Late Ptolemaic Capitation Taxes and the Poll Tax in Roman Egypt

Andrew Monson New York University

Abstract

The Roman census and poll tax (laographia) in Egypt are regarded as an Augustan innovation and a poignant symbol of imperial domination and fiscal exploitation. The argument of S.L. Wallace in 1938 for continuity from the Ptolemaic period has failed to win many adherents. Yet the Ptolemaic evidence cannot be so easily dismissed. One antecedent was the salt tax of the third century BCE, but its rate was far lower than the Roman laographia and it disappears in the second century BCE. The continuity from the capitation taxes attested under Ptolemy XII Auletes and Cleopatra VII is much stronger. One source that is often overlooked is a group of tax receipts from Karanis, which potentially shed light on the transition to the Augustan period in the Arsinoite nome. The Roman administration substantially reformed the capitation taxes but did not create a heavier fiscal burden on the taxpayers.

The publication of two closely related papyri (P.Tebt. 1.103 and 189) from the late Ptolemaic period that mention a laographia opened a debate more than a century ago about whether the Augustan census and poll tax were inherited from the Ptolemies. Wilcken had assumed that the Romans introduced these institutions and regarded the passage in 3 Maccabees (2.28), which mentions a poll tax called laographia under Ptolemy IV, as an anachronism. While Grenfell and Hunt initially confirmed his hypothesis, they revised their position along with Wilcken himself in light of the texts in P.Tebt. 1. Wallace went further, arguing that the Ptolemies had instituted a seven-year census cycle to

---

1 O.Wilck. 1, pp. 230-249, esp. 245, 435-455; cf. n. 146 below.
collect a general poll tax in Egypt called the syntaxis. Tcherikover and Evans subsequently disputed Wallace's claim. Their view was key to undermining what Lewis later derided as the “illusory half-truth” of Ptolemaic-Roman continuity: “Whatever may be true about the still-debated Ptolemaic syntaxis, it is simply a fact that the poll tax called laographia was a Roman innovation.”

Previous arguments for discontinuity have often hinged on the observation that the term laographia was not used in the sense of a poll tax during the Ptolemaic period or on the distinction, founded on specious definitions, between a “poll tax” and a “capitation charge.” Wallace identified as capitation taxes what tax registers in Roman Egypt call “distributed” taxes (μερισμοι), which he characterized as “a specific sum divided by the number of persons liable ... to obtain the rate,” in contrast to the Roman poll tax. However, some texts classify the laographia as one of the distributed taxes and some attributed by Wallace to this category, such as the dike tax, bath tax, and guard tax, were assessed like the laographia at uniform rates no matter how many taxpayers there were. Tcherikover maintained that a proper poll tax must be “a tax of a general, not of a local character ... and not [imposed] in order to maintain a certain institution.” Yet this distinction is artificial and differs from ordinary usage. The main characteristic of any capitation tax is that it is levied on persons at a standard rate, independently of their income, property, consumption,

---

3 S.L. Wallace, “Census and Poll-Tax in Ptolemaic Egypt,” AJPh 59 (1938) 418-442; the only recent scholar to favor this view is L. Capponi, Augustan Egypt: The Creation of a Roman Province (London 2005) 140-141.


7 S.L. Wallace, Taxation in Egypt from Augustus to Diocletian (Princeton 1938) 134.

8 Wallace knew only P.Col. 2.1.5 (134 CE, Arsinoite) for the expression λαογ(ραφίας) καὶ ἄλλω(ν) μερισμ(ῶν), but cf. BGU 9.1891.5 (133 CE, Arsinoite) and O.Lund 5.3 (137 CE, Theban). For the fixed rates of the dike, bath, and guard taxes, see Wallace (n. 7) 140-143, 146-148, 155-159.

9 Tcherikover (n. 4) 183; Margaret Thatcher’s “community charge” in the UK was considered a poll tax, when it was introduced in 1989 to fund local government services; in American English poll tax has come to mean a tax levied as a requirement for voting, so capitation tax is the equivalent of British poll tax.
or occupation, and typically according to some kind of census.\textsuperscript{10} This was true of the late Ptolemaic capitation taxes, whose purpose was not necessarily to fund specific institutions and whose relationship to the Roman \emph{laographia} is closer than scholars currently admit.

Let us not downplay the importance of Augustus’s fiscal reforms. Rather than a single poll tax, we find several capitation taxes levied on adult males in the late Ptolemaic period with confusing names whose rates seem to have been assigned locally, in some cases by dividing the village’s tax liability among the inhabitants. These taxes disappear from our sources in the early Roman period, suggesting that the Augustan administration abolished or subsumed them under the new \emph{laographia}. The assessment of the rates, the collection of installments, and the writing of receipts were aspects of the process that arguably underwent the most significant changes. To highlight these differences but also to adhere to scholarly conventions, the term \“poll tax\” is reserved in this article for that of the Roman period. However, one should not mistake it for a technical term corresponding to a distinction discernable in the papyrological evidence. There are, on the contrary, significant continuities between the local capitation taxes of the late Ptolemaic period and the Roman poll tax, which will receive greater emphasis below.

The most important point on which this study departs from earlier ones concerns the economic impact of the Augustan reforms. Since Rostovtzeff’s vivid characterization of Roman exploitation in Egypt, the \emph{laographia} has served as the principal evidence for a high-tax regime compared with that under the Ptolemaic monarchy. Strabo’s comment (17.1.53) that the Theban revolt in 30/29 BCE broke out \“because of the taxes\” (διὰ τῶν φόρων) has been read as an allusion to the introduction of the poll tax.\textsuperscript{11} Lewis writes, \“behind this laconic remark must lurk the fact that for the Egyptian peasants the advent of the Augustan regime meant higher taxes, or more efficient collection than under the last Ptolemies, or both.\”\textsuperscript{12} Rathbone assumes that Ptolemaic capitation taxes continued to be collected in the Roman period: \“The novelty was Octavian’s additional imposition of an imperial tribute on the whole population in the form of a substantial annual poll-tax.\”\textsuperscript{13} The evidence

\begin{footnotesize}
\textsuperscript{10} Wilcken in \textit{O.Wilck.} 1, p. 258, defines the \textit{μερισμοὶ} as \“Abgaben ..., die zu gleichen Teilen auf die Köpfe der Bevölkerung repartirt waren\” and the \textit{Kopfsteuer} (p. 232) as \“eine Abgabe, die Kopf für Kopf in gleicher Höhe erhoben wird.\”

\textsuperscript{11} M.I. Rostovtzeff, \“Roman Exploitation of Egypt in the First Century A.D.,\” \textit{Journal of Economic and Business History} 1 (1929) 346; Lewis (n. 5) 7; Rathbone (n. 6) 88; cf. already \textit{O.Wilck.} 1, p. 248.

\textsuperscript{12} Lewis (n. 5) 7.

\textsuperscript{13} Rathbone (n. 6) 98.
\end{footnotesize}
for late Ptolemaic capitation taxes reviewed here casts significant doubts on their interpretation of the laographia as a heavy new fiscal burden.

The Ptolemaic laographia

The existence of a Ptolemaic census, though not a seven-year cycle as Wallace envisioned, ought to be uncontroversial.14 There are many examples in both Greek and Demotic of house-by-house population registers in the third and second century BCE. Some scholars have suggested that the Demotic term spsp means “census,” but the evidence is sparse and ambiguous.15 Prior to the Theogonis papyri of the first century BCE there is just one Ptolemaic attestation of the Greek term laographia, where it means a population register or census. The reference is from a fragmentary account of money taxes containing figures as high as 8, 14, and 27 bronze talents: “and the (taxes?) based on the census.”16 In the early Ptolemaic period, the house-to-house census was used to assess the salt tax, which was in effect a poll tax.17 It fell on both males and females, unlike the poll taxes in the late Ptolemaic and Roman period. The house-by-house census adds up women and men separately since they paid different rates (Table 1), with teachers, policemen, athletic victors, Dionysiac artists, and later others being exempt. Converted into wheat, these rates were relatively low and declined sharply over time. It is often supposed that the disappearance of the salt tax in the early second century BCE was due to its incorporation into the late Ptolemaic syntaxis and then as a component of the syntaximon into the poll tax in the Roman period.18


16 *P.Ryl.* 4.667.ii.4 (second century BCE?): καὶ τὰ ἐγ λαογραφ[ίας].


Table 1: Annual Salt-Tax Rates in Early Ptolemaic Egypt

<table>
<thead>
<tr>
<th>Period</th>
<th>Male Rate</th>
<th>Wheat equiv.*</th>
<th>Female Rate</th>
<th>Wheat equiv.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate A (263-254)</td>
<td>1 dr. 3 ob.</td>
<td>0.75 art.</td>
<td>1 dr.</td>
<td>0.5 art.</td>
</tr>
<tr>
<td>Rate B (254-231)</td>
<td>1 dr.</td>
<td>0.5 art.</td>
<td>3 ob.</td>
<td>0.25 art.</td>
</tr>
<tr>
<td>Rate C (243-217)</td>
<td>4 ob.</td>
<td>0.33 art.</td>
<td>1 ob. 4 ch.</td>
<td>0.13 art.</td>
</tr>
</tbody>
</table>

* The conversion rate of 2 dr./art. is the median price attested in Egypt ca. 270-210 BCE.19

The two papyri mentioning a laographia for the assessment of the tax called syntaxis come from the village of Theogonis in the southwest Arsinoite nome and are dated to Thoth of year 21, probably of Ptolemy XII (61 BCE).20 Each begins with a similar heading and contains a long list of names. In one the heading reads: “Year 21, Thoth, census of Theogonis by person of those who pay syntaxis.”21 In the other text, it is more elaborate: ἔτους κα [Θωὺθ] ἵ λαογρ(αφία) Θεογο(νίδος) τῶν τε[τελε]κότων τὴν σύνταξ[ιν κ]αὶ τὸ{ν} ἐπιστατικ(ὸν) ἐν τῷ κ [[(ἔτει) καθὼς ὁ λογευτής, “Year 21 [Thoth] 10th, census of Theogonis of those who have paid the syntaxis and the epistatikon in year 20 according to the tax collector.”22 The crux is line 3, where Hoogendijk proposes to read instead, σύνταξ[ιν εἰ]ς τὸ{ν} ἐπιστατικ(ὸν) and to translate, “contribution for the epistatikon-tax” (Figure 1).23

19 The median is the same whether derived from the list of K. Maresch, Bronze und Silber. Papyrologische Beiträge zur Geschichte der Währung im ptolemäischen und römischen Ägypten bis zum 2. Jahrhundert n. Chr. (Opladen 1996) 181, or from that of H. Cadell and G. Le Rider, Prix du blé et numéraire dans l’Égypte lagide de 305 à 173 (Brussels 1997) 28-29.

20 The reign of Ptolemy X (94 BCE) is also possible but Grenfell and Hunt, P.Tebt. 1.103 intr., pp. 446-447, slightly favor the later date; cf. F.A.J. Hoogendijk, “The Practice of Taxation in Three Late Ptolemaic Papyri,” Pap.Congr. XXV, p. 313. The later dating is supported by Demotic papyri from the same batch of crocodile mummies, which probably date to the reign of Ptolemy XII; see B.P. Muhs, “A Late Ptolemaic Grapheion Archive in Berkeley,” Pap.Congr. XXV, pp. 581-582.

