation of an Arabian tetradrachm type with rev. military standards (Woytek, 'Cistophori', type A1): CNG 37 (20 Oct. 1996), 980 (10.40g): see **pl. 15, 18**.

⁴⁵ See Sydenham, *Caesarea in Cappadocia*, nos 199f., 217f. and 221–3.

⁴⁶ Metcalf, 'Tell Kalak', p. 91.

have to bear in mind that in the Trajanic imperial coinage there is a parallel for an animal reverse type occurring with the beast turned both ways: *semisses* of a small module with a she-wolf on the reverse come in two varieties, with the animal turned left or right,⁴⁷ although on the *semisses* the two varieties occur nearly with the same frequency. In any case, there are obverse die links between the drachm varieties with the camel turned to the left and to the right, see **pl. 00, 7, 00, 13** and **00, 15**. The two sub-types were obviously produced at the same place, at about the same time.

As for the images, more diversity is in evidence regarding the imperial bust types on the obverse. Up to now, five different bust types could be observed, one of which (bust d of our catalogue) has never been published in print. There is a huge disequilibrium in the distribution of these bust types in the material which has come down to us, as may be seen from *Tables 4* and *5*. Both in hoards and in the coin trade,⁴⁸ bust f is the best represented bust type by far, accounting for more than three quarters of the coins known, with busts m and h lagging far behind. The distribution patterns emerging from the two pools of material – hoards and trade – are essentially comparable.

	Eleutheropolis/ Beit Guvrin ⁴⁹	Horbat Zalit ⁵⁰	Khirbet Badd 'Isa – Qiryat Sefer ⁵¹	Mampsis ⁵²	Tell Kalak ⁵³	TOTAL	TOTAL % (rounded)
A-d	0	0	0	0	0	0	0 %
A-f	5	1	7	214	53	280	75.5 %
A-h	0	0	0	23	8	31	8.3 %
A-m	0	0	2	31	4	37	10 %
A-v	0	0	0	10	1 ⁵⁴	11	3 %
B-f	0	0	0	10	2	12	3.2 %

Table 4. Hoard evidence for the varieties of Trajan's camel drachms
(number of specimens)

⁴⁷ Woytek, *Reichsprägung*, nos 599–600.

⁴⁸ The card file of the Institute for Numismatics, Vienna University ('Numismatische Zentralkartei' = NZK) comprises material from various sources, both from the coin trade and from public and private collections, with a special emphasis on coins from printed auction catalogues and dealers' lists. There is a partial overlap between the material in NZK and in <pro.coinarchives.com>.

⁴⁹ I. N. Svoronos, '*Perigrafikos katalogos ton prosktematon tou Ethnikou Nomismatikon Mouseiou apo 1 Septembriou 1906 mechri 31 Augoustou 1907*', *JIAN* 10 (1907), pp. 177–268, esp. *Heurema Eleutheroupoleos Palaistines*, pp. 230–48. The camel drachms are nos 84–88, on p. 235. Photographs of these coins were kindly provided by Michel Amandry.

⁵⁰ G. Bijovsky, 'The coins from Horbat Zalit', *'Atiqot* 39 (2000), pp. 155–89, esp. 180–8.

⁵¹ G. Bijovsky, 'The coins from Khirbet Badd 'Isa – Qiryat Sefer. Isolated coins and two hoards dated to the Bar-Kokhba Revolt', in Y. Magen – D.T. Ariel – G. Bijovsky – Y. Tzionit – O. Sirkis, *The Land of Benjamin*. Judaea and Samaria Publications 3 (Jerusalem, 2004), pp. 243–300.

⁵² Unpublished; for preliminary bibliography see note 24 above.

⁵³ Metcalf, 'Tell Kalak'.

⁵⁴ This bust variety was not specifically described by Metcalf, although one coin of this type is at the ANS.

	Specimens in Vienna NZK	Specimens on pro.coinarchives.com
A-d	0	0
A-f	36	32
A-h	3	2
A-m	9	4
A-v	0	2
B-f	0	0

Table 5. The varieties of Trajan's camel drachms in the card file of the Institute for Numismatics, Vienna University ('Numismatische Zentralkartei' = NZK), and on <http://pro.coinarchives.com> (15 November 2014)

