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

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

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

The papyrus published here<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup> *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).<sup>6</sup> This pattern stands in clear contrast to the situation in the Fayum, where irrigation techniques were rather different.<sup>7</sup>

<sup>1</sup> 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.

<sup>2</sup> See appendix. Cf. also the unpublished texts mentioned by Van Haelst (1966): nrs. 4 (*P.Giss.Univ.Bibl. inv.* 37, AD 589) and 9 (*P.Giss.Univ.Bibl. inv.* 46, undated). Older lists can be found in Daris (1957) 98 and (in Russian) Fichman (1965) 227-248. *P.Oxy.* 16.1983 is similar in structure, but concerns a μολαίον *BASP* 31 (1994) 59-60 nr. 15 and *P.Lond.* 3.777 (p. 281) might be other μηχανή receipts, but only the heading is preserved.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> For axles five and seven year periods are mentioned in *P.Oxy.* 16.1988,30 and 16.1911,165 resp.

<sup>6</sup> Cf. Bonneau (1993) 226. In *P.Oxy.* 19.2244 a second peak occurs in the month Tybi (27/12-25/1), which still fits within the general pattern.

<sup>7</sup> 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 μηχανή 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. Upsilon is in general written as a descending diagonal stroke above the line. Abbreviations are generally (but not always) marked by an ascending diagonal stroke through the vertical stroke of the last letter. Ligatures occur occasionally. Cf. Tafel. III.

[βασιλε]ίας το[ῦ] θειοτάτο[υ κ(αί)] εὐσεβ(ε)σ(τάτου) ἡμῶν [δε]σπό(του) Φλ(αουίου)  
 [Ἰουστ]ινιανου τοῦ αἰών(ίου) Α[ὐ]γ[ού]στ(ου) κ(αί) Αὐτοκράτορ(ος) ἔτους  
 [κγ, τοῖς τὸ ἦ] μετὰ τ(ῆν) ὑπατ(είαν) Φλ(αουίου) Βασ[ι]λίου τοῦ λαμπρ(οτάτου)  
 Φαῶφι ιε ἰνδ(ικτίωνος) ιγ.

- 5 Φ[λ(αυίους)] Θεο[δ]ώρω τῷ ἐ[ν]δοξ(οτάτω) κόμ(ετι) τῶν καθο-  
 [σιωμένων] δ[ιο]μεστ[ικῶν] ἀπὸ δου[κ]ῶν κ(αί) αὐγουσταλιῶν  
 τῆς μεγ[α]λ[ο]πόλ[εως] Ἀλεξ(ανδρείας) κ(αί) Θεο[δ]οσίω τῷ ἐνδοξ(οτάτω)  
 ἰλλουστρίω αὐτοῦ ἀδελφῷ κουράτωρσιν τοῦ (οἴκου τοῦ)  
 θειοτάτ(ου) κ(αί) εὐσεβ(ε)σ(τάτου) ἡμῶν δεσπ(ότου) Φλ(αουίου) Ἰουστινιανου  
 10 τοῦ αἰωνίου [Α]ὐ[γ]ούστ(ου) κ(αί) Αὐτοκράτορος διακειμ(ένου) κ(αί) κατὰ  
 ταύτην τ(ῆν) Ὀξυρυγχ(ιτῶν πόλιν) καὶ τὴν ταύτης ἐνορίαν, διὰ  
 Ἀφουᾶ [οἰ]κέτου καὶ μειζοτέρου τοῦ αὐτοῦ θειοτάτου  
 οἴκου, Αὐρ[ή]λιος Ὀρος υἱὸς Ἀπολλῶτος  
 μητρ[ὸς] . . . ]ίας ἀπὸ ἐ[ποι]κίου Βελεσίου  
 15 το[ῦ] Ὀξ[υ]ρ[υ]γχ(ίτου) νομοῦ χαίρειν. χρείας καὶ νῦν  
 [γενομένης εἰς] τὴν ὑπ' ἐμὲ δε[σπ]οτικὴν μηχανήν  
 [καλου]μ[ένην] τ[οῦ] Λάκκου ἀντ[λοῦ]σαν εἰς ἄμ[π]ελ[ον]  
 [καὶ εἰς ἀρόσιμ]ον γῆν σκυτ[ά]ω[ν] πεντήκον[τα]  
 ] . . . [ ] [ ] . . . [ ]

On the back:

(symbol) χειρ[ο]γραφ(ία) Ὀρου υἱοῦ Ἀπολλῶτος

l. 5 read καθοσιωμένων l. 8 read κουράτωρσιν

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 the house> of our most divine and most pious lord Flavius Justinianus, the eternal augustus and imperator, situated also here at Oxyrhynchus and its territory, through Aphouas, steward and headman of the same Divine House, Aurelios Horos, son of Apollon, 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, . . .