21 P.Tebt. 1.103.1-2: (ἔτους) κα Θωὖθ, λαογρ(αφία) Θεογο(νίδος) κατ’ ἀνδρα τελοῦ[ν]των σύνταξιν.

22 P.Tebt. 1.189.1-4.

23 Hoogendijk (n. 20) 314-315.
There are certainly traces of ink after the putative sigma, which anyway looks more like the end of an alpha (cf. the sigma and alpha in the words syntaxis and epistatikon), explaining why Grenfell and Hunt read alpha iota. Moreover, there are receipts for both syntaxis and epistatikon among the contemporary ostraka from Karanis discussed below. In two of the bilingual texts, syntaxis appears in Demotic as a loan-word, where it is clearly the name of the tax rather than a word meaning contribution. These receipts seem to imply two different taxes but, as we shall see, the similarity of the payments makes one wonder if they could refer to the same tax. The other Theogonis text quoted above (P.Tebt. 1.103.1-2) demonstrates that one could refer to the taxes by the term syntaxis alone.

The taxpayers in the lists are exclusively male. In P.Tebt. 1.189 there are 272 names, in a few cases with a professional title, followed at the end of the list by an account calculating the amount due: 263 men (ἀνδρεῖς) owed 900 drachmas each; 8 men paid 750 drachmas; and one flute player known as “good Kephalion” paid just 500 drachmas. If this were for the entire year, then the rates would be comparable to the salt tax but quite low relative to the Roman laographia. In the course of preparing a new edition, Hoogendijk has shown that Grenfell and Hunt’s transcription is incomplete. Below column 10 a scribe wrote in a more cursive hand an account of sums due in the following month, Phaophi. Four men had been added to the list and the rates were different: 267 men paid 650 drachmas each; 7 men 350 drachmas; and Kephalion again 500 drachmas. Consequently, she argues that the tax was paid monthly as a kind of poll tax.

Extrapolating from figures for the months of Thoth and Phaophi yields the annual estimates shown in Table 2. Now that the newly read column provides independent evidence for payments in two consecutive months, it is worth

---

24 Roberto Mascellari kindly checked the original in Berkeley and prefers καὶ over εἶλος (personal communication, 22 February 2013).
26 Hoogendijk (n. 20) 315, 317; monthly payments had already been assumed by Wallace (n. 3) 435-436 and Préaux (n. 4) 385; Rathbone (n. 6) 91-92, on the other hand, believes that the rate in Thoth was for the full year and compares it to the earlier salt tax.
remembering that residents of the Arsinoite nome in the Roman period, unlike those of other nomes, often paid the poll tax in eleven monthly installments. The rate in Theogonis admittedly varied, so it is conceivable that taxpayers paid lower rates as the year progressed or paid nothing at all in some months; it is merely a hypothesis that payments continued on the same scale throughout the year. Yet one would not expect an annual tax to be paid in full in the autumn, months after the harvest. Moreover, the hypothesis accords with the tax rates in the Herakleopolite nome (cf. Table 5 below). Similar taxes were imposed there on villages as an annual lump sum, whose tax collectors distributed the burden among the inhabitants at standard rates per person. It is uncertain whether that was also the case in Theogonis. Apparently only those residing in the village each month paid the tax there, which led to fluctuations in revenue that could have caused problems similar to those described in the Herakleopolite petitions.

Table 2: The Capitation Tax in Late Ptolemaic Theogonis (P’Tebt. 1.189)

<table>
<thead>
<tr>
<th>Month</th>
<th>Total revenue*</th>
<th>Stand. rate</th>
<th>Wheat equiv.†</th>
<th>Annual est.</th>
<th>Wheat equiv.†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoth</td>
<td>41 tal. 2850 dr. 900 dr.</td>
<td>0.6 art.</td>
<td>1 tal. 4800 dr. 7.2 art.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phaophi</td>
<td>29 tal. 4250 dr. 650 dr.</td>
<td>0.4 art.</td>
<td>1 tal. 1800 dr. 5.2 art.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoth +</td>
<td>71 tal. 1100 dr. 1550 dr.</td>
<td>1 art.</td>
<td>1 tal. 3300 dr. 6 art.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The total due from all inhabitants at both the standard and reduced rates.
† The conversion rate of 1500 dr./art. based on P’Tebt. 1.121.140-141.

---

27 See note 135 below; Wallace (n. 3) 435-436 argued on the basis of the Roman practice that P’Tebt. 1.189 records monthly rates, which Rathbone (n. 6) 91, n. 33, criticizes as circular reasoning.
28 P’Tebt. 1.121.102-137 records the new income from thirteen men who just enrolled that month at 650 dr. each (Φαῶφι προσγι(νεται), lines 103-117) then subtracts 550 dr. for “exempted persons” (διάφορον ἀπολυομέ(ναν), lines 118-119) making 1 tal. 900 dr. From this increase in revenue, a decrease is subtracted of 1 tal. 200 dr. because of the departure of ten men from the village (ἀπελελυθό(να), lines 125-137), who thereby ceased to owe the tax in Theogonis; cf. BGU 8.1843 and 1846 discussed below.
29 P’Tebt. 1.189.207 and 276 with Hoogendijk (n. 20) 317 and 319, using her line numbering; the extra 1700 dr. added in Phaophi at P’Tebt. 1.189.273 is explained by P’Tebt. 1.121.102-137 as the revenue from thirteen new taxpayers minus the lost revenue from ten persons who left the village (see n. 28).
30 This is relatively high: the barley price of 720 dr./art. in P’Tebt. 1.189 verso descr. converts to 1200 dr./art. wheat at the usual 5:3 ratio, which is the median price ca. 130-30 BCE; Maresch (n. 19) 182.
Valuable information can be derived from the accompanying accounts of the same year, *P. Tebt. 1.121* and *189 verso*, where the official or tax farmer balances his expenses against the monthly tax revenue. *P. Tebt. 1.121* lists all expenses from Thoth 24th, where the account begins, to Phaophi 1st, after which a new section with income due in Phaophi begins. These expenses add up to 41 talents 1080 drachmas, a sum that corresponds closely to the total revenue due in the month of Thoth as given in *P. Tebt. 1.189 recto* (shown in Table 2), perhaps indicating a small surplus.31 *P. Tebt. 1.189 verso* continues the expense account through the month of Phaophi, where Hoogendijk has discovered that the total of expenses for that month, 32 talents 300 drachmas, is balanced against the total revenue due in Phaophi given in *P. Tebt. 1.189 recto*, namely, 29 talents 4250 drachmas. It shows a remainder of 2 talents 2100 drachmas, which she explains as a loss suffered by the tax farmer.32 The nature of these monthly expense accounts, which give us no reason to suspect that they were not kept for the rest of the year, adds further credibility to the notion that the tax was charged monthly.33

The accounts even allow us to determine how much tax revenue was spent locally and how much was transferred to the central administration. Since the expenses for Thoth are complete, we know that 74% of the tax revenue was transferred to the *polis* and 26% was spent locally.34 “To the *polis*” probably means to the royal bank in the nome capital, Krokodilopolis, but it could conceivably refer to Alexandria. Most of the local expenses seem to have been administrative, including the costs of donkey drivers, by which the money was transported, and armed guards (e.g. μάχιμοι) to protect them. Payments to the agents or guards of higher-level officials are common, especially those of the *oikonomos*, the chief tax official of the nome.35 There is an expense for the transport and provisions of officials visiting Theogonis on behalf of the nome *strategos*, who oversaw the census: “27th: to the agents of the *strategos* who came because of the census (*laographia*): 4 silver drachmas at 1600 (drach-

---

31 *P. Tebt. 1.121*: 18 tal. 3350 dr. (line 20) + 1 tal. 1120 dr. (line 40) + 12 tal. 2250 dr. (line 59) + 3 tal. 1080 dr. (lines 60-80) + 6 tal. 340 dr. (line 101) = 41 tal. 2180 dr.
32 *P. Tebt. 1.189 verso* ll. 336-337 and *recto* ll. 276-277 with Hoogendijk (n. 20) 319, using her line numbering.
33 Similar monthly accounts that balance tax revenue against expenses were kept by the keepers of the *γραφεῖον* archive identified by Muhs (n. 20) 583-584, e.g. *P. Tebt. 1.140* descr. (72 BCE) and UC inv. 1731 and 2489 (unpublished).
34 *P. Tebt. 1.121*: transfers (lines 6, 48, 82) = 30 tal. 4340 dr.; all expenses (see n. 31) = 41 tal. 2180 dr.
35 *P. Tebt. 1.121.34, 43, 59, and 83.*
mas/stater)."\textsuperscript{36} One entry on Phaophi 1st records a payment of 1 talent 3000 drachmas to the “tax collectors” (λογευταῖς), which seems to suggest that they were paid a monthly salary.\textsuperscript{37} Two expenditures, 600 drachmas for a priest of Tebtynis and 1 talent 500 drachmas for the god-bearers of Souchos, had ostensibly a religious purpose.\textsuperscript{38}

The transfers to the \textit{polis} ought to provide further clues about the nature of the tax. \textit{P.Te bt.} 1.121 designates the first of these in Thoth as the “payment (διαγραφή) of the superintendence (ἐπιστατεία) and chief of police (ἀρχιφυλακίτεια) on the 20th to the \textit{polis}.” It is followed by a second payment four days later on the 24th of Thoth. The total 260 silver drachmas, equated to 17 bronze talents 2000 drachmas.\textsuperscript{39} Subsequent large payments in Thoth designated only as διαγραφή were presumably the same type of transfer to the \textit{polis}.\textsuperscript{40}

Similarly, the account of Phaophi in \textit{P.Te bt.} 1.189 \textit{verso} records an expenditure of one bronze talent paid “to those who have come because of the superintendence (ἐπιστατεία) for the second installment (ἀναφορά).”\textsuperscript{41} Another payment in Phaophi to the \textit{polis} of 12 silver drachmas or 4250 bronze drachmas makes no reference to the ἐπιστατεία.\textsuperscript{42} The use of this term admittedly lends support to Hoogendijk’s identification of the whole tax with the \textit{epistiatikon} despite the doubts raised above about her reading.\textsuperscript{43} In any case, the tax cannot have been the salary for the village ἐπιστάτης or ἀρχιφυλακίτης, as has sometimes been suggested on analogy with the scribal tax (γραμματικόν), because the funds were transferred at least as far as Krokodilopolis if not further.\textsuperscript{44} Alternatively, one may suppose that ἐπιστατεία and ἀρχιφυλακίτεια refer to the office of the nome-level police superintendent (ἐπιστάτης τῶν φυλακιτῶν) but the amounts are simply too large for any person’s salary.

If the hypothesis of monthly payments is correct, then the revenue was so great that some share of the money transferred out of the village was probably sent to Alexandria. Even if it stayed in the nome, it would be credited to the

\textsuperscript{36} P. Te bt. 1.121.60-61: κζ. τοῖς [π]αρὰ τοῦ στρα(τηγοῦ) ἐληλυθό(σι) χάριν λαογρ(αφίας) ἀρ[γ]υ(ρίου) (δραχμαί) δ Ἀχ; Hoogendijk (n. 20) 316.

\textsuperscript{37} P. Te bt. 1.121.94.

\textsuperscript{38} E. g. P. Te bt. 1.121.67: [ἱ]ερεῖ Τεβτύνεως χ; line 76: θεαγῶν Σούχου (τάλαντον) α φ.

