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REPLACEMENT PARTS FOR AN IRRIGATION MACHINE OF THE DIVINE HOUSE AT OXYRHYNCHUS


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P.COLUMBIA INV. 83, OCTOBER 12, AD 549(?)

The papyrus published here\(^1\) contains the beginning of a receipt for replacement parts of a μηχανή, an irrigation machine. This type of document is well known. Twenty-three have been published so far, the earliest dating from AD 441, the latest from AD 602.\(^2\) All concern large estates at Oxyrhynchus. Most of them belong to the Apion estate; one pertains to holdings of the church of Oxyrhynchus, two to those of female landowners, and two, including the new text, to imperial estates.

The μηχαναί were waterlifting devices designed to irrigate those lands which were not reached by the flood of the Nile. They were in all probability saqiyas, consisting of a pair of cog wheels at right angles, driven by one or two oxen.\(^3\) In contrast to the much simpler shaduf a saqiya was a major investment - also because oxen were costly. In the Greek papyri the μηχαναί are mentioned with increasing frequency from the fourth century AD onwards, and it is tempting to relate this development to the rise of the large estates, where capital would be more readily available.\(^4\) In the Oxyrhynchite receipts, we find saqiyas being placed under the care of one or more peasants, often, but not always, ἐναπόγραφοι γεωργοί. When major repairs were necessary, the peasants were provided with replacement parts by the estate manager. A receipt was addressed in the name of the (usually illiterate) peasant to the owner of the estate. The receipt was written in a single copy, which was presumably kept in the archive of the estate manager.

The relatively high number of surviving receipts is not surprising. The replacement of parts of irrigation machines took place on a regular basis.\(^5\) *P.Oxy.* 19.2244, a list of axles of the sixth or seventh century, shows that on the Apion estate alone in two years ca. fifty new axles were needed. Since many of the extant receipts do indeed concern axles, it seems possible that for each entry on this list a separate receipt was drafted. Practices like these must have generated large amounts of paperwork.

Almost all Oxyrhynchite replacements were made in the period from September to January, when the Nile and its branches were at its higher levels. Both in *P.Oxy.* 19.2244 and in the list of μηχανή receipts the peak falls in the month Phaophi (28/9-27/10).\(^6\) This pattern stands in clear contrast to the situation in the Fayum, where irrigation techniques were rather different.\(^7\)

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\(^1\) Published with permission of the Papyrus collection, Rare Book and Manuscript Library, Columbia University, New York. My thanks to Prof. R.S. Bagnall for guidance and patience, to the academic staff of the Leiden Papyrological Institute for additional advice, and to E.J.B. Knibbeler and Y. Zelener for suggesting stylistic and grammatical improvements.


\(^3\) Exhaustive treatment of the papyrological evidence by Bonneau (1993) 107-15 and 226-30, much better organised than Oleson (1984) s.v. μηχανή. I see no particular reason to follow Oleson’s argument at p. 381 that some of the μηχαναί were shadufs instead of saqiyas. See also Bonneau (1993) 109, 230-1.

\(^4\) For the spread of the saqiya see, apart from the works cited in the previous note, Bagnall (1993) 18, and for the prohibitive cost of oxen Rowlandson (1996) 23. It seems also possible that the increase in attestations is caused by the changing pattern of Oxyrhynchite documentation, with its concentration on large estates.

\(^5\) For axles five and seven year periods are mentioned in *P.Oxy.* 16.1988.30 and 16.1911,165 resp.


\(^7\) See Rathbone (1991) 223-224: no noticeable peaks in the documentation of the third century Appianus estate in the Fayum.
Measurements: 13.1 x 13.8 cm. No kollesis. On both sides the writing runs with the fibres. On the recto eighteen lines of text, with some traces of a nineteenth line. On the verso one line of text. The second half of the papyrus is missing. Of the remaining part the upper left corner is much damaged. The holes in the rest of the papyrus follow a vertical pattern, which seems to be caused by the folding of the papyrus.

