Notes on the use of the iota adscript in the third century B.C.

The treatment of the long diphtongs $\alpha \iota$, $\eta \iota$ and $\omega \iota$ is typical of the secular tendency of the Greek language to model itself upon its classical past.

Up to the end of the classical period $\bar{a}\iota$ and $\omega\iota$ (1) are true diphtongs, but in the course of the Hellenistic age the iota is dropped in the spoken language both in the koinê and in the dialects (2). In inscriptions and papyri it is regularly written until the end of the third cent. B.C. (3), but from about 200 B.C. irregular spellings (ω for $\omega\iota$, $\omega\iota$ for ω) become increasingly frequent, attesting that the iota was no longer pronounced in that period (4). During the first centuries before and after Christ there exists a general confusion between $\omega\iota$ ($\bar{a}\iota$) and ω (\bar{a}) (5). In the second-century papyri, however, the historical orthography rapidly disappears; where it still occurs, the iota mutum is mostly written irregularly, but more often it is dropped altogether (6). In the third

- (1) In inscriptions and papyri of the pre-Christian era $\eta\iota$ developed differently from $\bar{a}\iota$ and $\omega\iota$. Cf. E. Schwyzer, *Griechische Grammatik I*, München, 1939, pp. 200-202.
- (2) Cf. F. Blass, Ueber die Aussprache des griechischen, Berlin, 1882, pp. 39-44; E. Lademann, De titulis Atticis quaestiones orthographicae et grammaticae, Kirchheim, 1915, pp. 41-44; E. Mayser H. Schmoll, Grammatik I², Berlin, 1970, pp. 95-98, 108-114; K. Meisterhans, Grammatik der Attischen Inschriften, Berlin, 1900, pp. 64-68; E. Nachmanson, Laute und Formen der Magnetischen Inschriften, Uppsala, 1904, pp. 49-59; E. Ruesch, Grammatik der Delphischen Inschriften, Berlin, 1914, pp. 117-136; E. Schweizer, Grammatik der Pergamenischen Inschriften Berlin, 1898, pp. 86-91.
- (3) In some dialects (Lesbian, Cypriot, Thessalian) the *iota* disappears as early as the beginning of the third century. Cf. E. Schwyzer, *Griechische Grammatik*, I, pp. 201-202.
- (4) The earliest literary evidence is probably in the Ars Grammatica of Dionysius Thrax (1st cent. B.C.) (= Grammatici Graeci I, 1, Leipzig, 1883, p. 58) : τῆς α διφθόγγον, προσγραφομένου τοῦ $\bar{\iota}$, μὴ συνεκφωνημένου δέ.
- (5) This was nicely put by W. Croenert, *Memoria Graeca Herculanensis*, Leipzig, 1903, pp. 45-46: « magna vero perturbatio est si primi p.C. librarios contemplamur; redundant acta et epistulae huius aetatis pravis scripturis - -. »

and fourth-century papyri the use of the *iota* is confined to the dative singular in the heading or the address of letters, petitions etc., where it occurs with increasing rarity (1). A similar tendency is noticeable in the inscriptions where the historical orthography practically disappears after Septimius Severus (2). From the fifth century onwards the documents nearly always display the phonetic spelling (3).

The *iota mutum*, however, is maintained in the literary papyri up to the 7th century. It is not found everywhere; moreover, it is quite often written irregularly within one and the same text or it has been added afterwards by a second hand, but the tradition was clearly kept alive by some scholars.

A thorough investigation of the use of the *iota mutum* in late Classical and Byzantine manuscripts is still inexistant (4). The grammarian Theodosius (4th-5th cent. A.D.) seems to have been the first to put $\tau \delta \ \bar{\iota} \ \tau \delta \ drex \varphi \delta v \eta \tau \sigma v$ under the preceding vowel $(\pi \varrho \sigma \sigma \gamma \varrho \alpha \varphi \delta \mu e v \sigma \kappa \Delta \tau \omega \theta e v)$ (5). His practice, however, was hardly followed in Antiquity (6). In the early Byzantine period (up to the 11th cent.) the *iota*, if written at all, was usually adscriptum, although sometimes smaller in size. In addition, a *iota superscriptum* (7), subscriptum and even inscriptum are