\textsuperscript{39} P. Te bt. 1.121.2-6; the account is similar to P. Te bt. 1.179 descr., which requires further study.

\textsuperscript{40} P. Te bt. 1.121.48 and 82: 11 tal. on the 25th and 2 tal. 320 dr. on the 28th.

\textsuperscript{41} P. Te bt. 1.189 descr.: τοῖς ἥκοσι χάριν ἐπιστατή(ας) τής β ἀναφοράς (τάλαντον) α.

\textsuperscript{42} P. Te bt. 1.189 descr.

\textsuperscript{43} Hoogendijk (n. 20) 315.

\textsuperscript{44} Préaux (n. 4) 385; Hoogendijk (n. 20) 315; cf. P. Te bt. 1.97 intr., pp. 426-428; Wallace (n. 7) 70, 279.
central administration at the royal bank for its general expenses. Extrapolating from Thoth and Phaophi, the annual revenue would have been about 5695 silver drachmas from a village with approximately 280 adult males, averaging 20 silver drachmas each.\textsuperscript{45} Given a total population of 30,000-70,000 adult males in the Arsinoite nome and ignoring tax-exempt groups, the government could expect 100-230 silver talents. Hypothetically, 1-2 million men in Egypt paying such a tax would generate revenue of 3300-6700 silver talents.\textsuperscript{46} Even on the minimalist assumption that it was paid only in the months of Thoth and Phaophi that are preserved in the accounts, 949 silver drachmas or 3 drachmas 2 obols per person, the nome-level revenue from this capitation tax would be around 17-40 silver talents, the equivalent of 40,000-50,000 artabai of wheat.\textsuperscript{47} That alone is theoretically enough to pay a generous salary to 200-400 of the highest-ranking nome officials and their entire staffs, so the idea that the tax's purpose might have been to pay officials' salaries must be abandoned entirely.\textsuperscript{48} Either scenario assumes that the administration was able to collect the tax from the entire adult male population, which seems overly optimistic. Many would surely have escaped the census or the tax collector in Theogonis and elsewhere. The census reforms of Augustus made collection easier to enforce than it was for the Ptolemies, so the Romans could potentially lower the tax rate and still gain revenue.

\textsuperscript{45} Calculation: 71 tal. 1100 dr. (Thoth + Phaophi) × 6 = 427 tal. 600 dr. annually = 5695 silver dr. at the stater price of 1800 bronze dr. used in this text, which is also the median for the late Ptolemaic period, Maresch (n. 19) 196-198. After several adjustments, the number of taxpayers in Theogonis was 281 men in Thoth and 283 men in Phaophi, Hoogendijk (n. 20) 316-317; cf. the 20 dr. rate for κάτοικοι in BGU 8.1779 discussed below.

\textsuperscript{46} For the population estimates, see A. Monson, \textit{From the Ptolemies to the Romans} (Cambridge 2012) 37-40; cf. Ptolemy XII's alleged revenue of 12,500 tal. (Strabo 18.1.13) or 6,000 tal. (Diod.Sic. 17.52.6).

\textsuperscript{47} Calculation: 71 tal. 1100 dr. ÷ 1800 dr./stater = 949 silver dr.; the median wheat price \textit{ca.} 130-30 BCE was 1200 dr. (= 2.67 silver drachmas); Maresch (n. 19) 182, 196-198.

\textsuperscript{48} Kleon, the chief engineer of the Arsinoite nome in the mid-third century BCE, was paid 300 silver dr. and a grain allowance plus another 300 silver dr., 12 1/2 \textit{art.} of wheat, and 25 \textit{art.} of barley for his staff; \textit{P.Petr.} 2.13 (17) (255/254 BCE); cf. T. Reekmans, “Le salaire de Cléon,” \textit{APF} 20 (1970) 17-24; for the suggestion that this was the purpose of the \textit{epistatikon}, see above, n. 44.
Capitation-tax receipts from Karanis

A group of receipts for sitonion, syntaxis, and epistatikon from Karanis may shed light on the transition from the Ptolemaic to the Roman period.49 An even larger number of the receipts do not specify the name of the tax but are so similar to the others that they must refer to one of these taxes, probably syntaxis or epistatikon.50 Uncertainty about the dating has always presented an obstacle to their historical interpretation. While Youtie admitted that at least some may be late Ptolemaic, he strongly suspected that the corpus as a whole is from the reign of Augustus.51 Only three receipts are firmly dated, all of them to Augustus. Most of the texts give the payments in large bronze-decimal drachmas, while a number of others employ the silver-standard with its single drachma and obol units, including the three dated to Augustus.

One indication of an earlier dating for some of the receipts that Youtie did not consider is that the term sitonion, “grain levy,” appears exclusively in the Ptolemaic period in connection with soldiers’ pay.52 It is attested as the name of a capitation tax in the Herakleopolite petition (BGU 8.1846) from the reign of Cleopatra VII discussed in the next section. It is therefore likely that the twelve receipts for this tax, which are denominated in bronze-decimal units, date to the same period. This accords with Youtie’s first-century BCE appraisal of their handwriting.53 One of the people who paid the sitonion also received receipts in bronze-decimal units for epistatikon and for an unspecified tax, so at least some of these other receipts were contemporary.54 Moreover, the receipts for syntaxis and epistatikon have an obvious parallel in the late Ptolemaic tax registers from Theogonis. In one receipt, the taxpayer’s profession is given as a “guest” (ξένος) mender. The technical term ξένος is used in another petition from the Herakleopolite nome under Cleopatra VII to designate a person who

---

49 For a more detailed study of these texts, see Monson (n. 25).
50 Thus H.C Youtie, “Notes on O.Mich. I,” TAPA 71 (1940) 643-644 (examples g and h).
53 O.Mich. 2.715-726.
54 O.Mich. 2.741 (epistatikon), 765 (unspecified).
paid capitation taxes away from his original home; the term even appears in the Theogonis tax registers.\(^{55}\)

Since it will be necessary to discuss the Roman poll tax or \textit{laographia} in more detail below, it suffices to note here that this tax was often called \textit{syntaxis} in the Arsinoite nome, where it was usually bundled with smaller charges into a tax called \textit{syntaximon} paid in monthly installments.\(^{56}\) Tcherikover was the first to discuss whether the Karanis receipts constituted evidence for the Roman poll tax. Assuming that all ostraka were from the reign of Augustus, he regarded the multiple irregular installments denominated in bronze-decimal units as uncharacteristic of the poll tax. With due caution, given the uncertain dating, he concluded that the receipts merely showed the continuation of Ptolemaic capitation taxes into the Augustan period, not evidence for the poll tax, an interpretation that subsequent scholars have followed.\(^{57}\) The unstated implication is that these capitation taxes co-existed with the new Augustan poll tax, for what must have been an enormous fiscal burden.\(^{58}\) Yet why should there be “Ptolemaic” \textit{syntaxis} receipts from Augustan Karanis but not a single receipt for the Roman poll tax, especially when the latter was also called \textit{syntaxis}\(^{55}\)?

The key to the dating and historical interpretation is arguably the use of bronze-decimal units versus the silver standard for payments in the receipts. The decimal units represent Ptolemaic denominations that disappeared during the Augustan period except as a unit of account. The last dated text with a payment on the old system is a receipt for an obscure “chief-huntsman tax” from 10 CE. However, as Wilcken observed, the silver standard began to replace the old system from the beginning of the Roman period.\(^{59}\) Out of 266 texts

\(^{55}\) O.Mich. 2.712; see n. 98 below.

\(^{56}\) See notes 134-135 below.

\(^{57}\) Tcherikover (n. 4) 188-189; Evans (n. 4) 261-262; Rathbone (n. 6) 91, n. 33, dates the \textit{syntaxis} receipts O.Mich. 2.709-714 to the reigns of Ptolemy XII or Cleopatra VII on the grounds that the payments are too small for the Roman poll tax; cf. Capponi (n. 3) 139, 238, n. 105, who cites the Karanis \textit{syntaxis} receipts as evidence for the poll tax without addressing Tcherikover’s or Rathbone’s counter-arguments.

\(^{58}\) Cf. Rathbone (n. 6) 98, quoted above at n. 12, and similarly D.W. Rathbone, review of L. Capponi, \textit{Augustan Egypt}, CR 57 (2007) 489: “C.’s revisionist suggestion that the Roman poll-tax was not a novelty but a combination of Ptolemaic capitation taxes ... is implausible because, as she notes, the \textit{huikê}, \textit{chômatikon}, and so on all continued as separate levies.”

dated 30 BCE-10 CE that refer to drachmas, I managed to find only fourteen that certainly use Ptolemaic bronze-decimal units, of which maybe six relate to taxes.60 The Roman poll tax, by contrast, was denominated in silver from as early as there is evidence for it.61 Thus the Karanis receipts with payments in bronze-decimal units must at least be earlier than 10 CE and chances are that they date to the late Ptolemaic period.

Furthermore, the receipts denominated in bronze decimals display a different pattern of payments from the silver-standard receipts. What Tcherikover found to be inconsistent with the Roman poll tax was that some texts record numerous small installments within a single month. For example, according to one receipt for the syntaxis of regnal year 11, the taxpayer paid 100 bronze drachmas on Hathyr 14th, 80 bronze drachmas on Hathyr 23rd, and 120 bronze drachmas on Hathyr 27th.62 The most extreme examples of multiple small payments show twelve or sixteen installments in the course of two months on a single ostrakon.63 Of the forty-two bronze-decimal receipts for syntaxis, epistatikon, and unspecified taxes, sixteen show two or more payments (38%).64 Only six of thirty-four receipts on the silver standard (18%) record two payments and none more than two, though four more mention a span of dates for a single amount.65

At an exchange rate of about 400 bronze drachmas to one silver drachma, the bronze-decimal payments have no parallel in poll tax receipts of the Ro-

60 Taxes: P.Tebt. 2.345 (28? BCE), land-tax register; O.Bodl. 2.951 (21? BCE), date-palm receipt; mason-tax receipt; SB 26.16543 (2 BCE), receipt for τιμ(ῆς(?)) or πυρ(οῦ); O.Leid. 42 (ca. 7 CE), bath-tax receipt; O.Wilck. 2.1545 (10 CE), chief-huntsman receipt. Other references: P.Oxy. 78.5166 (ca. 29-20 BCE); BGU 4.1205 (28 BCE); BGU 4.1194 (27 BCE); P.Fay. 101 (ca. 18 BCE); P.Fay. 44 (16? BCE), P.Amst. 1.41 (10 BCE); PSI 10.1099 (6/5 BCE); SB 12.10942 (4 BCE); O.Mich. 1.17 (4 BCE); cf. West and Johnson (n. 59) 17, nn. 19-20, and A. Gara, Prosdiaphomena e circolazione monetaria (Milan 1976) 16-17.

61 E.g. O.Bodl. 2.407 (23 BCE), see below for further examples of Augustan poll-tax receipts in silver.

62 O.Mich. 2.710.


64 By type: syntaxis 4/12, epistatikon 2/5, unspecified 10/25; none of the sitonion receipts illustrate this but only because the partial-month payments were demonstrably recorded on separate ostraka.