On nearly all the camel drachms that have come down to us, the emperor is shown in the cuirass (busts f, h and m). This ties in well with the fact that these coins were produced at the height of the Parthian campaign and circulated in an eastern province. It would, however, probably be unwise to make too much of the strong military flavour of the obverses of this provincial issue: all the bust types occurring on the camel drachms are, in principle, well attested in Trajan's imperial issues with legends in Latin, too. Still, a comparison of the busts on this group of provincial coins and on contemporary imperial issues yields interesting results. In principle, an uneven distribution among the various busts attested for a specific coin type is a pattern all too familiar from the imperial issues of this emperor. It is normal to find one 'standard bust' for a given coin type, with several other rarer 'special bust' types occurring in much smaller numbers. If we take one of the imperial denarius types issued in the period AD 114–116 as a comparative example (see *Table 6*), we find a similar distribution. For these denarii (depicting Fortuna Redux seated to the left), seven bust types are attested in all, but one of them accounts for more than 70% of the specimens known. Five of the seven busts are attested on less than 5% of the denarii each. Of the five bust varieties attested on the Trajanic camel drachms, four – viz. busts d, f, h and v – can be found in the contemporary denarii, too.⁵⁵

Now on to the differences which may be discerned: the distribution behaviour of the four bust varieties attested on both camel drachms and imperial denarii is completely different in the two classes of coins. Bust v, featuring the emperor in the *paludamentum* to the right, is the standard bust of Trajan's imperial silver coinage from the early years of the sixth consulate onwards. It accounts for the vast majority of the denarii in *Table 6*, and it is the 'leading' bust type on all the imperial denarii of the period AD 114–116. On the camel drachms, by contrast, it is a special bust attested on just very few specimens. Bust f, on the other hand, the 'leading' bust of the camel drachms, is just a 'special' bust on the contemporary denarii. In fact, this bust type never functioned as a standard bust type on any imperial silver issue of Trajan: it was used as a standard bust on his *aurei*, from the second half of the fifth consulate down to the end of Trajan's reign.⁵⁶ But there is another peculiar aspect

⁵⁵ For comparable observations regarding light Trajanic tetradrachms of Roman style circulating in Arabia, see Woytek, 'Cistophore', pp. 115f.

⁵⁶ See Woytek, *Reichsprägung*, pp. 78f.

to the bust distribution of the camel drachms. Bust m, which occupies a prominent place among the special busts used for these drachms struck in AD 114–116 – it is, in fact, the second best attested bust in the hoards –, never occurs on imperial issues of the COS VI period at all, as far as we can see. It was used exclusively on imperial COS V pieces, and is very rare on them.⁵⁷ Whether the fact that bust m is attested on some COS V aurei featuring the personification of Arabia on their reverse⁵⁸ is significant, is hard to decide. In any case, it must be noted that on the camel drachms, bust m features a round *fibula* on the emperor's left shoulder, whereas the *fibula* is absent from this bust type on imperial issues.⁵⁹

Bust variety	Specimens cited in <i>MIR</i>	%
<i>MIR</i> 526d	2	1.1%
<i>MIR</i> 526f	5	2.8%
<i>MIR</i> 526h	35	19.8%
<i>MIR</i> 526t ⁶⁰	1	0.6%
<i>MIR</i> 526v	128	72.3%
<i>MIR</i> 526x ⁶¹	5	2.8%
<i>MIR</i> 526y ⁶²	1	0.6%

Table 6. The bust varieties on a Trajanic denarius type of the period AD 114–116 (*MIR* 526, rev. FORTuna REDux: 177 specimens gathered in *MIR*)

The Murabba'ât hoard, discovered 25 km to the south of Jerusalem,⁶³ closes with a denarius of Hadrian and provides important evidence for the circulation patterns of various coinages of the region in this emperor's reign. Apart from 51 imperial denarii, the publication of the hoard lists 119 Nabataean drachms, 14 Roman provincial tetradrachms from Syria (Nero–Trajan) as well as various other Trajanic silver coins with Greek legends: among them, we find 23 drachms with Arabia as well as nine camel drachms.⁶⁴ By Hadrian's time, the Nabataean currency obviously had not yet completely gone out of circulation, and it was used alongside the Trajanic provincial coins. Thanks to the research by Karl Schmitt-Korte and Michael Cowell, we are well-informed about the development of the silver content in the alloy of Nabataean silver coins.⁶⁵ During the reign of king Aretas IV (9 BC – AD 40), two marked decreases in the silver content of the drachms are in evidence, the second of which – occurring during the period AD 18–21 – led to the establishment of a silver standard of c. 50%. This standard was adhered to for the following decades,

⁵⁷ See Woytek, *Reichsprägung*, p. 82.