The handwriting is similar to those of the other sixth century μηχανεία receipts, e.g. to SB 12.11231 (photo in ZPE 11/3 (1973) pl. 7). The writing is fairly regular, although the size of the letters varies considerably. A trema is written above the initial iotas of l. 8 and 9. Upsylons are in general written as a descending diagonal stroke above the line. Abbreviations (not always marked by an ascending diagonal stroke through the vertical stroke of the last letter. Ligatures occur occasionally. Cf. Tafel. III.

\[\text{[basile]}\phi\text{[a]w t[ò] yeio[ò]t[ù] ësebes(tãtou) [de]spÔ(tou) Fl[æougu] \]
\[\text{[basile]w t[ò] ësebes(tãtou) [de]spÔ(tou) Fl[æougu] \]
\[\text{[basile]w t[ò] ësebes(tãtou) [de]spÔ(tou) Fl[æougu] \]

On the back:

(symbol) \(\text{[basile]}\phi\text{[a]w t[ò] Yeirograf[a] ËVrou uflo[æ] ÉApol[òtow] \}

1. 5 read κοβοσιομένων 1. 8 read κουράτοριν

In the 23rd year of the reign of our most divine and most pious lord Flavius Justinianus, the eternal Augustus and imperator, the consuls for the 8th year after the consulate of the most brilliant Flavius Basilius, Phaophi 15, 13th indiction.

To the Flavii Theodorus, the most excellent count of the most devoted domestics, former dux et augustalis of the great city Alexandria, and Theodosius, the most excellent illustrious man, his colleague, overseers of our most divine and most pious lord Flavius Justinianus, the eternal augustus and imperator, situated also here at Oxyrhynchus and its territory, through Aphousas, steward and headman of the same Divine House, Aurelios Horos, son of Apollos, his mother being …ia, from the hamlet Belesiou of the Oxyrhynchite nome, greetings.

Since now the need has arisen for (a wheel?) with fifty … cogs for the imperial waterwheel under my charge which is called 'Of the Cistern' and supplies water to vine-land and arable land, …
The assignment at the beginning of l. 3 of specific traces to specific letters is rather doubtful. There is too little space to write μετά τὴν υπατείαν in full; for the specific form of its abbreviation, see in the list of Oxyrhynchite formulas presented by Bagnall and Worp (1979a) SB 6.9239 and P.Oxy. 16.1970. Both regnal and post-consular year are almost certainly lost in the lacuna.

5 For Theodorus see CPR 5.18 (Herakleopolis, AD 538?). This receipt for money is written by a Φλάνους θεόδωρος, who describes himself as ὁ ἐνδόξος κόμης τῶν καθοισμένων δομεστικῶν ἀπὸ δουκῶν καὶ ἀρχισταλίων, φροντιστὴς προγμάτων τῆς θεοτρῆσεως καὶ εὐξεμηστάτης ἡμῶν δεσποινῆς καὶ αἰωνίας Ἀγούστου βασιλέως θεόδωρας, ‘most excellent count of the most devoted domestics, former dux et augustalis, overseer of the estates of our most divine and most pious mistress and eternal augusta, queen Theodora.’ Although Theodorus is a common name, the combination of titles is so similar that it would be difficult to avoid identification with the Theodorus mentioned in the new text.

5-7 To describe Theodorus simply as a ‘funzionario del dipartimento decentrato in Egitto’ (Migliardi Zingale [1984-1985] 148) might be strictly speaking correct, but is somewhat misleading. All elements of Theodorus’ titulation point to the fact that he was a very high ranking official. The title of comes domesticorum is surely honorary and might have been conferred both in relation to Theodorus’ governorship and in relation to his curatorship. See Delmari (1984) 148-153, with Haldon (1984) 135 n223 and Feissel (1985) 467. For analogies see PLRE III: Callinicus 4 was in the late sixties of the sixth century comes domesticorum and dux et augustalis Thebaidis; Cyrus 2 was somewhere during the sixth century comes domesticorum and praeses Arcadiae. Theod(os)i)us 10 (Justianinic) and Magnus 2 (around 581) both combined the curatorship with the comitiva. Note that Magnus headed earlier another domus without carrying the title of comes domesticorum. As can be learned from the list presented by Delmari (1984) 157-161, in the fifth century comites domesticorum were invariably called μεγαλοπρεπέστατος καὶ ἐνδόξος, magnificentissimus et gloriosissimus. Afterwards several varieties came into use, among which was ἐνδόξος, as sole title. See also Koch (1903) 63-64. Ἐνδόξος among the comites domesticorum of PLRE are Cyrus 7 (mid Vlc), possibly So... (between AD 527 and AD 548) and Theodos(i)us 10 (Justianinic).