65 By type: syntaxis 1/13, epistatikon 0/11, unspecified 5/10. However, if one includes those with a span of dates, the percentage (34%) is similar to the bronze-decimal receipts: syntaxis 3/13, epistatikon 1/11, unspecified 6/10.
man period or in the silver-standard receipts for the same taxes from Karanis.\(^{66}\) Some installments are as low as 40 drachmas, equivalent to roughly one half of an obol. Even adding the installments together, the median payment per bronze-decimal receipt, 240 drachmas (see Table 3), would be less than one drachma. This low median is largely due to the fact that many small payments within the same month were often recorded on separate ostraka, which is clearly evident in the *sitonion* receipts of year 17 issued to a single person.\(^{67}\) By contrast, one finds far less variation in the amounts paid in the silver-standard receipts, so there is no reason to suppose that additional payments were made in the same month and recorded elsewhere. These observations underscore the likelihood that the two groups are not contemporary.

By estimating the annual rates and converting the money into wheat, we can compare the Karanis receipts with other evidence for Ptolemaic capitation taxes and for the Roman poll tax. The monthly distribution of receipts is fairly even, so it seems reasonable to assume that payments were made throughout the Egyptian year.\(^{68}\) The data from texts denominated in bronze-decimal units are shown in Table 3. The annual rates are calculated on the basis of the median and the mean total of each receipt. The wheat equivalents of the bronze-decimal payments illustrate even more starkly why they cannot be contemporary with the silver-standard payments. Reckoned in a common medium, early Roman nominal prices were higher than late Ptolemaic ones roughly by a factor of three, a transition that occurred in the reign of Cleopatra VII (see below). The median price of wheat in the early Roman period, 8 drachmas/\textit{artabe}, can be expressed in bronze units as 3200 drachmas/\textit{artabe}.\(^{69}\) Recalculating the wheat equivalents in Table 3 at this price would give us amounts that are radically less than those found in the silver-standard receipts.

---

\(^{66}\) The late Ptolemaic median was 450:1, while rates of 350:1, 400:1, and 450:1 are attested during the Augustan period; see West and Johnson (n. 59) 14 and Maresch (n. 19) 115-119, 196-198.

\(^{67}\) O.\textit{Mich.} 2.717-718 (Choiak), 719-720 (Pharmouthi), 721-722 (Pachon), 723-725 (Payni); note that the payments in 723-724 occurred on the same day!

\(^{68}\) For the monthly distribution, see Monson (n. 25).

Table 3: Tax Receipts in Bronze-Decimal Units from Late Ptolemaic Karanis

<table>
<thead>
<tr>
<th>Name of tax</th>
<th>Median Annual estimate</th>
<th>Wheat equiv.*</th>
<th>Mean Annual estimate</th>
<th>Wheat equiv.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>syntaxis (n=12)</td>
<td>500 dr. 1 tal.</td>
<td>5 art.</td>
<td>860 dr. 1 tal.</td>
<td>8.6 art.</td>
</tr>
<tr>
<td>sitonion (n=11)</td>
<td>100 dr. 1200 dr.</td>
<td>1 art.</td>
<td>200 dr. 2400 dr.</td>
<td>2 art.</td>
</tr>
<tr>
<td>epistatikon (n=5)</td>
<td>230 dr. 2760 dr.</td>
<td>2.3 art.</td>
<td>490 dr. 5880 dr.</td>
<td>4.9 art.</td>
</tr>
<tr>
<td>unspecified (n=24)</td>
<td>290 dr. 3540 dr.</td>
<td>3 art.</td>
<td>660 dr. 1 tal.</td>
<td>6.6 art.</td>
</tr>
<tr>
<td>all (n=52)</td>
<td>240 dr. 2880 dr.</td>
<td>2.4 art.</td>
<td>595 dr. 1 tal.</td>
<td>6 art.</td>
</tr>
</tbody>
</table>

* The conversion rate of 1200 dr./art. is the median price attested in Egypt ca. 130-30 BCE.70

The extreme variability of the totals in receipts with bronze-decimal units, ranging from 60 to 4000 drachmas, admittedly makes the annual estimates very uncertain. As noted above, the median most likely underestimates the rates because the numerous receipts with just one or two small payments were likely accompanied by further installments within the same month. The mean may help to correct the imbalance because large payments probably cover one month or longer but it is sensitive to distortion by unusual outliers.71 In three cases with payments listed for one month or more on a single ostrakon the totals are 400, 970 and 1000 drachmas per month.72 It may be a false assumption that the monthly or annual rate was the same every year or even every month. The late Ptolemaic tax register from Theogonis reveals that the syntaxis and epistatikon varied, with most inhabitants paying 900 drachmas in Thoth but only 650 in Phaophi. The Karanis data, uncertain as they may be, suggest a rate of taxation on the same scale as this.73

---

70 Maresch (n. 19) 182.
71 For a full tabulation, see Monson (n. 25). The sitonion estimate is especially doubtful because all but one receipt (O.Mich. 2.716-726) are from a single person in small amounts 60-120 bronze dr., sometimes within the same month of the same year, while O.Mich. 2.715 is from another person for 1200 bronze dr.
72 O.Mich. 2.704 (unspecified), 400 dr. Hathyr 7th to Choik 6th; O.Mich. 2.737 (epistatikon), 970 dr. Pharmouthi 25th-Pachon 20th; O.Mich. 2.754 (unspecified), 1000 dr. Tybi 1st-30th (or 1460 dr. for 46 days Choik 27th-Mecheir 13th = 950/mo.).
73 The fact that many Karanis receipts record sums of 1000 dr. or more (O.Mich. 1.297, 301, 2.714, 715, 754, 3.985), 2000 dr. or more (O.Mich. 1.295, 302, 3.980, 982, 4.1113), and even 4000 dr. (O.Mich. 3.1000) makes it unlikely that P.Tebt. 1.189 recto gives annual rates, as Rathbone (n. 6) 91, n. 33, assumed.
Dating the bronze-decimal receipts to the late Ptolemaic period removes precisely the ones that Tcherikover found to be incongruent with the Roman poll tax because of the irregular payments. As Table 4 indicates, the remaining silver-standard receipts closely resemble the poll tax or *syntaximon* receipts from the Arsinoite nome discussed below. If one compares, for example, the second-century CE tax rolls from Karanis, where daily incoming payments of the poll tax and other money taxes were recorded, the vast majority of entries mirror the sums in the Karanis ostraka.\(^7^4\) Thirteen of the thirty-four receipts (38%) or seventeen of the thirty-seven installments (46%) attested in them were for exactly 4 drachmas, another seven receipts (21%) or eight installments (22%) were for 2 drachmas. A minority of payments was for 3, 6, or 8 drachmas or amounts appearing only once. The outlier is an unspecified payment of 28 drachmas, which explains the misleadingly high averages for “unspecified” and “all” receipts in Table 4.\(^7^5\)

<table>
<thead>
<tr>
<th>Name of tax</th>
<th>Median Annual estimate</th>
<th>Wheat equiv.*</th>
<th>Mean Annual estimate</th>
<th>Wheat equiv.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>syntaxis (n=13)</td>
<td>4 dr.</td>
<td>48 dr.</td>
<td>6 art.</td>
<td>4 dr.</td>
</tr>
<tr>
<td>sitonion (n=0)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>epistatikon (n=11)</td>
<td>4 dr.</td>
<td>48 dr.</td>
<td>6 art.</td>
<td>4 dr.</td>
</tr>
<tr>
<td>unspecified (n=10)</td>
<td>4 dr.</td>
<td>48 dr.</td>
<td>6 art.</td>
<td>8 dr.</td>
</tr>
<tr>
<td>all (n=34)</td>
<td>4 dr.</td>
<td>48 dr.</td>
<td>6 art.</td>
<td>5 dr.</td>
</tr>
</tbody>
</table>

* The conversion rate of 8 dr./art. is the median price attested in Egypt ca. 30 BCE-150 CE.\(^7^6\)

The Karanis ostraka still leave open the question whether the *syntaxaxis* and *epistatikon* were two separate taxes or refer to the same tax. Youtie assumed that the Karanis *epistatikon* was that of the temple, so only priests would have paid it.\(^7^7\) In the village of Theogonis, however, the same tax that *P. Tebt. 1.103*

\(^7^4\) *P.Mich. 4.1.223* (171/172 CE), 224 (173 CE), and 225 (175 CE).

\(^7^5\) Cf. the following receipts for *syntaximon*: *P. Tebt. 2.349* (28 CE), 20 dr., *2.464* (48/49 CE), >24 dr., *2.558* (100 CE), 30 dr. 1 ob. 2 ch.

\(^7^6\) Drexhage (n. 69) 13-15, 18; the eight Upper Egyptian prices dating 13 BCE-65 CE are quite low, all close to the median of 3.5 dr./art., and may distort the situation in Middle Egypt during these years; if one excludes them, the median was 7.8 dr./art. before 50 CE and 8.9 before 150 CE.

\(^7^7\) Youtie (n. 51) 88; before the second century CE, temples normally paid the *epistatikon* on behalf of its priests but two late Ptolemaic receipts may anticipate the practice
calls the *syntaxis* is called *syntaxis* and *epistatikon* (or simply *epistatikon* according to Hoogendijk) in *P.Tebt.* 1.189. There the tax was clearly levied on the adult male population, not only priests, and the reference to ἐπιστατεία and ἀρχιφυλακιτεία on the verso suggests that it was related to the police superintendent.78 A fragmentary papyrus of the late first century BCE mentions a tax called ἐπιστατεία φυλακιτῶν but it seems to be paid by the guards (φύλακες) rather than the population at large.79 A small capitation tax for the maintenance of the guards (φυλάκιων) accompanying the poll tax is attested starting in 57/58 CE in Upper Egypt and in the second century CE in Middle Egypt.80

It is remarkable how similar the payments for *syntaxis* and *epistatikon* are in the Karanis ostraka. The fact that so many receipts of this type omit the name of the tax altogether suggests that there was no difference between them. It is unlikely that all inhabitants paid both *syntaxis* and *epistatikon* at the rate of 4 drachmas per month, much less another 4 drachmas per month for the *syntaximon*. According to the interpretation proposed here the receipts denominated in bronze-decimal units relate to a capitation tax of the late Ptolemaic period identifiable with the *syntaxis* and *epistatikon* of Theogonis. The silver-standard receipts show that the *syntaxis* and *epistatikon* continued into the Roman period. They may have been two names for the same tax. Alternatively, they were two different taxes, with the *syntaxis* being identical to the Roman poll tax and the *epistatikon* perhaps being paid only by priests. In any case, the Karanis receipts suggest that Augustus merely standardized the existing capitation taxes, rather than imposing a heavy new fiscal burden.

### Capitation taxes in the Herakleopolite nome

Several late Ptolemaic papyri from the Herakleopolite nome provide further evidence for capitation taxes under Ptolemy XII and Cleopatra VII that were either abolished or transformed into the *laographia* during the Augustan period. The situation is confusing owing to the different types of assessment attested in the sources. Several taxes described in this section, namely, the *sito-
in Toy and the stater-tax in Titeris, were levied on villages as lump sums and distributed among the population at fixed rates. Similar levies for military provisions in this period were sometimes linked to landholdings but that was probably not the case here. Contemporary texts discussed below (BGU 8.1779 and 14.2429) leave the impression of standard rates for privileged and non-privileged status groups more like the Roman poll tax, though the irregular amounts make it conceivable that these were lump sums distributed per head within villages or some larger area. For the present argument, the important point is that none of these taxes continued to be levied in the Roman period alongside the poll tax and their burden on the taxpayers was much greater than the Herakleopolite rate of the poll tax.