1-4 For the date of the text see the discussion below. The dating formula contains the elements prescribed by *Nov.* 47 of AD 537: regnal year, consulate (in this case a post-consulate) and indiction. The specific phrasing of this *intitulatio*, the use of τοῖς τό, and the use of λαμπρότατος for Basilius are all regularly used in other Oxyrhynchite documents dating from this period. See Bagnall and Worp (1979a) 45-48 and (1979b) 245-246.

- The assignment at the beginning of l. 3 of specific traces to specific letters is rather doubtful. There is too little space to write μετὰ τὴν ὑπατεῖαν 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 Φλάουιος Θεόδωρος, who describes himself as ὁ ἐνδοξότατος κόμης τῶν καθοσιωμένων δομestikῶν ἀπὸ δουκῶν καὶ ἀγουσταλίων, φροντιστῆς πραγμάτων τῆς θειοτάτης καὶ εὐσεβεστάτης ἡμῶν δεσποίνης καὶ αἰωνίας Ἀγούστης βασιλίσσης Θεοδώρας, ‘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’ titulature 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 Delmaire (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*; Cyricus 2 was somewhere during the sixth century *comes domesticorum* and *praeses Arcadiae*. Theod(osi)us 10 (Justinianic) 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 Delmaire (1984) 157-161, in the fifth century *comites domesticorum* were invariably called μεγαλοπρεπέστατος καὶ ἐνδοξότατος, *magnificentissimus et gloriosissimus*. Afterwards several varieties came into use, among which was ἐνδοξότατος as sole title. See also Koch (1903) 63-64. ‘Ἐνδοξότατος among the *comites domesticorum* of *PLRE* are Cyrus 7 (mid VIc), possibly So... (between AD 527 and AD 548) and Theod(osi)us 10 (Justinianic).
- 6-7 ἀπὸ δουκῶν καὶ ἀγουσταλίων τῆς μεγαλοπόλεως Ἀλεξανδρείας: 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.
- ἀπὸ: 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 μεγαλοπόλεως Ἀλεξανδρείας see D. Hagedorn, *ZPE* 86 (1991) 248.
- 7-8 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 ἐνδοξότατος ἰλλούστριος see Koch (1903) 44-45 and Guiland (1967) 25. Several other ἐνδοξότατοι ἰλλούστριοι are known from the papyri, some without any office, others as pagarchs.
- 8 For ἀδελφός in the sense of colleague, see *LSJ* s.v. I.3.
- Rea’s equation in *CPR* 5.18 comm. ad l. 3 of φροντιστῆς with κουράτωρ is neatly confirmed by the new text.
- 10 διακειμ(ένου): διακεῖσθαι was in regular use in this period to denote the place where property was situated. See in the list of μηχανή receipts *P.Oxy.* 16.1899, where a Flavius Joseph acts as διοικητῆς πραγμάτων τοῦ αὐτοῦ ἐνδοξοτάτου ἀνδρὸς διακειμένων κατὰ τὴν Ὀξυρυγιτῶν. 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: ‘to NN’, γεουχοῦντι καὶ ἐνταῦθα τῇ λαμπρῇ Ὀξυρυγι(τῶν) πόλ(ει), ‘landowner also here at Oxyrhynchus’. The confusion arises from the fact that the curators were the addressees of the receipt but not the owners of the estate. As it seems unlikely that διακειμ( ) was meant to refer to persons, supplying οἴκου τοῦ ἀφ’ οὗ κουράτωρσιν τοῦ might be the easiest solution to the problem.
- 11 For the use of ἐνορία see *P.Oxy.* 8.1101.5 (AD 367-70) with Gelzer (1909) 62, who argued that its use from the fourth century onwards reflected the administrative conversion of nomes into pagi.
- 12 Note that in almost all μηχανή receipts the addressees and addressors are Flavii and Aurelii respectively, whereas almost all the agents through whom the action takes place lack such onomastic status designators.
- For οἰκέτης there is an analogy in Menas, οἰκέτης 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.
- 14 Βελεσίου: The reading of the name has been suggested by D. Hagedorn, who refers to *P.Harr.* 1.163 and possibly *P.Strasb.* 8.800.