⁵⁸ Woytek, *Reichsprägung*, no. 290m.

⁵⁹ On this point see Woytek, *Reichsprägung*, p. 82.

⁶⁰ Laureate bust of Trajan right, with aegis on left shoulder, in a 3/4-frontal view.

⁶¹ Laureate bust of Trajan right, with cloak on left shoulder, in a 3/4-frontal view.

⁶² Laureate bust of Trajan right, wearing a cuirass; bust depicted in a nearly full-frontal view.

⁶³ J.T. Milik – H. Seyrig, 'Trésor monétaire de Murabba'ât', *RN*, 6^e Série, 1 (1958), pp. 11–26.

⁶⁴ Milik – Seyrig, 'Murabba'ât', p. 24; since there is no indication of the bust types of these specimens in the publication, these nine drachms could not be entered in Table 4.

⁶⁵ K. Schmitt-Korte – M. Cowell, 'Nabataean Coinage – Part I. The Silver Content Measured by X-Ray Fluorescence Analysis', *NC* 149 (1989), pp. 33–58.

up to the end of the Nabataean drachm production.⁶⁶ Trajan's first drachm issues for the new province of Arabia, the Eastern-style drachms with the personification of Arabia on the reverse, were struck on the very same standard of c. 50% silver and 50% copper, as metallurgical analyses of four specimens conducted with different analytical methods prove.⁶⁷ This is in accordance with the fact that these Trajanic Arabia-drachms are sometimes found overstruck on Nabataean drachms. The first to draw attention to this phenomenon was Avraham Negev, who observed traces of overstriking – more precisely: traces of Nabataean letters – on nine Arabia drachms from the huge Mampsis hoard, comprising no fewer than 1838 such coins, by his count.⁶⁸

According to Negev's observations, the undertypes are drachms of the last Nabataean king Rabel II.⁶⁹ He reconstructs the operation at the mint as follows: 'Technically this was done by defacing the Nabataean symbols and script with a blow of a hammer, after which the new coin was struck. While the Nabataean denarii of Rabel are rather thick and small, their diameter being 12.5–14 mm, the restruck drachms are very thin, their diameter being 18.5–20 mm'.⁷⁰ After Negev's publication, his results were confirmed by William Metcalf, who observed seven overstruck Arabia drachms in the Tell Kalak hoard, one of which bears traces of a legend attributable to drachms of Rabel II.⁷¹ Also, a Trajanic Arabia drachm with traces of overstriking has turned up in trade.⁷²

Both Negev and Marcus Weder reflected about the possible political and economic background of these overstrikes.⁷³ Negev plausibly proposed that the Romans confiscated the treasure of the Nabataean kings after the annexation of the new province and used the royal coinage from the treasure to produce the new provincial currency. Weder correctly pointed out that the Arabia drachms started to be produced only about six years after the annexation of the Nabataean kingdom: he surmised that the royal treasure may have been transported to Antioch on the Orontes in AD 106, immediately after the annexation, and that the Arabia drachms were struck at

⁶⁶ Schmitt-Korte – Cowell, 'Nabataean Coinage – Part I.', pp. 56f.

⁶⁷ See K. Butcher – M. Ponting, 'Atomic absorption spectrometry and Roman silver coins', in A. Oddy – M. Cowell (eds), *Metallurgy in Numismatics*, vol. 4, RNS SP 30 (London, 1998), pp. 308–34, esp. pp. 316 and 325 (AAS on samples of drilled heart material of three specimens), and K. Uhlir – B. Woytek – M. Schreiner – M. Alram – M. Griesser, 'Metallanalytische Forschungen zur Denarprägung Kaiser Traians (98–117 n. Chr.)', *Technologische Studien (Kunsthistorisches Museum Wien)* 4 (2007), pp. 68–101, esp. p. 98 (XRF on the cross-section of one specimen).

⁶⁸ Negev, 'Trajanic drachms', cat. nos 6–14; see, however, also n. 24 above.

⁶⁹ On these coins, see R. Barkay, 'The coinage of the last Nabataean King, Rabbel II (AD 70/1–105/6)', *NC* 174 (2014), pp. 29–44, esp. 30–6.

⁷⁰ Negev, 'Trajanic drachms', p. 116. See also A. Spijkerman†, *The Coins of the Decapolis and Provincia Arabia, edited with historical and geographical introductions by Michele Piccirillo* (Jerusalem, 1978), pp. 32–35.

⁷¹ Metcalf, 'Tell Kalak', p. 95.