6-7 ἄτο δουκῶν καὶ αὐρωποτορίων τῆς μεγαλόπολεως Ἀλεξάνδρειάς: the first papyrological attestation of the full title of the dux et augustalis Alexandriae. In Edict 13 Justinian reorganised the provincial administration of Egypt (for the date and some discussion see below). Both the Thebaid and ‘Alexandria’ (the former provinces Aegyptus I and II) were to be administered by a dux et augustalis, who combined military with civil power. ἀτό: there is no good reason to assume that Theodorus’ office was honorary. Although some curators are known to have been honorary consul and patricius only, others held real offices, such as comes sacrarum largitionum or governor. See PLRE III Magnus 2 (CSL); Faustinus 1 (governor of Palestine); Aristomachus 2 (prefect Constantinople, possibly dux et augustalis Thebaidis), although the last two cases are not completely certain. The present state of our evidence does on the other hand not warrant the conclusion that there exists a structural relationship between the office of governor and the office of curator, as Gascou (1985) 35 n. 213 suggests.

7 For τῆς μεγαλόπολεως Ἀλεξάνδρειάς see D. Hagedorn, ZPE 86 (1991) 248.

8-7 Theodosius seems to be a new personage. His namesakes in P.Ant. 3.188 (VI-VIIc) and in P.Cair.Masp. 3.67309 (AD 569) are both too remote a possibility for identification, nor can he be identified with the villain of SB 6.9102 (discussed below). Theodosius ὁ μεγαλοπρεπέστατος about whose misconduct the villagers of Aphrodito compiled a whole dossier. For Theodosius’ title ἐνδόξος ἠλλοστρότης see Koch (1903) 44-45 and Guillaud (1967) 25. Several other ἐνδόξος ἠλλοστρότης are known from the papyri, some without any office, others as pagarchs.

8 For ἰδελφός in the sense of colleague, see LSJ s.v. ι.3.

9 Rea’s equation in CPR 5.18 comm. ad l. 3 of φροντιστῆς with κωπρᾶται is neatly confirmed by the new text.

10 διοικεῖν (ἔνω): διοικεῖθαι was in regular use in this period to denote the place where property was situated. See in the list of μηχανινὴ παροικια P.Oxy. 16.1899, where a Flavius Joseph acts as διοικητῆς προγμάτων τοῦ κυάτου ἐνδόξοτατου ἀνδρὸς διοικημένων κατὰ τὴν Ὀζυρυχτέων. However, its use in this text is slightly awkward. The former phrase is conflated with a phrase regularly in use in the receipts coming from the Apion estate: ‘τὸ ΝΝ’, γνωρισμένο καὶ κατατεθεία τῇ λαμπρῇ Ὀζυρυχτέων πόλεως, ‘landowner also here at Oxyrhynchus’. The confusion arises from the fact that the curators were the addresses of the receipt but not the owners of the estate. As it seems unlikely that διοικεῖν ( ) was meant to refer to persons, supplying οἰκίαν τοῦ after κωπρᾶται or τοῦ might be the easiest solution to the problem.

11 For the use of ποιεῖν see P.Oxy. 8.1101.5 (AD 367-70) with Gelzer (1909) 62, who argued that its use from the fourth onwards reflected the administrative conversion of nomes into pagi.

12 Note that in almost all μηχανινὴ receipts the addresses and addressees are Flavii and Aurelii respectively, whereas almost all the agents through whom the action takes place lack such onomastic status designators. For οἰκίατης there is an analogy in Menas, οἰκίατης of the Apion estate, whose name appears in documents for almost a whole century. It is difficult to say anything about Aphouas’ status, for that of Menas, see the comments in P.Oxy. 58.3935 ad l. 7.