18 For the reading σκυτ[άλω]ν see the comments in Daris (1957) 96-7 and Drew-Bear (1994) 162. One expects on the next line a waterwheel (ἐργάτης, presumably μέγας) to be mentioned after the numeral (which might not be complete).

Back, χειρογραφ(): the receipts that have the word written in full suggest resolving the abbreviation as χειρογραφ(ία), not χειρόγραφ(ον).

The main interest of the text lies in the fact that it concerns the Divine House, ὁ θεῖος 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 (ἐνδοξοί) or the ecclesiastical (εὐαγεῖς) estates.<sup>8</sup>

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.<sup>9</sup> At Oxyrhynchus several documents attest to its activity.<sup>10</sup>

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.<sup>11</sup> 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.<sup>12</sup>

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 Basilisus and the death of Justinian two thirteenth indictions 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 titlature 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.<sup>13</sup> Rea argued that Theodorus must have combined two separate

<sup>8</sup> Gascou (1985) is fundamental.

<sup>9</sup> 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.

<sup>10</sup> *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).

<sup>11</sup> Grégoire (1923) 164, also Gascou (1985) 35, who refers to *CJ* 7.37.3 (531) and Kaplan (1992) 140-142 and 177-179.

<sup>12</sup> 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' *Anekdotia*.

<sup>13</sup> *Edict* 13.3.2, cf. 1.14. A second indiction is implied in the phrase τῆς ἄρτι παρελθούσης πρώτης ἐπιμεμήσεως. See Rémondon (1955) with literature cited there and *PLRE* 3 s.v. Fl. Hephaestus. An early date for *CPR* 5.18 cannot be used as confirmation of an early date for *Edict* 13, contra Delmaire (1988) 131, repeated (1989) 263.

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(or)us. As a *comes domesticorum* and θεῖος 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.<sup>14</sup>

Of more interest is the possible identification with the writer of *SB* 6.9102, a curator of an unnamed Divine House, residing at Constantinople.<sup>15</sup> 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 Aphrodito. The name of the writer was reconstructed as follows: π(α)ρὰ Θεοδώρῳ Πέτρῳ [--- ca 22 letters missing ---] οὔ πατρ(ικίου) (καὶ) σεμ(νοτάτου) κουρά(τωρος) τοῦ θε(ιοτάτου) οἴκου. The editor, R.G. Salomon, suggested to identify this Θεόδωρος Πέτρῳ 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*.<sup>16</sup> Recently, however, Delmaire emended the text to πατρ(ικίῳ καὶ) κουρά(τορι) and concluded that 'il s'agit alors du même Theodorus [as in *CPR* 5.18], devenu patrice entre-temps; dans ce deuxième texte [*SB* 6.9102], les domaines jadis affectés à Theodora sont retournés à la *domus divina* après la mort de l'impératrice.'<sup>17</sup>

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.<sup>18</sup> Although the chronology of Aphrodito's embassies to the capital is complex,<sup>19</sup> identification of the two persons would require too many unsubstantiated arguments to make it convincing.

<sup>14</sup> 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 κουράτωρ τοῦ δεσποτικῶ οἴκου τῶν Πλακιδιάς, and would be rather late in date).

<sup>15</sup> L. 36 τῆς παρ' ἡμῶν προνοουμένης θειοτάτης οἰκίας. Ed. pr. Salomon (1948); unfortunately the text on the verso is not printed in *SB* 6.9102.

<sup>16</sup> Followed by Migliardi Zingale (1984-1985) 147-8.

<sup>17</sup> 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.

<sup>18</sup> L. 9-11: Θεοδόσιον τὸν μεγαλοπρεπέστατον τοὺς ὑπὲρ τῆς ἑνδεκάτης ἐπινεμ(ήσεως) δημοσίους ἀποπληρωθέντα φόρο[υς]. 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.