⁷² Münz Zentrum Rheinland 116 (7 May 2003), 359 (3.21g), ex Schenk-Behrens 83 (23 May 2002), 238. On these overstrikes, see also K. Schmitt-Korte – M. Price, 'Nabataean Coinage – Part III. The Nabataean Monetary System', *NC* 154 (1994), pp. 67–131, pp. 109f. (with reference to an additional example in a private collection: 2.85g).

⁷³ For some pertinent considerations, see also Metcalf, 'Tell Kalak', p. 102.

the mint of Antioch a few years later, by the personnel responsible for various other Eastern issues of Trajan, too, as discussed above.⁷⁴

Marcus Weder, a numismatic scholar paying particular attention to stylistic analysis, was also one of the first to point out that the identity of mints postulated for the Trajanic Arabia and camel drachms by both Avraham Negev and William Metcalf⁷⁵ was highly questionable, from a stylistic perspective. He convincingly compared the style of the camel drachm obverses with bust f to contemporary aureus obverses from the mint of Rome and did not hesitate to propose Roman mintage for the camel drachms.⁷⁶ As for parallels to the presumed central production of provincial silver coinage circulating in the east, Weder fittingly referred to H.R. Baldus's seminal study of the MON VRB tetradrachms of Philip I, the Roman origin of which cannot reasonably be questioned.⁷⁷ Weder's results are widely accepted today and were endorsed by, among several other scholars, Dominique Hollard.⁷⁸ Independently of Weder, D.R. Walker had reached a similar conclusion: 'There must be two mints involved, the one producing the standing Arabia drachmas [...] and the other the non-overstruck drachmas with walking camel.'⁷⁹

However, the seemingly neat picture of two Trajanic silver issues which circulated side by side in Roman Arabia, but had completely different characteristics regarding their style and workmanship – 'Rome style' camel drachms on the one hand, and on the other hand 'local style' Arabia drachms, which were sometimes overstruck on Nabataean coins – was disturbed in 1983. In that year, Arie Kindler, in his monograph on the coinage of Bostra, mentioned the existence of an overstruck Trajanic camel drachm in the Kadman Numismatic Pavilion of the Eretz Israel Museum, Tel Aviv.⁸⁰ This most important specimen, which – curiously enough – has never been illustrated in print before, is depicted on **pl. 15, 19** and **19a**, by courtesy of Cecilia Meir. Its museum inventory number is K-2712, its weight 3.40g.

It is obvious that this is a perfectly regular piece, as far as its style is concerned, and not a local imitation. It was struck from the same pair of dies as a camel drachm from the Tell Kalak hoard, now in the collection of the American Numismatic Society (New York), viz. ANS 1956.127.2241 (see **pl. 15, 20** and **20a**). Unfortunately, the

⁷⁴ M. Weder, 'Zu den Arabia-Drachmen Trajans', *GNS* 27, issue 107 (1977), pp. 57–61, p. 59.

⁷⁵ Negev, 'Trajanic drachms', p. 117; Metcalf, 'Tell Kalak', p. 103.

⁷⁶ Weder, 'Arabia-Drachmen', p. 60.

⁷⁷ H.R. Baldus, *MON(eta) URB(is) – ANTIOXIA. Rom und Antiochia als Prägestätten syrischer Tetradrachmen des Philippus Arabs* (Frankfurt/Main, 1969). A few years after the publication of Weder's paper, another very convincing case for the central production of an issue circulating in the east was made: A.M. Burnett – P. Craddock, 'Rome and Alexandria. The minting of Egyptian tetradrachms under Severus Alexander', *ANSMN* 28 (1983), pp. 109–18.

⁷⁸ D. Hollard, 'Le monnayage de la *Legio III Cyrenaica* frappé à Bostra sous Antonin le Pieux', *RN* 160 (2004), pp. 155–73, esp. 158–60.

⁷⁹ D.R. Walker, *The Metrology of the Roman Silver Coinage. Part II: from Nerva to Commodus*. BAR Supplementary Series 22 (Oxford, 1977), p. 109.