13 Βελεσίου: The reading of the name has been suggested by D. Hagedorn, who refers to P.Harr. 1.163 and possibly P.Strash. 8.800.
The main interest of the text lies in the fact that it concerns the Divine House, ὁ θείος οἶκος. The imperial family had several sources of income, but in contrast to the other revenues those of the Divine Houses belonged to the members of the imperial family personally. The Divine Houses seem to have functioned in every respect like other οἶκοι. They generated the same type of document, and paid the same taxes as the private (ἐνδοκοι) or the ecclesiastical (ἐκκλησιατικά) estates. ⁸

The Divine House may not have been the biggest landholder in sixth century Egypt, but as far as the very uneven pattern of surviving sixth century documentation allows us to judge, there were few places where it did not have holdings. ⁹ At Oxyrhynchus several documents attest to its activity. ¹⁰

The Divine Houses were administered by curators. As H. Grégoire already pointed out in 1923 these curatores were chosen from the highest ranks of society. ¹¹ Probably due to the nature of our sources, we meet most of them in the neighbourhood of the imperial court at Constantinople. More is known about their involvement in court intrigues than about their administrative activities. ¹²

The first of the two curators mentioned in our new text, Flavius Theodorus, is count of the most devoted domestics and former dux et augustalis of Alexandria. As stated above, Theodorus is known already from CPR 5.18. This identification solves the problem of the date of the new text, albeit in a somewhat roundabout fashion.

Day, month and indiction of P.Col. inv. 83 are certain, but both the regnal year and the post-consulate have disappeared in a lacuna. The document is written on the twelfth October of a thirteenth indiction. Between the introduction of the post-consulate of Basilisius and the death of Justinian two thirteenth inductions occurred, the one in AD 549/50, the other in AD 564/65.

The other document in which Theodorus figures, CPR 5.18, lacks an official date, but is said to be written on April 15 of a first indiction, which could refer to either AD 538 or AD 553. As J. Rea, the editor of the text, convincingly argued, the ‘first indiction’ cannot but refer to AD 538, because the titulature of Theodora indicates she was still alive. If the text was written after Theodora’s death in AD 548, one would expect a formula with τῆς θείας λήξεως, as in P.Cair.Masp. 1.67019,12 (cf. I.G.L.S. 4.1905).

As Rea explains, there is admittedly a problem with this date. The office of dux et augustalis seems to have been introduced by Justinian when he promulgated Edict 13, the edict in which the administrative structure of Egypt was redefined. Scholars now generally agree that this edict was promulgated in AD 538/9, not in AD 553/4, but even this early date is later than that of CPR 5.18, where the office of dux et augustalis is already mentioned. ¹³ Rea argued that Theodorus must have combined two separate

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⁸ Gascou (1985) is fundamental.

⁹ Hardy (1931) 43-44 and Gascou (1985) 141-142, compare Crawford (1976) 37, 62-63 for the earlier period. Antinoopolis: P.Ant. 3.188 (VI-VII); for Aphrodito see below; Herakleopolis: CPR 5.18 (AD 553); for Oxyrhynchus see next note.

¹⁰ P.Oxy. 16.1915 (ca AD 560); P.Oxy. 16.2020 (around AD 580); P.Oxy. 16.1892 (AD 581); P.Oxy. 16.2055 (VI); PSI 3.196-7 (VI-VII).

¹¹ Grégoire (1923) 164, also Gascou (1985) 35, who refers to CJ 7(37.3) (531) and Kaplan (1992) 140-142 and 177-179.

¹² It is telling that much of the information in the entries on the curatores domus divinae in PLRE II and III is based on Procopius’ Anekdota.

offices, a practice for which there exist some good parallels in the fifth century. *Edict* 13 supposedly formalized a situation that had already come to exist in specific cases.