<sup>19</sup> See Salomon (1948) 103-105 and the chronology presented by MacCoull (1988) 10-11.

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.<sup>20</sup> The new document seems to suggest that the absorption must have taken place shortly after Theodora's death.

## APPENDIX: THE MECHANE RECEIPTS

Papyrus	Month, year	Addressee	διὰ	Addressor	Replaced parts
<i>P.Med.</i> 64 (ph.), cf. <i>S.B.</i> 6.9503	Choiak 441 ( <i>BL</i> 7)	NN, πολιτευόμενος of Oxyrhynchus, [διοικητής] πραγμάτων τῆς ... δεσποίνης Ἀρκαδίας	-	Aur. Paulus, ἐναπόγραφος γεωργός, illiterate	1 μέγας ἐργάτης μηχανικός
<i>P.Oxy.</i> 34.2724	Phaophi 469	Flavia Kuria, γεουχοῦσα at Oxyrhynchus	-	Aur. Pasoerius and Aur. John, ἐναπόγραφοι γεωργοί, both illiterate	1 ἄξων
<i>P.Oxy.</i> 16.1899	Pachon 475 or 476 ( <i>BL</i> 7-8)	Fl. Alexander, στρατηγός	Fl. Joseph, διοικητής πραγμάτων	Aur. Symphonias, illiterate	1 κυκλάς
<i>P.Oxy.</i> 16.1982	Phaophi 497	Fl. Strategius (of the Arion family), γεουχῶν	-	Aur. Joseph, ἐναπόγραφος γεωργός illiterate	1 ἄξων
<i>P.Oxy.</i> 16.1984	Phaophi 523 (?)	Fl. Strategius (of the Arion family), γεουχῶν	-	Aur. Vitalius	lost
<i>P.Oxy.</i> 16.1900	Phaophi 528	The Oxyrhynchite church, under abba Petros, ἐπίσκοπος	Phib, πρεσβύτερος καὶ καθολικός οἰκονόμος	Aur. Pseeis, ἐναπόγραφος γεωργός illiterate	1 ἄξων
<i>P.Oxy.</i> 36.2779	Tybi 530	Fl. Strategius (of the Arion family)	Menas, οἰκέτης	Aur. Epimachus alias Arima, ἐναπόγραφος γεωργός, illiterate	1 ἄξων
<i>P.Oxy.</i> 16.1985	Phaophi 543	Fl. Arion, γεουχῶν	Menas, οἰκέτης	Aur. Pamouthius, φροντιστής and ἐναπόγραφος γεωργός illiterate	1 σινόργανον, 1 ἰλαστήριον and 1 κυλλὴ κυκλάς
<i>S.B.</i> 12.11231, cf. <i>P.Oxy.</i> 16.1986 (descr.). Ph.: <i>ZPE</i> 11/3 (1973) pl. 7	Hathyr 549	lost	lost	Aur. Parnouthius and Aur. Menas, ἐναπόγραφοι γεωργοί, illiterate	1 ἄξων
<i>P.Lond.</i> 3.776 p.278 (ph.), cf. <i>P.Oxy.</i> 1.197 (descr.)	Thoth 552	Fl. Arion, γεουχῶν	Menas, οἰκέτης	Aur. Sourus	1 μέγας ἐργάτης, 1 μικρὸς ἐργάτης and 1 κυλλὴ κυκλάς
<i>P.Lond.</i> 3.775 p. 279, cf. <i>P.Oxy.</i> 1.195 (descr.)	Thoth 567	Fl. Arion, γεουχῶν	Menas, οἰκέτης	Aur. Epimachus alias Arima, ἐναπόγραφος γεωργός	lost

<sup>20</sup> See Salomon (1948) 101 n4. Some further *osservazioni* by Migliardi Zingale (1984-5).