⁸⁰ A. Kindler, *The Coinage of Bostra* (Warminster, 1983), p. 96: 'In the collection of the Kadman Numismatic Museum there is one specimen of the camel-type which bears clear traces of overstriking on a Nabataean coin.' For statements in numismatic literature written in Hebrew, according to which there are overstruck camel drachms, see already the reference in Metcalf, 'Tell Kalak', p. 103, n. 47.

remains of the undertype are not as clear as one would wish them to be. It is beyond dispute that the reverse of the Roman provincial coin was overstruck on the obverse of the undertype. In the exergue, beneath the camel, there are distinct remains of the back of a head and the back of a draped bust, turned to the right. Two floating wreath ties are in evidence, to the left of which traces of a letter may be discerned. Apart from that, the side of the coin featuring the camel does not present clear traces of the undertype. In any case, the wreath ties of the undertype have a completely different shape as compared to the wreath ties of Trajan on the coin's obverse, so that a flip-over double-strike can safely be ruled out. On the side of the coin featuring Trajan's portrait, clear traces of the undertype are confined to the area immediately above the emperor's head, at 12 o'clock. The description of the coin on a file card in the Kadman Numismatic Pavilion, generously made available to us by Cecilia Meir, already identified these as 'traces of Nabataean letters'. Drachms of the two last Nabataean kings Malichus II (AD 40–70) and Rabel II (AD 70–106) are obviously the most plausible candidates for being overstruck under Trajan, and the busts of these kings on the obverses of some specimens nicely correspond to the remains of the undertype on the coin published here. Since these drachms were always produced with a die axis of about 12 o'clock, the spot above Trajan's head on our coin corresponds to the right field of the undertype's reverse. On the reverse of the drachms of these two Nabataean kings, portrait busts of their queens are depicted: Shaqilat was the sister-wife of Malichus II and mother of the future king Rabel II; she was depicted both under Malichus and in the early period of her son's rule (regnal years 1–6: **pl. 15, 21**). On Rabel's later silver coins, from year 11 onward, his first wife Gamilat took Shaqilat's place. In the right field of all of these drachms, there are legends reading 'Shaqilat his sister', 'Shaqilat his mother', or 'Gamilat his sister' etc. Unfortunately, it does not seem possible to decipher the remains of the Nabataean letters on the Trajanic coin with confidence. Karl Schmitt-Korte, who kindly examined images of the coin for us, could not find clear matches for the traces of letters in the material known to him. Still, he concluded, regarding the undertype: 'From an overall point of view there is every likelihood that it was a coin of Rabel II and I would not hesitate to put this conclusion forward.'⁸¹ This is consonant with Rachel Barkay's observation that the form of the wreath ties of the undertype corresponds to the ties on drachms of 'Rabel II in his early years'.⁸²

Although it does not seem possible, for the moment, to pinpoint the variety of drachm which was overstruck, this is the first piece of evidence for the use of a Nabataean silver coin as a flan in the production of a Trajanic camel drachm. At this point, it must be remembered that such an overstrike ties in well with what is known about the metallurgy of the camel drachms in general. The two specimens kept in the British Museum were found to contain 49.5% and 49.0% silver respectively; this means that the camel drachms were most probably struck on the very same standard of fineness as the Arabia drachms, which exhibit a completely different

⁸¹ Personal communication, 2 February 2011.

⁸² Personal communication, 13 June 2014.

style.⁸³ The overstrike is also perfectly possible in view of the weight standard of the late Nabataean drachms. In her recent article on the coinage of Rabel II, Rachel Barkay calculated an average of 3.40g for the drachms of this king:⁸⁴ this is exactly the weight of our overstruck camel drachm, and it is precisely in the range of the potential target weight of these coins in general, as demonstrated above.

Up to now, the drachm in the Kadman Numismatic Pavilion is the only camel drachm with distinct remains of an undertype that we know of. However, this discovery of course changes the way one looks at coins of the camel series. In fact, upon close inspection, quite a number of these pieces from the trade seem to display indistinct traces of overstriking especially in their reverse fields: see for example Kricheldorf 26 (19 Feb. 1973), 181; SKA Zurich Monetarium List 59 (Spring 1991), 130 = List 61 (Spring 1994), 131 = Elsen 54 (13 June 1998), 663 (3.26g); Bank Leu 18 (5 May 1977), 325 (3.37g; 6h), ex *SNG* Aulock 6408 (3.36g); Gorny & Mosch 160 (8 Oct. 2007), 2042 = 181 (12 Oct. 2009), 1879 (3.25g).