If *CPR* 5.18 dates from AD 538, economy of hypothesis leads to the exclusion of AD 564/5 for *P.Col. inv.* 83. Otherwise Theodorus would have had a rather long career, without significant changes or improvements. All three texts under consideration, *CPR* 5.18, *Edict* 13 and *P.Col. inv.* 83 have two possible dates, but any other possible chronological relationship only complicates and does not clarify matters. Absolute certainty cannot be reached, but it seems very likely that *P.Col. inv.* 83 dates from October 12, AD 549.

Thus far, Theodorus’ activities do not seem to extend outside lower Egypt. There is nothing which suggests that *CPR* 5.18, written by Theodorus, originates from outside Egypt. Perhaps more identifications of the above mentioned Theodorus are possible, but they hinge on the question of how the imperial domains were organized. Should we assume that Theodorus (and Theodosius as well?) held office in Alexandria?

An inscription from Kejiut in Pontus mentions a Theod(osi)us whose name could be equally well read as Theod(orr)us. As a *comes domesticorum* and θείου κουράτωρ he was involved in the building of a church under Justinian. Theodorus is a common name, however, so that with the present state of our knowledge about the curatorship it seems rather pointless to pursue the issue.¹⁴

Of more interest is the possible identification with the writer of *SB* 6.9102, a curator of an unnamed Divine House, residing at Constantinople.¹⁵ The document consists of a letter written around 549 AD in Constantinople. It forms part of the dossier devoted to the problems of the village of Aphroditos. The name of the writer was reconstructed as follows: πατήρ Θεόδωρος Πέτρου [--- ca 22 letters missing ---] Πατρ(ίκιος) Κουρά(τωρ) τοῦ Θεοδώρου οἶκου. The editor, R.G. Salomon, suggested to identify this Θεόδωρος Πέτρου with the curator of the domains of the empress who was addressed in *CJ* 7.37.3 of AD 531 as *Petro viro illustri curatori divinae domus serenissimae Augustae*.¹⁶ Recently, however, Delmaire emended the text to πατρ(ίκιος) κουρά(τωρ) and concluded that ‘il s’agirat alors du même Théodorus [as in *CPR* 5.18], devenu patrice entre-temps; dans ce deuxième texte [*SB* 6.9102], les domaines jadis affectés à Théodora sont retournés à la domus divina après la mort de l’impératrice.’¹⁷

The date of our new text complicates this tempting identification. Given Theodorus’ supposed promotion to the patriciate one expects *SB* 6.9102 to be later in date than *P.Col. inv.* 83. Yet in *SB* 6.9102 an eleventh indiction is mentioned, implying that the document was written shortly after AD 547/8, whereas *P.Col. inv.* 83 dates from October 12, AD 549.¹⁸ Although the chronology of Aphrodito’s embassies to the capital is complex,¹⁹ identification of the two persons would require too many unsubstantiated arguments to make it convincing.

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¹⁴ Yorke (1898) 325 no. 45 (undated) = *AE* 1899, 85, with *PLRE* III Theodosius 10, where the possibility for the alternative reading was raised. Cf. further the curatores in *PLRE* III Theodorus 72, 108, 114 (three different seals) and 25 of AD 562 (though this concerns a κουμάτωρ τοῦ δησποτικοῦ οἴκου τῆς Πλακίδιας, and would be rather late in date).

¹⁵ L. 36 τῆς πατρίθμου προνοομομένης θειοτάτης οἰκίας. Ed. pr. Salomon (1948); unfortunately the text on the verso is not printed in *SB* 6.9102.


¹⁷ Delmaire (1988) 131. Note that in *PLRE* III Theodorus 15 the possibility is raised that Theodorus and Petrus might be Petrus 6 and his son Theodorus 34, the former active from AD 534 to 564, the latter from AD 560 to 576. Of a curatorship nothing is known, however.

¹⁸ L. 9-11: Θεόδωρον τὸν μεγαλοπρεπέστατον τοὺς ἀνά ό τῆς ἐνδεκάτης ἐπίνειμιθείσως δησμοσίως ἀποστέρηθεντα φῶρας. According to Salomon *P.Cair.Masp* 1.67029, written after the ‘just passed’ eleventh indiction, provides a terminus ante quem. If *SB* 6.9102 antedates *P.Cair.Masp* 1.67029, the text surely must have been written before the beginning of the thirteenth indiction in September 549.