<i>BASP</i> 31 (1994) 61-63 nr. 16 (ph.), cf. <i>P.Oxy.</i> 1.202 (descr.)	Phaophi 582	The heirs of Fl. Apion, γεουχοῦντες	Menas, οἰκέτης	Aur. Baltholomaeus, ἐναπόγραφος γεωργός	1 μέγας ἐργάτης
<i>P.Lond.</i> 3.774 p.280 (ph.), cf. <i>P.Oxy.</i> 1.193 (descr.)	Phaophi 582 (?)	The heirs of Fl. Apion, γεουχοῦντες	Menas, οἰκέτης	Aur. Johannes, ἐναπόγραφος γεωργός	2 μεγάλοι ἐργάται
<i>P.Oxy.</i> 1.137	Tybi 584	The heirs of Fl. Apion, γεουχοῦντες	Menas, οἰκέτης	Aur. Ptollion, ἐναπόγραφος γεωργός, illiterate	1 ἄξων
<i>P.Oxy.</i> 16.1987	Mecheir 587	The heirs of Fl. Apion, γεουχοῦντες	Menas, οἰκέτης	Phoibammon, ἀντέκδικος	1 μέγας ἐργάτης
<i>P.Oxy.</i> 16.1988	Tybi 587	The heirs of Fl. Apion, γεουχοῦντες	Menas, οἰκέτης	Aur. Phoibammon, ἐναπόγραφος γεωργός, illiterate	1 ἄξων
<i>P.Oxy.</i> 16.1989	Hathyr 590	Flavia Praejecta and Fl. Apion, the heirs of Fl. Apion, γεουχοῦντες	Menas, οἰκέτης	Aur. Hareotes, ἐναπόγραφος γεωργός, illiterate	1 ἄξων
<i>P.Oxy.</i> 16.1990	Tybi 591	Flavia Praejecta and Fl. Apion, the heirs of Fl. Apion, γεουχοῦντες	Menas, οἰκέτης	Aur. Sarmatas, ἐναπόγραφος γεωργός, illiterate	1 ἄξων
<i>P.L.Bat.</i> 13.20 (ph.)	Choiak 592 (Van Haelst (1966) 588 = <i>BL</i> 10 forthcoming)	lost, ascribed to Flavia Anastasia by Van Haelst (1966) 588.	lost	NN and Pamouthios ( <i>BL</i> 5), ἐναπόγραφοι γεωργοί, illiterate	1 μικρὸς ἐργάτης
<i>PSI</i> 1.60. Ph.: Norsa, <i>Pap. Greci Scritt. Doc.</i> 3 pl. 24.	Phaophi 595	Fl. Apion, γεουχῶν	Menas, οἰκέτης	Aur. Matthias, ἐναπόγραφος γεωργός, illiterate	1 μικρὸς ἐργάτης
<i>P.Oxy.</i> 16.1991	Thoth 601 ( <i>BL</i> 8)	Fl. Strategius (of the Apion family), γεουχῶν	Fl. Dorotheus, κόμης and διοικητής	Aur. Georgius, ἐναπόγραφος γεωργός, illiterate	1 κυλλὴ κυκλᾶς
<i>PSI</i> 3.179. Ph.: <i>P.Laur.</i> 3, pl. 91	Choaiak 602 ( <i>BL</i> 8 and <i>P.Oxy.</i> 58.3933 ad 2-3)	Fl. Apion, γεουχῶν	Menas, οἰκέτης	Aur. Onnophris	lost
<i>P.Jand.</i> 50	Tybi VI-VIIc	lost	lost	lost	lost

## BIBLIOGRAPHY

- Bagnall and Worp (1979a):  
R.S. Bagnall and K.A. Worp, *Regnal Formulas in Byzantine Egypt (BASP Suppl. 2)* (Missoula, Montana).
- Bagnall and Worp (1979b):  
R.S. Bagnall and K.A. Worp, 'Chronological Notes on Byzantine Documents, III', *BASP* 16, 239-247.
- Bagnall (1993):  
R.S. Bagnall, *Egypt in Late Antiquity* (Princeton).
- Bonneau (1993):  
D. Bonneau, *Le régime administratif de l'eau du Nil dans l'Égypte grecque, romaine et byzantine* (Leiden etc.).
- Crawford (1976):  
D.J. Crawford, 'Imperial Estates', in: M.I. Finley ed., *Studies in Roman Property* (Cambridge etc) 35-70.
- Daris (1957):  
S. Daris, 'Dai papiri inediti della raccolta milanese', *Aegyptus* 37, 89-99.
- Delmaire (1984):  
R. Delmaire, 'Les dignitaires laïcs au Concile de Chalcédoine: notes sur la hiérarchie et les préséances au milieu du V<sup>e</sup> s.', *Byzantion* 54, 141-175.