What are the implications of these observations? As mentioned above, in previous work on the subject, notably by D.R. Walker and Markus Weder, the obvious differences in style between the Arabia- and camel-drachms of Trajan ('Eastern style, vs. 'Rome style') were paralleled with alleged differences in fabric: while no overstruck camel drachms were known to Walker and Weder, overstruck Arabia drachms were, and the use of this production technique was interpreted as being consistent with (or even indicative of) Eastern mintage.⁸⁵ In fact, some of the largest operations of overstriking known from antiquity are to be attributed to mints of the Eastern Mediterranean and took place in the early second century AD: e.g. the recoinage of cistophori under Hadrian in Asia Minor⁸⁶ and the production of the silver coinage of the Jewish rebels under Bar Kochba – as is well known, the latter class of coins is always found overstruck.⁸⁷ By way of contrast, extremely few overstruck imperial coins from the mint of Rome are attested in the High Principate: as far as the Trajanic period is concerned, there is one overstruck dupondius in the Berlin Cabinet,⁸⁸ a sestertius that recently appeared in trade⁸⁹ and a denarius in a newly discovered coin hoard from Side.⁹⁰ All of these imperial coins of Trajan were overstruck on earlier imperial coins of the same emperor.

⁸³ Butcher – Ponting, 'Atomic absorption spectrometry', pp. 316 and 325. Despite the shortcomings of his analytical technique, Walker, *Metrology*, p. 109 had already recognized that 'both series of drachmas were clearly struck on the same standard, and doubtless the non-overstruck ones [i.e. the camel drachms] were produced from Nabataean silver as well as the overstruck ones, without any attempt to purify the silver.'

⁸⁴ Barkay, 'Last Nabataean king', p. 35.

⁸⁵ As for other provincial silver coinages of Trajan which partly seem to be overstruck, mention must be made of one of the few tetradrachms in local style with Greek legends and cistophoric reverse types: Woytek, 'Cistophore', p. 121 and pl. 26, B3.

⁸⁶ W.E. Metcalf, *The Cistophori of Hadrian*. Numismatic Studies 15 (New York, 1980).

⁸⁷ L. Mildenberg (ed. P. Erhart Mottahedeh), *The Coinage of the Bar Kokhba War*. Typos 6 (Aarau – Frankfurt am Main – Salzburg, 1984).

⁸⁸ Published in Woytek, *Reichsprägung*, p. 425 and pl. 96 (*MIR* 474v²).

⁸⁹ Roma Numismatics Ltd, e-sale 7 (26 April 2014), 1104.

⁹⁰ Thanks to Ahmet Tolga Tek for informing us about this piece.

The overstruck coin presented here shows that, in reality, there are camel drachms which combine features hinting at fabrication in Rome with a production technique that seems to have more in common with minting practice in the Near East. It has to be stressed, though, that the preparation of the coins to be used as flans was apparently more careful for the camel drachms than for the Arabia drachms of Trajan, so that the undertype is hardly ever clear on the camel coins. Also, we cannot be sure which percentage of the camel drachms was produced from Nabataean coins, and it is possible that just part of the issue was overstruck.

It may be regarded as commonly acknowledged that the dies for the Trajanic camel drachms (at least for their obverses, which form a coherent style group) were produced by engravers who also cut dies for this ruler's imperial precious metal coins struck at the mint of Rome. They will probably have carved these dies in Rome (unless one wants to assume travelling *sculptores*). Hence, two scenarios can be envisaged. Either the camel drachms were struck from these dies in Rome, and the coins were then shipped to the province – a model which seems to have been in operation in the Roman empire on and off from the Flavian period to the mid-third century and which was particularly characteristic of the period from Vespasian to Trajan⁹¹ – or the dies were shipped to the East, and the camel coins were produced locally.⁹² At first sight, the evidence provided by the overstruck Trajanic camel drachm in the Kadman numismatic Pavilion, as well as related observations on other coins of the series, favour the latter hypothesis: it may seem difficult to imagine that larger quantities of Nabataean drachms were transported from Arabia or Syria to the mint of Rome, overstruck in Rome with Trajanic types, and then shipped back to the Levant. On the other hand, the very specific distribution of die-axes on the camel drachms, discussed above, implies that these coins were manufactured with a striking technique identical to the striking technique of imperial denarii produced at the mint of Rome in the same period. Furthermore, our metrological analysis shows that the target weight of these drachms was identical to the target weight of Trajanic denarii. Thus, if the camel drachms had been struck in the east, Roman mint-workers (or at least instructors) would have had to travel to the east with the dies. Also, recent research suggests that in the period from Nero to Trajan, large quantities of silver coins were sent to the mint of Rome from all over the empire anyway, mainly in order to be recoinced in the form of denarii of the reformed Neronian weight standard (1/96 lb).⁹³ In view of this, we should not rule out the possibility that Nabataean drachms were sent to Rome for recoincing under Trajan, and it is not entirely unthinkable that the Roman mint decided to avoid the process of producing new flans for some of the camel drachms, since the Nabataean standard of fineness had to be adhered to.