The sitonion of the Karanis ostraka has its parallel in BGU 8.1846 (51-49 BCE) from the beginning of the reign of Cleopatra VII. This is a petition sent by the inhabitants of the village Toy to Soteles, the highest official of the nome, the στρατηγός καὶ ἐπὶ τῶν προσόδων.81 The fifty (male) inhabitants report that they used to be charged 100 silver drachmas for sitonion, at a rate of 2 silver drachmas per person, plus an additional “carriage” fee (καταγώγιον) for payment in bronze.82 After an unspecified official named Agathokles had raised the total to 150 silver drachmas, Soteles himself doubled that amount to 300, at 6 silver drachmas per person. Agathokles subsequently raised it once more to 360 silver drachmas prompting the villagers to beg Soteles to bring it back down to 300 silver drachmas. Just as in the case of the Theogonis papyri from the Arsinoite nome, it was the strategos in the contemporary Herakleopolite nome who oversaw the assessment of a capitation tax in an Egyptian village, which was probably also based on a census (laographia).

The abrupt increases in the annual rate of sitonion in Toy could be linked to Ptolemy XII’s debasement of the silver tetradrachma from 90% to as low as 33% silver in 53/52 BCE.83 Demanding the tax in silver at higher rates may have aimed to compensate for the return of debased coins as well as to bring in some good silver still in circulation, though Gresham’s law would limit its effectiveness.84 Before 53/52 BCE, the initial tax of 100 silver drachmas would correspond to about 38 artabai of wheat or 3/4 artabe per person. If wheat

---

81 For Soteles, see Pros.Ptol. 1:334; for the combination of these two offices in the first century BCE, see Armoni (n. 52) 101-102, 105.
82 More specifically, καταγώγιον covers the costs of transporting bronze coins; see P.Tebt. 1.35.5 n., p. 132; cf. BGU 14.2431.2 n., p. 118. It was also charged on the payments for the capitation taxes denominated in silver but paid in bronze in late Ptolemaic Theogonis, P.Tebt. 1.121.8.
84 For hoarding of the old silver after 53/52 BCE, cf. Hazzard (n. 83) 89.
prices tracked the decline in silver content already by 51-49 BCE and thus began to approximate their Augustan levels, then the current tax, 360 silver drachmas, would correspond to just 49.6 art, about 1 artabe per person. With such inflation one would expect a corresponding plunge in the bronze price of the stater, which fluctuated in the second and first century BCE according to supply and demand. \textit{BGU} 8.1827, dated securely to the first year of Cleopatra VII (51 BCE), attests an exchange rate of 1550 drachmas per stater, which is below the median (1800 drachmas) but not unprecedented for the late Ptolemaic period.\textsuperscript{85} Moreover, the same text, an alimentary settlement, allocates 60 artabai of olyra and 60 silver drachmas for a woman’s upkeep, similar to the rate in an earlier contract.\textsuperscript{86} Auletes’ children may have tried to maintain the fiduciary currency system despite the silver debasement, at least until Cleopatra VII’s reforms after 44 BCE.\textsuperscript{87} To judge by their petition, the villagers of Toy perceived the increasing taxes as a real burden. If we assume no shift in prices between 53/52 and 51-49 BCE, which seems reasonable enough, then the wheat equivalent of the current tax of 360 silver drachmas would correspond to 136 artabai or 2.7 artabai per person.

The sitonion was money used to compensate Ptolemaic soldiers for their purchase of grain.\textsuperscript{88} In the Herakleopolite nome in the first century BCE, such expenses were apparently levied on villages and then on their population as capitation taxes.\textsuperscript{89} \textit{BGU} 14.2431, which is presumably roughly contemporary with the petition to Soteles, is a tax account of the village of Phebichis in the Herakleopolite nome. It begins with the revenue “for two (?) grain levies (σειτωνίων): 2600 drachmas, for carriage 104 drachmas, equals 2704 drachmas, of which to the bank: Phamenoth 1st 500 drachmas, 30th 940 drachmas, Pharmouthi 23rd 928 drachmas, Mecheir 25th 64 drachmas, Mesore 30th 272 drachmas, equals 2704 drachmas.” These were large lump sums paid in silver (as shown by the non-decimal units) by the tax collector at the end of the year. Unfortunately, the rates are not given but if we apply the high and low ones attested in Toy, we get a population of around 360 or 1300 adult males, which

\textsuperscript{85}Two other late Ptolemaic papyri, \textit{BGU} 8.1885 (possibly from the same group as our texts of Cleopatra VII) and \textit{P.Oxy} 4.784, report a price of just 1350 dr./stater, the lowest attested; Maresch (n. 19) 196-198.

\textsuperscript{86} \textit{UPZ} 1.118.10-14 (136 or 83 BCE), which values emmer at the unusually high price of 2 silver dr./art. (cf. \textit{UPZ} 1, pp. 409 and 551, n. 14) corresponding to 5 silver dr./art. of wheat at the customary conversion rate of 2:5 for emmer to wheat prices.

\textsuperscript{87} Cf. Hazzard (n. 83) 89.

\textsuperscript{88} See n. 52 above.

\textsuperscript{89} Cf. \textit{P.Ross.Georg.} 2.10 intr. = \textit{O.Wilck.} 2.1535 (88 BCE), a receipt for the “price of wheat”.
implies a total of about 1000 or 4000 inhabitants. 90 By the first century BCE, Phebichis had become the administrative center of a new Peri Phebichin toparchy, in which the village of Tale (mentioned in line 8) was probably located. 91 However, this estimate may exclude some people because the next entry of the account is labeled: “discount (παράτιμον), entirely out of silver, 410 drachmas” followed by the dates of payment. 92 On the analogy of BGU 8.1779.14-15 and BGU 14.2429.13-14, where settlers (κάτοικοι) and Greeks (Ἑλληνες) respectively pay discounted rates of the village capitation tax, perhaps the lower amount in this entry was paid by those eligible for the discount. 93

Two further entries record payments of money by tax collectors into the bank “for the price of wine” (τιμὴ οἴνου), which is presumably another military expense levied as a capitation tax just as the sitonion. 94 The wine stipend may have been due to the settlers (κάτοικοι) but this is unlikely since they were not necessarily active soldiers entitled to rations. It is also conceivable that this was the amount that they paid at a rate lower than the other villagers in the last entry. 95 On the other hand, an earlier receipt records a payment of 3,000 bronze drachmas (= about 7 silver drachmas or 2.5 artabai of wheat) “for the price of wheat (τιμὴ πυροῦ) on behalf of the kleros of Herieus son of Herieus that you cultivate” to supply his soldiers dispatched with Platon, the strategos. In this case, it was evidently an emergency charge on the leaseholder of the kleros to pay for rations of the army sent to crush the Theban revolt of 88 BCE. 96

Another petition to Soteles, the στρατηγὸς καὶ ἐπὶ τῶν προσδών of the Herakleopolite nome, BGU 8.1843 (50/49 BCE), is from the inhabitants of

90 On the ratio of adult males to inhabitants of 1:2.909, see R.S. Bagnall and B. Frier, The Demography of Roman Egypt (Cambridge 1994) 103 n. 35. If σειτωνίων β means the sitonion of two years, the population would be half this; cf. BGU 14.2429.1, discussed below.
91 Cf. BGU 14.2435 intr., pp. 131-132; the fact that Tale is ordered under it in both texts supports this hypothesis; on this village, see also M.R. Falivene, The Herakleopolite Nome (Atlanta 1998) 207-208.
92 BGU 14.2431.6; as the editor notes (n. 6) the payment in silver explains the absence of καταγώγιον.
93 Another suggestion by one of the anonymous reviewers is that it was a “discount” because it was paid in real silver without the carriage fee.
94 BL 9:34: τρά(πεζα), the local bank.
95 BGU 14.2431.8: τῶν ἐν Ταλῇ ὁ(κατοίκων)/.
the village Titeris and concerns a so-called “stater tax” (στατηρίσκος or on the more likely reading στατηρισμός). The villagers complain that a drought caused resident guests (ξένοι) to return to their home villages and to pay the stater tax there. These were people officially registered elsewhere who paid taxes in their host village. They also appear in the Theogonis tax register and the Karanis receipts from the Arsinoite nome. It was evidently a technical term in the Ptolemaic tax administration that anticipates the concept of the “fiscal domicile” (ιδία) and the status of those away from it (ἐπὶ ξένης or ἐπὶ ξενοί) for paying the poll tax during the Roman period.98

Despite its name, the stater tax was presumably not fixed at that rate but levied on the entire village collectively because the departure of the guests forced the remaining inhabitants of Titeris to pay higher rates per capita, which they allegedly could no longer afford. Presumably it was divided among them equally, as the sitonion was in the village of Toy. The fact that resident guests (ξένοι) had to pay it speaks in favor of it being a capitation tax rather than one distributed according to landholding sizes. BGU 8.1850 (48-46 BCE) is a petition to Eurylochos, Soteles’s successor as στρατηγὸς καὶ ἐπὶ τῶν προσδων, where an individual complains about the so-called “talent tax” (ταλαντισμός) for five aourai of cleruchic land (κατοικικοῦ κλήρου). Préaux supposes that the taxes were analogous and both linked to landholdings.99 However, it is not likely that resident guests would become exempt from a land tax by moving back to their home village, nor is a silver stater equivalent to a bronze talent, so they were surely different taxes. In a new petition to Soteles that has just been published, a Greek priest of Demeter complains of being charged the στατηρισμός, which he formerly did not pay, and asks to be granted the same exemption that Egyptian priests in his village enjoy. The editor cites an unpublished papyrus in Berlin stating that the tax was levied in the metropolis and the entire Herakleopolite nome. Since the priest’s petition makes no reference

97 For the reading, cf. Préaux (n. 4) 403, n. 3.
99 Préaux (n. 4) 403; cf. W. Huss, Ägypten in hellenistischer Zeit (Munich 2001) 682, n. 75.
to land and the στατηρισμός was charged even in the metropolis, it is now almost certain that this was a capitation tax.  

There is contemporary evidence from the Herakleopolite nome for annual capitation taxes levied on adult male villagers at standard rates independent of landholdings. BGU 8.1779, which dates after the month of Choiak in the second year of Cleopatra VII (June-August 50 BCE), even shows a fiscal distinction between settlers (κάτοικοι) and commoners (λαοί), just as in the Roman period. A village scribe of Tesenephy in the Herakleopolite nome reports complaints to a superior (the strategos?) about extortion by three men, probably tax collectors, who were responsible for the rents of neglected royal land and money revenues from the village. The latter were evidently derived from a capitation tax (or several taxes bundled together) on adult males levied at two different rates according to status. The ten male settlers (κάτοικοι) paid 20 silver drachmas each, while the rate paid by the twenty other male villagers (λαοί) is lost in the lacuna. It is possible that even this tax was levied on the village as a lump sum and only afterwards distributed as a capitation tax; the fact that the village scribe needed to specify the rates per person implies a lack of uniformity in the nome. The privileged rate of 20 silver drachmas, probably worth about 7.5 artabai in this period, is similar to the annual rate estimated above for the village of Theogonis in the Arsinoite nome.