- Delmaire (1988):  
 'Le personnel de l'administration financière en Egypte sous le Bas-Empire Romain (IV-VI<sup>e</sup> siècles)', *CRIPPEL* 10, 113-138.
- Delmaire (1989):  
 R. Delmaire, *Les responsables des finances impériales au Bas-Empire romain (IV<sup>e</sup>-VI<sup>e</sup> s.)*. Études prosopographiques (Bruxelles).
- Drew-Bear (1994):  
 M. Drew-Bear, 'Sur l'alimentation en eau d'Hermoupolis Magna d'après deux papyrus du III<sup>e</sup> siècle' in: B. Menu ed., *Les problèmes institutionnels de l'eau en Égypte ancienne et dans l'Antiquité méditerranéenne (I.F.A.O. 110)* (Cairo) 157-168.
- Feissel (1985)  
 D. Feissel, 'Magnus, Mégas et les curateurs des "maisons divines" de Justin II à Maurice', *Travaux et Mémoires* 9, 465-476.
- Fichman (1965):  
 I.F. Fichman, *Egipjet na rubjezje dvuch epoch: rjemjeslenniki i rjemjesljennij trud, v IV - sjerjedinje VII v* (Moscow).
- Gascou (1985):  
 J. Gascou, 'Les grands domaines, la cité et l'état en Égypte byzantine (Recherches d'histoire agraire, fiscale et administrative)', *Travaux et Mémoires* 9, 1-90.
- Gelzer (1909):  
 M. Gelzer, *Studien zur byzantinischen Verwaltung Ägyptens (Leipziger Historischen Abhandlungen 13)* (Leipzig).
- Grégoire (1923):  
 H. Grégoire, 'Miettes d'histoire byzantine (IV<sup>me</sup>-VI<sup>me</sup> siècle)', in: W.H. Buckler and W.M. Calder eds., *Anatolian Studies presented to Sir William Mitchell Ramsay* (Manchester) 151-164.
- Guilland (1967):  
 R. Guilland, *Recherches sur les institutions byzantines I* (Berlin etc).
- Haldon (1984)  
 J.F. Haldon, *Byzantine Praetorians: an Administrative, Institutional, and Social Survey of the Opsikion and Tagmata, c. 580-900* (Bonn).
- Hardy (1931):  
 E.R. Hardy, *The Large Estates of Byzantine Egypt* (New York).
- Kaplan (1992):  
 M. Kaplan, *Les hommes et la terre à Byzance du VI<sup>e</sup> au XI<sup>e</sup> siècle. Propriété et exploitation du sol* (Paris).
- Koch (1903):  
 P. Koch, *Die Byzantinischen Beamtentitel von 400 bis 700* (Jena).
- MacCoull (1988):  
 L.S.B. MacCoull, *Dioscorus of Aphrodito. His work and his world* (Berkeley etc).
- Migliardi Zingale (1984-1985):  
 L. Migliardi Zingale, 'Osservazioni sulla *domus divina* di Teodora', *Annali della facoltà di giurisprudenza di Genova* 20, 142-149.
- Oleson (1984):  
 J.P. Oleson, *Greek and Roman Mechanical Water-Lifting Devices: The History of a Technology* (Toronto etc).
- Rathbone (1991):  
 D. Rathbone, *Economic Rationalism and Rural Society in third-century A.D. Egypt. The Heroninos Archive and the Appianus Estate* (Cambridge etc.).
- Rémondon (1955):  
 R. Rémondon, 'L'Édit XIII de Justinien a-t-il été promulgué en 539?', *CE* 30, 112-121.
- Rowlandson (1996):  
 J. Rowlandson, *Landowners and Tenants in Roman Egypt. The Social Relations of Agriculture in the Oxyrhynchite nome* (Oxford).
- Salomon (1948):  
 R.G. Salomon, 'A papyrus from Constantinople', *JEA* 34, 98-108.
- Van Haelst (1966):  
 J. van Haelst, 'De nouvelles archives: Anastasia, propriétaire à Oxyrhynchus, in: *Atti dell'XI Congresso Internazionale di Papirologia* (Milan) 586-590.
- Yorke (1898):  
 V.W. Yorke, 'Inscriptions from Eastern Asia Minor', *JHS* 18, 306-327.