⁹¹ Cp. the overview in K. Butcher – B. Woytek, 'The grand scheme of things. Modelling coin production and coin distribution in the Roman Empire in the first and second centuries AD', in B. Woytek (ed.), *Infrastructure and Distribution in Ancient Economies. The Flow of Money, Goods and Services* (Vienna, forthcoming).

⁹² For arguments against the shipping of dies, see, however, Butcher, 'Silver coinage of Roman Arabia', p. 205.

⁹³ K. Butcher – M. Ponting, *The Metallurgy of Roman Silver Coinage. From the Reform of Nero to the Reform of Trajan* (Cambridge, 2015), pp. 456, 459, 691–2, 694 and 699; see also Butcher – Woytek, 'The grand scheme of things' (forthcoming).

To sum up: at present, the place of production of the camel drachms cannot be identified with absolute certainty. It is, on the evidence currently available, more or less a matter of taste which of the options available one prefers. If one decides to attribute these drachms to some mint in Syria or Arabia – despite their Roman style and weight standard as well as the ‘Roman’ striking technique – this of course does not mean that the concept of the central production of Roman provincial coins in the Principate as such has to be abandoned: let us just briefly recall that in some cases, metallurgical data strongly support the hypothesis of a Roman origin of the coins in question.⁹⁴ As in so many other fields, we doubtless have to allow for some flexibility also in the production of Roman provincial coinage. If the camel drachms were really struck in the province from dies produced in Rome, they may be the exception that proves the rule. To us, however, the evidence provided by the die-axes in particular seems to tip the balance in favour of mintage at Rome in this case, too.⁹⁵