This text can be compared with BGU 14.2429, a list of villages with the number of male inhabitants and the rate of an unnamed capitation tax. In this case, the same rates applied across several very small villages but once again they had to be specified, so perhaps the rates were based on a lump sum due from a higher level such as the toparchy rather than being standard in the nome. The text begins with the heading “year 19 to 20”, which the editor assigns to Ptolemy X or XII (94-92 or 63-61 BCE). Egyptians paid a rate of 92 silver drachmas 1 obol, while Greek men (Ἑλληνες), possibly equivalent to

---

100 BGU 20.2845 (51-49 BCE) intr., pp. 54-5 on P.Berol. 16250.11-12: στατηρισμόν, ὁν ἡ μητρόπολις καὶ ὅλος ὁ Ἡρακλεοπολίτης διαγέγραφεν.
101 The verb παραλογεύειν in l. 8 suggests excessive taxation by a λογευτής; this was the title of the tax collector confirming payment of syntaxis and epistatikon in P.Tebt. 1.189.1-4; the was also the one who collected the poll tax in the Augustan period, e.g. BGU 7.1590(b).5 (6/7 CE, Philadelphiea).
102 BGU 8.1779.14-17: ἕκαστον μὲν ἄνδρα τῶν κατοίκων ἀνδ(ρῶν) ἀνὰ ἀργ(υρίου) (δραχμάς) κ ὥν . . . καὶ τῶν λαῶν ἀλλων ἀνδ(ρῶν) κ α . . . χαλκοῦ [(τάλαντα) . . .]. An anonymous reviewer suggests that τῶν κατοίκων ἀνδ(ρες) and τῶν λαῶν ἀλλων ἀνδ(ρες) would give better sense to the text.
103 The wheat conversion is based on the median wheat price (1200 dr.) divided by the median stater price (1800 dr.) ca. 130-30 BCE; Maresch (n. 19) 182, 196-198.
the κάτοικοι of the previous text, paid about 25% less, 69 silver drachmas.\textsuperscript{104} There was a similar reduction in the Theogonis capitation tax (\textit{syntaxis} and \textit{epistatikon}) described above.\textsuperscript{105} However, the privileged persons there had no apparent distinction that would explain the difference; most had Egyptian names, though this does not rule out the possibility that they were Greeks or at least regarded as such for tax purposes.\textsuperscript{106}

As much as \textit{BGU} 14.2429 appears to record a capitation tax based on a census of villages, the rates denominated in silver drachmas are implausibly high for the dates proposed by the editor, so one may have to abandon the interpretation unless there is some monetary explanation.\textsuperscript{107} The heading “year 19 to 20” could mean that the payments covered two years, implying rates of 46 drachmas 1/2 obol for Egyptians and 34 drachmas 3 obols for Greeks but even these are too high. A possible solution would be to attribute the papyrus to the reign of Cleopatra VII, post-dating both Ptolemy XII’s silver debasement in 53/52 BCE and Cleopatra’s currency reform sometime after 44 BCE (see below). By 34-32 BCE, the debased currency system had presumably stabilized at the new price levels that we find under Augustus. We could hypothesize a wheat price of about 7.25 silver drachmas/\textit{artabe} for this period based on the decline in silver content or use the Roman median price of 8 drachmas/\textit{artabe} as a proxy for the end of Cleopatra’s reign.\textsuperscript{108} At the latter rate, the wheat equivalent for the Greek and Egyptian capitation taxes then comes out to be roughly 4.3 and 5.8 \textit{artabai} respectively. It is remarkable that the tax rates in the Herakleopolite nome summarized in Table 5 were so much higher than those in the Roman period, shown in Table 6 below.

\textsuperscript{104} Rathbone (n. 6) 93 does not explain why he believes, “the levies were not proper capitation taxes.”
\textsuperscript{105} \textit{P.Tebt.} 1.189 recto: in Thoth, 900 dr. standard and 750 dr. reduced rate (17% less); in Phaophi, 650 dr. standard and 350 dr. reduced rate (46%) less.
\textsuperscript{106} Hoogendijk (n. 20) 317-318.
\textsuperscript{107} Assuming 1800 dr./silver stater and 1200 dr./\textit{art.} of wheat, to use the late second to first cen. BCE medians (cf. Maresch [n. 19] 182, 196-198), that is, 2.67 silver dr./\textit{art.}, then the wheat equivalent is about 35 \textit{art.} for Egyptians and 26 \textit{art.} for Greeks.
\textsuperscript{108} The total 7.25 silver dr./\textit{art.} = 2.67 (see n. 84) × 0.9 (old silver content) ÷ 0.33 (new silver content); for this decline, see Hazzard (n. 83) 89; Maresch (n. 19) 67-68; E. Göltitzer, \textit{Entstehung und Entwicklung des alexandrinischen Münzwesens von 30 v. Chr. bis zum Ende der julisch-claudischen Dynastie} (Berlin 2004) 32, 45. Such a hypothesis accords with the median wheat price in Roman Egypt of 7.8 dr./\textit{art.} before 100 CE or 8 dr./\textit{art.} before 150 CE; the median was also 7.8 dr./\textit{art.} before 50 CE in Middle Egypt but only 3.5 dr./\textit{art.} in Upper Egypt; Drexhage (n. 69) 13-15, 18.
Table 5: Summary of Capitation Taxes in the Herakleopolite Nome

<table>
<thead>
<tr>
<th>Date</th>
<th>Papyrus</th>
<th>Rate per capita (in silver dr.)</th>
<th>Wheat equiv.*</th>
<th>Wheat equiv.†</th>
</tr>
</thead>
<tbody>
<tr>
<td>51-49</td>
<td>BGU 8.1846</td>
<td>sitonion 7.2 dr.</td>
<td>2.7 art.</td>
<td>-</td>
</tr>
<tr>
<td>50</td>
<td>BGU 8.1779</td>
<td>20 dr. for κάτοικοι</td>
<td>7.5 art.</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>? dr. for λαοί</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>32/31?</td>
<td>BGU 14.2429</td>
<td>34 dr. 3 ob. or double for Ἑλληνες</td>
<td>-</td>
<td>4.3 art. or double</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46 dr. 0.5 ob. or double for others</td>
<td>-</td>
<td>5.8 art. or double</td>
</tr>
</tbody>
</table>

* The conversion rate of 2.67 dr./art. is the median price (1200 dr.) divided by the median bronze price of silver (1800 dr./stater) attested in Egypt ca. 130-30 BCE.109
† The conversion rate of 8 dr./art. is the median price attested in Egypt ca. 30 BCE-150 CE.110

The most explicit evidence for the continuity of the poll tax from the Ptolemaic to the Roman period is yet another papyrus from the Herakleopolite nome. BGU 4.1198 is a petition from an Egyptian priest to the prefect Gaius Turranius in the 26th year of Augustus (5/4 BCE). It merits a full translation:

To Gaius Turranius from Soterichos son of Nouchis, a priest chosen by his fellow priests Haryothes, Harsiesis, and Soterichos, priests of Isis, Sarapis, Harpsenesis, and Asklepios in Bousiris of the Herakleopolite nome beyond Memphis. Great governor, formerly even in the time of the queen (Cleopatra VII) until the 25th year of divine Caesar Augustus (6/5 BCE), we four priests out of the six who perform sacred services and carry out purifications and sacrifices two by two were undisturbed on account of the poll tax (laographia) but in the present 26th year of Caesar (5/4 BCE) because Epiodoros the royal scribe of the nome registered us for collection we were pressed into payment on account of the poll tax (laographia) for four years, each of us 64 silver drachmas, and on account of dike-taxes 108 silver drachmas. We therefore ask ...111

109 Maresch (n. 19) 182, 196-198.
110 Drexhage (n. 69) 13-15, 18.
111 The text, as it was copied down on the papyrus, ends here. The figures correspond to the poll tax at 16 dr. and the dike tax (χωματικόν) at 6 dr. 4 1/2 ob. per person annually; cf. Wallace (n. 7) 127, 141. On this text, see further Kruse (n. 98) 2:632, 709 and Jördens (n. 98) 340.
The implication is clear: Augustus’s *laographia* was the continuation of a capitation tax under Cleopatra, including its exemption for priests. Rathbone argues that, “their careful wording ... shows that they were not claiming that the actual tax called *laographia* went back to Cleopatra VII”; for him it shows only that they based their claim on some “previous exemption from Ptolemaic capitation charges.” The priests, on the other hand, obviously regarded the *laographia* as the same tax that existed before, expecting that the prefect would recognize this fact as well. If the *laographia* was a Roman innovation, why would the priests give the Ptolemies the credit for the exemption that they enjoyed until 6/5 BCE? It would have been in their interest to show gratitude for the decision of Augustus or his prefect Cornelius Gallus, who supposedly (according to modern scholars113) introduced the *laographia* prior to the Theban revolt of 30/29 BCE.

The origins of this tax-exemption are more plausible in the Ptolemaic period than under Augustus.114 While the Romans recognized some traditional priestly privileges, that is not the same as introducing new ones and the evidence rather suggests that they limited them where they could.115 The problems for the priests in the petition seem to have started with the introduction of the new Roman census on a seven-year cycle, which is first attested in regnal year 20 (11/10 BCE).116 Since poll taxes were paid in installments throughout the year, the collection of taxes based on the results of this census could only have begun in regnal year 21 (10/9 BCE). A four-year interval corresponds to the four years of arrears for *laographia* that the priests had to pay in regnal year 25 (6/5 BCE).117 It is quite conceivable that their petition and others like it were the catalyst that prompted the prefect Gaius Turranius to issue his edict at the end of the same year (June 4th, 4 BCE), ordering all temples to submit lists of priests and dependents as well as their functions for him to inspect (ἐπικρύνω).

---

112 Rathbone (n. 6) 96.
113 O. Wilck. 1, p. 248; Rostovtzeff (n. 11) 346; Lewis (n. 5) 7; Rathbone (n. 6) 88.
114 Priests initially paid the Ptolemaic salt tax but were soon exempted, probably in the reign of Ptolemy III: *Petr. 3.59b = W. Chr. 66 = P. Count 16* (third century BCE, Arsinoite); Clarysse and Thompson (n. 14) 55-56 and esp. 58. *BGU 20.2845* states explicitly that Egyptian priests in a Herakleopolite village were exempt from the capitation tax called *στατηρισμός* under Cleopatra VII (cf. n. 100 above).
115 Despite recent revisionism and caricature of Augustus’s policy, e.g. D. Klotz, *Caesar in the City of Amun* (Turnhout 2012) 1-7, 229-231, no one has persuasively refuted the evidence for tighter state control of temples, of which Jördens (n. 98) 41-46, 338-343 is the best analysis; cf. Monson (n. 46) 218-227.
116 Bagnall and Frier (n. 90) 4-5.
117 Cf. Rathbone (n. 6) 90, n. 27, who dates the first cyclical census to 10/9 BCE.
so that he could eliminate those not of priestly origin. The decree probably had a fiscal purpose, limiting the number eligible for exemption, because subsequently priests reaching the age of maturity for the poll tax underwent an analogous state inspection (ἐπίκρησις) to establish their priestly descent. Taken together, the two texts suggest not only that the priests were undisturbed by the poll tax until the census reforms of 11/10 BCE but also that the Roman prefect Turannius accepted the argument that a previous exemption in the Ptolemaic period should entitle them to an exemption from the laographia. The Roman innovation was that they must be recognized as priests by the state's inspectors and not exceed the approved number for each temple.