At any rate, both in CPR 5.18 and the new text Theodorus is a curator of a ‘Divine House’. In 538 (CPR 5.18) this is the House of Theodora, while in AD 549 (P.Col. inv. 83) Theodorus is in charge of the House of Justinian, together with a colleague. Several scenarios are possible, but it seems easiest to relate this development to the absorption of the domains of Theodora into those of Justinian after Theodora’s death in AD 548. There is some more evidence for the same process. In P.Cair.Masp. 1.67024 of ca AD 551 Aphrodito appears as a part of the household of Justinian, whereas before it belonged to Theodora.  

APPENDIX: THE MECHANE RECEIPTS

<table>
<thead>
<tr>
<th>Papyrus</th>
<th>Month, year</th>
<th>Addressee</th>
<th>διά</th>
<th>Addressor</th>
<th>Replaced parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.Med. 64</td>
<td>Phaophi 528</td>
<td>The Oxyrhynchite church, under abba Petros, ἐπίσκοπος</td>
<td>-</td>
<td>Aur. Pseeis, ἑναπόγραφος γεωργός, illiterate</td>
<td>1 αξίων</td>
</tr>
<tr>
<td>P.Oxy. 36.2779</td>
<td>Phaophi 543</td>
<td>Fl. Apion, γεωρχόν</td>
<td>-</td>
<td>Aur. Epimachus alias Apima, ἑναπόγραφος γεωργός, illiterate</td>
<td>1 αξίων</td>
</tr>
</tbody>
</table>

| **BASP 31** (1994) 61-63 nr. 16 (ph.), cf. P.Oxy. 1.202 (descr.) | Phaophi 582 | The heirs of Fl. Apion, γεουχούντες | Menas, οικέτης, έναπόγραφος γεωργός | 1 μέγας έργατης |
| **P.Lond. 3.774 p.280 (ph.), cf. P.Oxy. 1.193 (descr.)** | Phaophi 582 (?) | The heirs of Fl. Apion, γεουχούντες | Menas, οικέτης | Aur. Johannes, έναπόγραφος γεωργός | 2 μεγάλοι έργαται |
| **P.Oxy. 1.137** | Tybi 584 | The heirs of Fl. Apion, γεουχούντες | Menas, οικέτης | Aur. Pollion, έναπόγραφος γεωργός | 1 άξον |
| **P.Oxy. 16.1987** | Mecheir 587 | The heirs of Fl. Apion, γεουχούντες | Menas, οικέτης | Pheibammon, άντικ-δίκος | 1 μέγας έγκατης |
| **P.Oxy. 16.1989** | Hahyr 590 | Flavia Praejecta and Fl. Apion, the heirs of Fl. Apion, γεουχούντες | Menas, οικέτης | Aur. Hareotes, έναπόγραφος γεωργός, illiterate | 1 άξον |
| **P.Oxy. 16.1990** | Tybi 591 | Flavia Praejecta and Fl. Apion, the heirs of Fl. Apion, γεουχούντες | Menas, οικέτης | Aur. Saratias, έναπόγραφος γεωργός, illiterate | 1 άξον |
| **P.L.Bat. 13.20 (ph.)** | Choiak 592 (Van Haelst (1966) 588 = BL 10 forthcoming) | lost, ascribed to Flavia Anastasia by Van Haelst (1966) 588. | lost | NN and Pamouthios (BL 5), έναπόγραφοι γεωργοί, illiterate | 1 μικρός έργατης |
| **PSI 3.179. Ph.: P.Laur. 3, pl. 91** | Choiak 602 (BL 8 and P.Oxy. 58.3933 ad 2-3) | Fl. Apion, γεουχών | Menas, οικέτης | Aur. Omnompis | lost |
| **P.Jand. 50** | Tybi VI-VIIc | lost | lost | lost | lost |

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