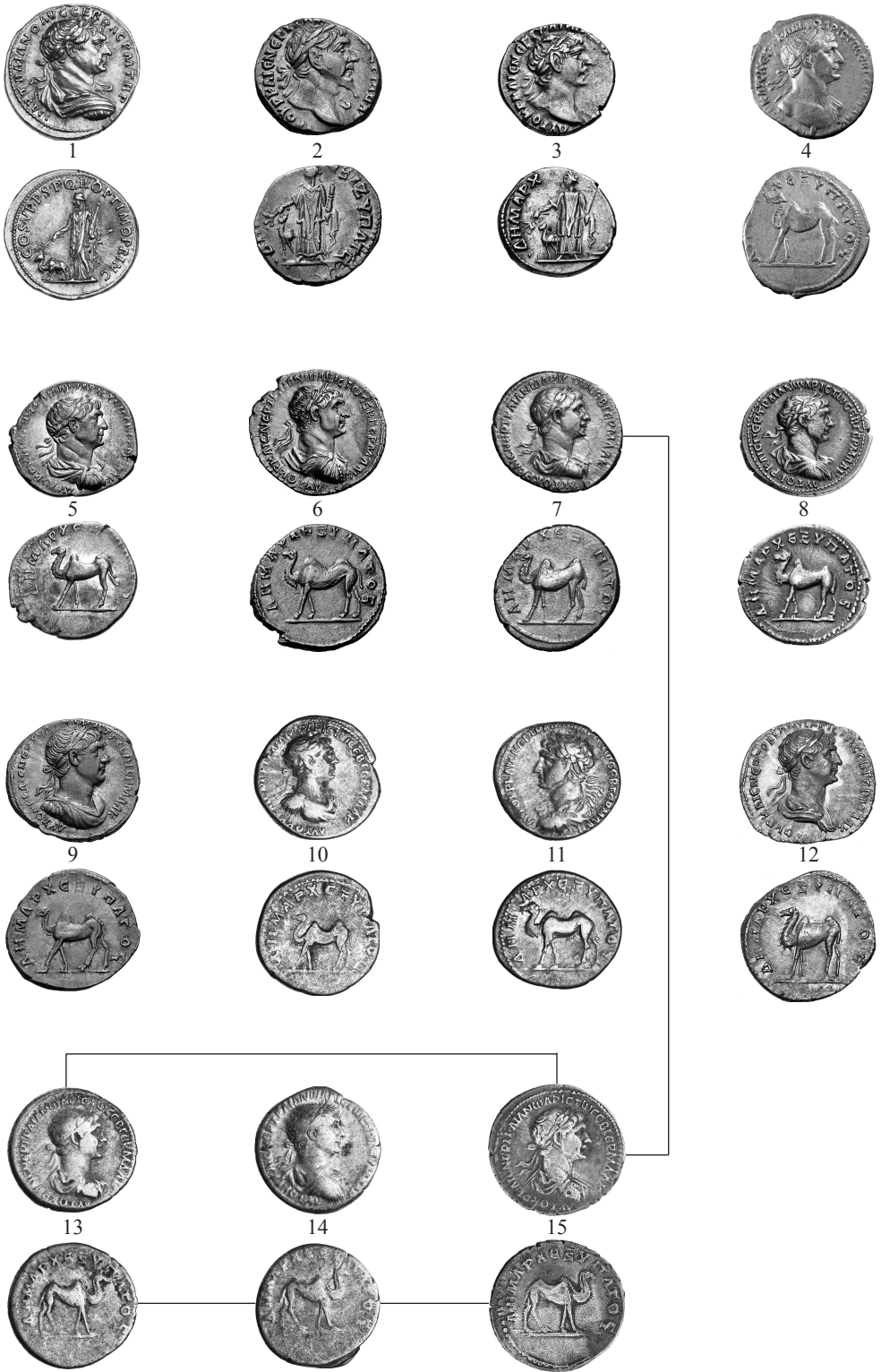
Illustrations

- 1 Trajan, Aureus, *MIR* 290f: Goldberg 46 (The Millennia collection: 26 May 2008), 104.
- 2 Trajan, Arabia drachm (IZ): Lanz 153 (12 Dec. 2011), 443.
- 3 Trajan, Arabia drachm (date off flan): CNG e-auction 296 (13 Feb. 2013), 201.
- 4 Camel drachm A-d. Private coll.
- 5 Camel drachm A-f. CNG Electronic Auction 158 (14 Feb. 2007), 186.
- 6 Camel drachm A-f. NAC 59 (4 Apr. 2011), 983.
- 7 Camel drachm A-f. Roma Numismatics, 21 May 2013, 767.
- 8 Camel drachm A-f. Gorny & Mosch 225 (14 Oct. 2014), 1903.
- 9 Camel drachm A-h1. Peus 409 (25 Apr. 2013), 701.
- 10 Camel drachm A-h2. ANS 1956.127.2250. Photo © ANS, Alan Roche.
- 11 Camel drachm A-m. ANS 1956.127.2251. Photo © ANS, Alan Roche.
- 12 Camel drachm A-v. Goldberg 41 (27 May 2007), 2916.
- 13 Camel drachm B-f. ANS 1956.127.2254. Photo © ANS, Alan Roche.
- 14 Camel drachm B-f. ANS 1956.127.2255. Photo © ANS, Alan Roche.
- 15 Camel drachm B-f. ANS 1992.41.47. Photo © ANS, Alan Roche.
- 16 Imitation of camel drachm A-f. Numismatica (Vienna) 13 (9 Nov. 1976), 314.
- 17 Imitation of camel drachm A-f. Private coll.
- 18 Imitation of Trajanic tetradrachm for Arabia. CNG 37 (20 Oct. 1996), 980.
- 19 Camel drachm A-f. Overstruck. Kadman Numismatic Pavilion of the Eretz Israel Museum, Tel Aviv, inv. K-2712. Photo © Eretz Israel Museum.
- 19a As 19, enlarged.
- 20 Camel drachm A-f. ANS 1956.127.2241. Photo © ANS, Alan Roche.
- 20a As 20, enlarged.
- 21 Rabel II, drachm, regnal year 3. Barkay, *NC* 2014, p. 41, no. 6 (pl. 6, no. 6). Private collection. Photo © K. Butcher.

⁹⁴ See I. Carradice – M. Cowell, ‘The minting of Roman Imperial bronze coins for circulation in the East: Vespasian to Trajan’, *NC* 147 (1987), pp. 26–50; K. Butcher – M. Ponting, ‘Rome and the East. Production of Roman Provincial silver coinage for Caesarea in Cappadocia under Vespasian, AD 69–79’, *OJA* 14 (1995), pp. 63–77.

⁹⁵ The survey of die-axes of Syrian civic coinage in Butcher, *Coinage in Roman Syria*, p. 295, shows that 12 o’clock die-axes were the norm in Roman Syria until the mid second century, with axes oriented towards 6 o’clock being rare.

PLATE 14



WOYTEK and BUTCHER, THE CAMEL DRACHMS OF TRAJAN IN CONTEXT (1)



16



17



18



19



19a (2x)



20



20a (2x)



21