The Roman Laographia

As noted above, it is often suggested that Strabo refers to the introduction of the laographia when he claims that the revolt of the Thebaid in 30/29 BCE broke out “because of the taxes” (διὰ τῶν φόρων). It is doubtful, however, that it would have been possible for Augustus to introduce a new poll tax within a few months of seizing the province without first conducting a census. Most Egyptian taxes were not even due until after the revolt was suppressed in April 29 BCE. The main point of Strabo’s passage is that Egypt is so peaceful that it requires a relatively small military presence: “for the Egyptians are not war-like despite their considerable numbers, nor are the neighboring peoples.” Since the Roman poll tax affected the whole country and was highest in the Arsinoite nome, there must have been reasons for the Thebans in particular to revolt, reasons that are not hard to guess. The region had long bristled under the Ptolemies’ fiscal pressure, which was probably made worse by the unsuccessful revolt in 88 BCE and by Ptolemy XII’s fiscal crisis. In the trilingual commemoration of his victory in April 29 BCE, the prefect Cornelius Gallus himself stresses the continuity of the revolts, claiming that the Thebaid was “a common terror of all kings” in the Latin version and that it had “never submitted to the kings” in the Greek version.

---

118 BGU 4.1199; Jördens (n. 98) 339, n. 38.
120 See n. 11 above.
121 Strabo 17.1.53.
122 I. Philae 2.128 = F. Hoffmann, M. Minas-Nerpel, and S. Pfeiffer, Die dreisprachige Stele des C. Cornelius Gallus (Berlin 2009) 119-121, 144-147: communi omnium regum
Rome’s victory over Cleopatra presented the Thebans with no better opportunity to renew their struggle against the fiscal system that the Ptolemies had developed. Prior to Gallus’s campaigns in the south, it was perhaps uncertain to the Thebans how far Rome was willing to go to integrate Upper Egypt into the empire. Philo of Alexandria, writing just a few decades after the revolt of 30/29 BCE and probably referring to this as well as earlier ones, claimed that the Egyptians were “in the habit of sparking great seditions from very small sparks” given their natural insubordination “at every trivial or common occurrence.” One may doubt the value of this source but he seems to have believed that Egyptian revolts were a long-term pattern rather than a response to Roman provocations. Ammianus Marcellinus blames Gallus for the illicit exploitation of Thebes, comparing him to the Persian king Cambyses: “Long afterwards, Cornelius Gallus, as procurator of Egypt when Octavian was ruling Rome, drained the city again with numerous appropriations,” though this was presumably during or after his campaign. Ultimately, we cannot know why Thebes revolted but the introduction of the poll tax is not the most plausible hypothesis.

The earliest receipt for the laographia of the Roman period is dated to the 7th year of Augustus (February 23 CE) according to its paleography and formula, while the first to name Caesar (Augustus) explicitly as the ruler dates to his 9th year (22/21 BCE). Like all laographia receipts from his reign, the payments were reckoned on the silver standard rather than in Ptolemaic bronze-decimal units. The abundance of laographia receipts on ostraka starting in the Roman period admittedly leaves the impression that this was a new tax. Wallace, however, dismissed the absence of earlier receipts. For him, Augustus’s reforms were limited to “the resumption of giving receipts for capitation taxes and the introduction of the συμβολικά, a charge for those receipts, by which the bureaux for the collection of the taxes were made partially or perhaps

---

formidine (lines 6-7) and μὴ ὑποταγεῖσαι τοῖς βασιλεῦσιν (line 16); cf. Veïsse (n. 96) 74-76 and esp. 240-241.

123 Philo In Flacc. 17.

124 Amm. Marc. 17.4.5: longe autem postea Cornelius Gallus Octaviano res tenente Romanas, Aegypti procurator, exhaustit civitatem plurimis interceptis; Hoffmann et al. (n. 122) 134 propose this as a possible cause of the revolt.

125 O.Bodl. 2.407 (23 BCE); O.Strass. 1.38 (22/21 BCE); the next earliest is O.Ash.Shelt. 6 (21/20 BCE); on the Roman poll tax in Egypt, see O.Wilck 1, pp. 230-249, P.Oxy. 2.254 intr., pp. 207-214; P.Oxy. 4.711 intr., pp. 176-177; O.Wilb., pp. 28-33; Wallace (n. 7) 116-134; L. Neesen, Untersuchungen zu den direkten Staatsabgaben der römischen Kaiserzeit (Bonn 1980) 117-135; Tcherikover (n. 4); Evans (n. 4); Rathbone (n. 6) 86-99; P.A. Brunt, Roman Imperial Themes (Oxford 1990) 324-346, 531-540; O.Strass. 2, pp. 77-81.
even wholly self-supporting.”126 The charge for receipts was normally included tacitly in the amount paid.127

While these early laographia receipts come from Upper Egypt, the first evidence from the Arsinoite nome is a declaration dated to the 11th year of Augustus (19/18 BCE).128 The text is significant in part because it shows that the poll tax was called the syntaxis, just as in the texts from Theognis and Karanis discussed above. The term “syntaxis of the people” (λακη σύνταξις), recurs regularly in the Arsinoite nome during the Roman period as a designation of the laographia.129 It is possible that the term syntaxis had also been used in Upper Egypt because an unpublished Demotic tax receipt on an ostrakon from Edfu employs syntaxis as a loan word written in alphabetic signs.130 The same phenomenon is observable in two bilingual receipts for syntaxis with bronze-decimal payments from Karanis.131 The Edfu text is otherwise identical in its formula to the many Demotic receipts among the Edfu ostraka for the “bronze poll tax” (ḥmt ṯp.t), which is the normal equivalent of laographia in the Roman period. However, this syntaxis receipt as well as two poll-tax receipts from the same group, one of which likewise dates to year 16 (perhaps 15/14 BCE), differ from the rest in one interesting respect: these are the only three examples where the payment is denominated in bronze-decimal units.132 Therefore, they are not later than Augustus and would be the only examples of such denominations of the poll tax in the Roman period, so they may be late Ptolemaic.133

126 Wallace (n. 3) 441-442; cf. Hombert and Préaux (n. 14) 51-52. For συμβολικά-charges on Roman receipts for capitation taxes, see Wallace (n. 7) 123-124.
128 P.Grenf. 1.45 = W.Chr. 200a; P.Benaki 1 = SB 26.16683 is dated to regnal year 5 of Augustus (25 BCE) or Tiberius (19 CE) based on palaeography; Rathbone (n. 6) 88, n. 12, sees evidence for the poll tax also in P.Fay. 1.43, a receipt from the Arsinoite village of Euhemeria dated by palaeography to year 2 of Augustus (28 BCE).
129 All examples are from the Arsinoite nome: P.Mich. 2.121 recto ii.8 (42 CE, Tebytnis); SB 14.11586 with 11587 (47 CE, Philadelphieia); P.Strass. 6.522 (87 CE, Bakchias); PSI 8.902 with P.Mich. 5.355 (first century CE, Tebtynis); P.IFAO 1.27 (98-117 CE, Ptolemais Euergetes); SB 20.15038 (117 CE, Tebtynis).
130 O.IFAO inv. D170-M5; I am grateful to Déborah Kott for sharing her transcriptions and photographs of these texts, as well as for permitting me to cite them here. They will be edited in her Ph.D. dissertation at the École Pratique des Hautes Études in Paris.
131 O.Mich. 2.701-702, with Monson (n. 25).
133 Cf. O.Edfou 224 (104/103 BCE) and 362 (100 BCE), receipts for the epistatikon of priests.
Even more frequently, texts from the Arsinoite nome use the cognate term *syntaximon* to denote a bundle of payments “like the *syntaxis*.” The basic poll-tax rate for villagers was 40 drachmas but additional charges made the total rate of the *syntaximon* 44 drachmas 6 chalkoi per year. It was typically paid in eleven monthly installments of about 4 drachmas each but other installments are also attested. One of the minor charges was about 4 obols for the salt tax, which is ostensibly similar to the last rate attested in the third century BCE (cf. Table 1) but actually much less because of the silver debasement and monetary reforms of Cleopatra VII. It is plausible that the salt tax was integrated into the one larger payment known as *syntaxis* in the late Ptolemaic period. Its inclusion in the Roman-period *syntaximon* distinguishes it from other charges such as the bath and pig taxes that were paid separately.

Table 6 provides an overview of the net rates of the *laographia*, excluding additional taxes or fees paid with it. These varied inexplicably between nomes with the Arsinoite rate being much higher than anywhere else. A privileged rate was applied to those registered as metropolitan residents or gymnasial members except in the Thebaid, where inhabitants of the cities seem to have paid the same rate as villagers. To obtain metropolitan status, it sufficed as evidence that both parents were registered in the city. For gymnasial status, on the other hand, one had to trace one’s ancestry back to the census of 4/5 CE. The members were called settlers (κάτοικοι) or Greeks (*Ελληνες*) in the Arsinoite nome and “those from the gymnasium” (οἱ ἀπὸ τοῦ γυμνασίου) elsewhere. There is a striking parallel to the distinction in the Herakleopolite nome of the late Ptolemaic period between κατοίκοι and λαοί in BGU 8.1779 (50 BCE) and between Ἕλληνες and the rest in BGU 14.2429 (32/31? BCE), where the former paid the capitation tax at a privileged rate. Gymnasial status was possibly intended to ensure that village elites who were not residents of the metropolis but attached to village gymnasia were not stripped of their privi-

---

134 Wallace (n. 3) 435-436.
135 Wallace (n. 7) 122-126; P.Cair.Mich., pp. 18-22; see e.g. BGU 13.2291 (6/5 or 5/4 BCE) and P.Fay. 45 (10/11 CE). Besides 4 dr., P.Giss. 3.94 intr., p. 86 lists the following other installments attested for the *syntaximon*: 8 dr., 12 dr., 20 dr., 24 dr., 25 dr. 2 ob., 5 dr. 2 ob., 1 dr. 2 ob., 32 dr., 30 dr. 1 ob. 2 ch.
136 Wallace (n. 7) 123-124, 184; see n. 18 above.
leges with respect to capitation taxation when Augustus granted a discounted rate to the urban masses (at least in Middle Egypt), which they did not have in the Ptolemaic period.\textsuperscript{138}

Table 6: Net \textit{laographia} rates in Roman Egypt\textsuperscript{139}

<table>
<thead>
<tr>
<th>Nome</th>
<th>Privileged rate</th>
<th>Wheat equiv.*</th>
<th>Standard rate</th>
<th>Wheat equiv.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mendesian</td>
<td>8 dr.</td>
<td>1 art.</td>
<td>16 dr.</td>
<td>2 art.</td>
</tr>
<tr>
<td>Memphite</td>
<td>8 dr.</td>
<td>1 art.</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Arsinoite</td>
<td>20 dr.</td>
<td>2.5 art.</td>
<td>40 dr.</td>
<td>5 art.</td>
</tr>
<tr>
<td>Herakleopolite</td>
<td>8 dr.</td>
<td>1 art.</td>
<td>16 dr.</td>
<td>2 art.</td>
</tr>
<tr>
<td>Oxyrhynchite</td>
<td>12 dr.</td>
<td>1.5 art.</td>
<td>16 dr.</td>
<td>2 art.</td>
</tr>
<tr>
<td>Hermopolite</td>
<td>8 dr.</td>
<td>1 art.</td>
<td>16 dr.?</td>
<td>2 art.</td>
</tr>
<tr>
<td>Tentyrite</td>
<td>16 dr.</td>
<td>2 art.</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Coptite</td>
<td>16 dr.</td>
<td>2 art.</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Thebes</td>
<td>10 dr.</td>
<td>1.25 art.</td>
<td>10 dr.</td>
<td>1.25 art.</td>
</tr>
<tr>
<td>Hermonthite</td>
<td>16 dr.?</td>
<td>2 art.</td>
<td>16 dr.</td>
<td>2 art.</td>
</tr>
<tr>
<td>Eileithuyopolite</td>
<td>16 dr.</td>
<td>2 art.</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Apollonopolite</td>
<td>16 dr.</td>
<td>2 art.</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Elephantinite</td>
<td>16 dr.</td>
<td>2 art.</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Dakhleh oasis</td>
<td>?</td>
<td>-</td>
<td>9 dr. 1 ob.</td>
<td>1.13 art.</td>
</tr>
</tbody>
</table>

* The conversion rate of 8 dr./art. is the median price attested in Egypt ca. 30 BCE-150 CE.\textsuperscript{140}

Table 6 is also helpful for answering the main question of this article: did the Roman \textit{laographia} constitute a heavy new burden on the Egyptian population? Converting the rates into their wheat equivalent based on the median price of 8 drachmas/\textit{artabe} in the early Roman period facilitates comparison with the Ptolemaic taxes discussed in the previous sections. If the payments in the consecutive months of Thoth and Phaophi in Theogonis continued on the same scale throughout the year, then its wheat equivalent of about 6 \textit{artabai} (see Table 2) was slightly higher than the village rate in the Arsinoite nome, which equals roughly 5 \textit{artabai} of wheat, even with the additional charges

\textsuperscript{138} Monson (n. 46) 267-268; similarly, Broux (n. 136) 149.
\textsuperscript{139} O.\textit{Strass}. 2, pp. 80-81, with further bibliography.
\textsuperscript{140} Drexhage (n. 69) 13-16, 18.
contained in the *syntaximon*. The Karanis ostraka suggest a similar level of taxation in the late Ptolemaic period (see Table 3).

The texts from the Herakleopolite nome in the reign of Cleopatra VII point to an even heavier burden compared with the Roman *laographia* (see Table 5). The *sitonion*-tax charged in Toy started out at two drachmas, which was probably less than one *artabe* of wheat in this period, but rose to over 7 drachmas worth perhaps 2.7 *artabai* of wheat. Given its connection with soldiers’ provisions, this was possibly an extraordinary demand in addition to regular taxation. *BGU* 8.1779 (50 BCE) and *BGU* 14.2429 (32/31? BCE) indicate rates of 20 drachmas and higher for the capitation tax, which by any measure surpass the privileged and villager rates in the Herakleopolite nome of 8 drachmas and 16 drachmas (equivalent to about 1 and 2 *artabai* of wheat) in the Roman period.

There were additional capitation taxes in Roman Egypt, which require further study. Including them complicates the argument but does not substantially alter the conclusions. The dike tax (χωματικόν) had been assessed on land in the Ptolemaic period. The petition of the priests in Bousiris in the Herakleopolite nome (*BGU* 4.1198) shows that it was levied as a capitation tax by 10/9 BCE at the annual rate of 6 drachmas 4 1/2 obols. Whether this was an innovation of the late Ptolemaic period or of Augustus is uncertain. Almost the same rate, 6 drachmas 4 obols, is attested elsewhere in Roman Egypt and is the equivalent of about 5/6 *artabe* of wheat. Roughly two drachmas per year, equivalent to 1/4 *artabe* of wheat, were charged for the guard tax (φυλάκων), which is first attested in 57/58 CE, though a similar guard tax (φυλακιτικόν) had been assessed on cleruchic land in the Ptolemaic period. Wallace regarded the pig tax (ὑική) in Roman Egypt as a capitation tax but it may have continued to be based on land or pig ownership as in the Ptolemaic period. In any case, the rate was low: one drachma one obol in the Arsinoite and about two drachmas elsewhere, the equivalent of 1/8 and 1/4 *artabe* of wheat, except in Upper Egypt where it is not attested. Together all of these contributed an added capitation-tax burden equivalent to less than 1 1/2 *artabai* of wheat, which was partially offset by other fiscal changes.

141 Wallace (n. 7) 140-143; *PKöln* 9.376 intr.; Capponi (n. 3) 141-142; evidence published after Wallace’s book shows that the Ptolemaic χωματικόν was still a land tax in the late second century BCE: *P.Tebt.* 3.2.860 (138 BCE) and 1043 (172/171 BCE), *SB* 8.9899b.14 (113 BCE), *P.Paramone* 8.14 (148/147 or 137/136 BCE), and *PKöln* 7.313.15-16 (186 BCE).

142 Wallace (n. 7) 146-148; Homoth-Kuhs (n. 79) 149-192, esp. 160, 163-164, 167, 183.

143 Wallace (n. 7) 143-145; for doubts that it was a capitation tax, cf. Capponi (n. 3) 151-152.
Conclusion

This article revisits an old debate about the possible Ptolemaic origins of the Roman poll tax. It is impossible to return without qualifications to the opinion that prevailed in the early twentieth century. Articulated most forcefully by Wallace, this view asserted that the Ptolemaic syntaxis was a general poll tax based on a census (laographia) that continued into the Roman period. Yet the arguments put forth for rejecting that thesis, especially those of Tcherikover and Evans, are not convincing either. A reevaluation of the late Ptolemaic papyri from the Arsinoite and the Herakleopolite nomes suggests a more balanced picture of continuity and change.

The distinction between Hellenistic capitation taxes and the Roman poll tax that Tcherikover first proposed is too categorical and artificial.144 As we have seen, the existence of a census used for taxation goes back to at least the third century BCE, when Ptolemy II introduced the salt tax. Looking outside of Egypt, there is some evidence for a capitation tax in Koile Syria paid in money, perhaps at the rate of 2 silver drachmas per person, in the late Achaemenid and early Ptolemaic period.145 Perhaps the historicity of the passage in 3 Maccabees mentioning the subjection of Jews to a laographia under Ptolemy IV, which is usually interpreted as a capitation tax, ought be given more credence.146 Upon annexation to the Seleucid empire in 200 BCE, Antiochus III granted the priests in Jerusalem exemption from a capitation tax (ἐπικεφάλιον), which they must have paid under Ptolemaic rule.147 By 181 BCE there was a capitation tax called syntaxis in the village of Kardakon, of the territory of Telmessos in Asia Minor, which then belonged to the Attalid kingdom having previously been under Ptolemaic and Seleucid rule.148 If the Roman tributum capitis became a standard feature of provincial taxation it was because many imperial

144 Tcherikover (n. 4) 182-184.
146 P.Tebt. 1.103 intr., p. 447, and Wallace (n. 3) 437; cf. O.Wilck. 1, p. 246, and O.Wilb., p. 30; Clarysse and Thompson (n. 14) 17 point out that Alexandria rather than Judea was the context for this passage and suggest that laographia means only a census here, not a poll tax.
subjects in the Hellenistic East had long been accustomed to capitation taxes in one form for another.

The Egyptian evidence suggests that the political and economic turbulence of the later Ptolemaic period led its rulers to innovate with new capitation taxes to extract money taxes from their subjects. The salt tax, which both men and women paid, disappears by the early second century BCE, though the census evidently continued throughout the second and first centuries BCE. Préaux doubted whether the census itself implied the existence of a poll tax but the evidence speaks strongly in favor of it being used for taxation in the late Ptolemaic period. From the reign of Ptolemy XII, if not earlier, the census was used in Theogonis to collect the syntaxis and epistatikon on the adult male inhabitants of the village. Under Cleopatra VII population counts were also necessary for the assessment of capitation taxes, whether the rates were standard across villages or based on a lump sum distributed by local officials among the inhabitants. Only the receipts from Karanis for sitonion, syntaxis, and epistatikon give us a glimpse into the experience of individual taxpayers, who made frequent payments throughout each month of irregular amounts.

While it is uncertain whether Karanis was typical for the payment of Ptolemaic capitation taxes, the practice there changed dramatically in the Roman period. Once the Karanis syntaxis and epistatikon receipts switch to the silver standard, they closely resemble other poll tax receipts in the Arsinoite nome. In the Herakleopolite nome, the reduced rates for “Greeks” and katoikoi under Cleopatra VII prefigure the privileged status of the gymnasioc group in the Roman period. The priests too could trace their exemption from the laographia in the early years of Augustus back to the Ptolemaic period. The guest residents (ξένοι) who appear in connection with capitation taxes in both the Arsinoite nome and the Herakleopolite nome during the late Ptolemaic period are paralleled in the poll tax and census regulations of the Roman period. By this analysis the importance of Augustus’s reforms was arguably that he standardized the existing census and the assessment of capitation taxes, transforming them into a system that was more homogenous across Egypt.

To the extent that our sources enable us to estimate the rates, the late Ptolemaic capitation taxes appear to have been as high as and perhaps in some places much higher than the Roman poll tax. While the rates in the Arsinoite nome appear relatively constant, those in the Herakleopolite are astonishingly high under Cleopatra VII compared with the rates in the Roman period. This stems largely from the fact that the Arsinoite nome paid the highest attested

---

149 O. Wilb., pp. 28-29.
150 See n. 98 above.
rates for laographia, 40 drachmas for villagers and 20 drachmas for privileged groups, while the residents of the Herakleopolite paid just 16 and 8 drachmas respectively. During the late Ptolemaic period, the taxes in the Arsinoite and the Herakleopolite were perhaps more similar to one another. The reasons for the rate differences between nomes generally in the Roman period remain elusive. One group that probably benefited enormously from the Augustan reforms is the urban population in Middle Egypt. It is unlikely that residents of the metropolis had any privilege in the Ptolemaic period like that of the settlers (κάτοικοι), whose own discount was not as generous as it would be in the Roman period. Instead they probably paid the same rates as villagers.151

If these arguments are correct, our understanding of the economic impact of the Augustan reforms requires revision. Rather than seeing the laographia as an instrument of exploitation, it may be interpreted as an attempt to create a more efficient and equitable system for the taxpayers than what had existed previously. Depopulation was reportedly acute during the time of Ptolemy XII and Cleopatra VII, particularly in the Herakleopolite nome, which means above all a decline in the registered population, as people fled the levies on villages that were distributed as capitation taxes.152 Many people must have escaped the Ptolemaic census and taxation altogether. To compensate for those it could not reach, the monarchy was even more dependent on its most productive subjects, those who were unwilling to abandon their land or place of business and could therefore be compelled to pay taxes. Augustus’s reforms improved the state’s capacity to assess and enforce poll-tax liability, introducing the census cycle, predictable rates, and the widespread use of written receipts. For the real taxpayers, the Roman fiscal regime was probably more of a relief than a burden. It created incentives for everyone to settle down, accumulate possessions, and become participants in a regulated economy.

151 Cf. Rathbone (n. 6) 96: “the reduced rate for metropolites must have been a Roman innovation because they invented the category of metropolites.”
152 BGU 8.1835.9-10 (51/50 BCE), “poverty and depopulation” (ἀσθένεια καὶ ὀλιγανδρία); cf. BGU 8.1815 (before 60 BCE), 1843 (50/49 BCE) discussed above, and 1858 (64-44 BCE) with Préaux (n. 4) 500-502; see also BGU 14.2370 intr., pp. 6-8, and 2429 intr., p. 114, for few adult males in Herakleopolite villages.