- (1) An interesting exception is the correspondence of Theophanes (early 4th cent.) where the *iota* is regularly written. Cf. E. G. Turner, *Greek Manuscripts of the Ancient World*, Oxford, 1971, p. 118.
- (2) Cf. W. Larfeld, Handbuch der griechischen Epigraphik I, Leipzig, 1907, p. 305. [see addendum 1]
- (3) Exceptions are very rare, e.g. P. Grenf. I 63, l. 8 (VI-VII; χωιφιζ) and Wilcken, Chrestom. 134, l. 10 (VI-VII; άγιωτάτωι πατφί).
- (4) The following survey is based mainly on V. Gardthausen, *Griechische Palaeographie* II, Leipzig, 1913, pp. 241-244.
- (5) Theodosii Alexandrini Grammatica, edid. C. G. Goetling, Leipzig, 1822, p. 158, 27.
- (6) A very exceptional example of iota subscriptum is attested in a funerary inscription from Claudiopolis (Cilicia; probably 3th or 4th cent A.D.). Both the copies of Sterett (Papers of the American School of Classical Studies at Athens, 3, 1885, p. 9, nr. 6) and A. C. Headlam (Ecclesiastical Sites in Isauria, The Society for Promotion of Hellenic Studies, Supplementary Papers nr. 2, 1892, p. 23, nr. 3) clearly note the iota under the o-mega of $\Delta o\mu\nu\epsilon\ell\nu\phi$ and $\tau\tilde{\phi}$ $\tau a\mu\nu\epsilon\ell\phi$ (whereas $\tilde{a}\lambda\lambda\omega$ on l. 5 is written without). The revised text printed by G.E. Bean and T.B. Mitford, Journeys in Rough Cilicia 1964-68, Wien, 1970, p. 234, nr. 53 suppresses the main point of interest of the inscription by not marking the peculiar use of the iota subscriptum.
- (7) An early example (papyrus of the 7th cent.) is discussed by F. Blass, $Z\ddot{A}S$ 18, 1880, p. 35.

met with. In the 12th cent. the *iota adscriptum* is gradually written lower until it coincides with the *subscriptum*.

Even in the earliest printed books (late 15th - early 16th cent.) the *iota* is usually, though not always, omitted (¹). Apparently the French royal type, created by H. Estienne for Francis I, definitively and universally spread the use of the subscribed iota (²).

In Modern Greek the *iota subscriptum* is still written regularly in the *kathareuousa*, whereas it has disappeared in normal language together with the dative and the subjunctive.

The present article deals only with the use of the *iota adscriptum* after \bar{a} and ω in Greek papyri from the third cent. B.C. According to the traditional view the disappearance of the *iota* in the Egyptian *koine* can be traced back to this period.

The examples of aberrant use of the *iota* after \bar{a} and ω are conveniently listed by H. Schmoll in his recent reedition of vol. I of Mayser's *Grammatik* (3). These instances will now be scrutinized one by one in order to see how many of them are acceptable.

* *

1.a. Spelling a for as. (Grammatik, pp. 96-97)

-- OGIS I 69, 1 *(247-221 B.C.): θεοῖς μεγάλοις Σαμοθοᾶξι (4).

The date of this inscription is perhaps not as certain as would seem at first glance. It is based on palaeographical grounds only (5). The plate in E. Breccia, *Iscrizioni greche e latine*, tav. XXIV 60, does rather favour a date in the late third or even early second century.

- (1) See on this topic R. Proctor, The Printing of Greek in the fifteenth century (Illustrated Monographs issued by the Bibliographical Society 8), Oxford, 1900, e.g. pp. 17-18 (4 the iota subscript, usually omitted in early types 3), p. 58 (in the oldest Greek printed book, A.D. 1476, the iota adscript is used, in contrast with the majority of the early types), p. 97 (iota subscript used by Aldus Manutius), p. 134 (casual occurrence of the iota adscript), etc.
 - (2) Cf. R. PROCTOR, The Printing of Greek, p. 145.
- (3) E. Mayser, Grammatik der griechischen Papyri aus der Ptolemäerzeit, I, 1, Berlin-Leipzig, 1923²; zweite Auflage bearbeitet von H. Schmoll, Berlin, 1970.
- (4) According to the established custom among editors of papyri and inscriptions the spellings q and ω indicate that the iota is *not* written in the original.
- (5) Cf. W. DITTENBERGER, OGIS I 69, comm. « Sane hunc titulum Euergetae potissimum aetatis esse non constat, nam etiam inferiore aetate Theram in fide Ptolemaeorum fuisse probant n. 102, 110 ».

-- *P. Col. Zen. II 80, 8 (246 B.C.): ἀπεστείλα/[με]ν τὸν λόγον τοῦ ἀν/[δρὸς] Θρακὸς

I need only repeat here T. Reekmans' convincing correction, listed in *Berichtigungsliste* III (1958), p. 45: λόγον τοῦ ἄν/θοακος (¹).

- P. Ent. 28, 6 (218 B.C.): τῶι Ἱππωίτα.

 The reading has been checked by M. Muszynski.
- --- *SB V 7782 (221-204 B.C.): 'Αφοοδίτηι Οὐοανία

Here H. Schmoll was deceived by a misprint in the Sammelbuch. The editio princeps of this foundation-plaque by E. Breccia, BSAA 26, 1931, p. 276 has the regular spelling with iota adscriptum: $^{\circ}A\varphi\varrho o$ - $\delta i\tau \eta i$ $O\dot{e}\varrho ariai$ ($^{\circ}$).

— SB IV 7270, 5 *(III-II B.C.): Διὶ καὶ ʾΑθηνą̃.

On the evidence of Arrhenidês' aulic titulature the text is dated by L. Mooren, *Prosopography*, no 0281, to the second, or perhaps even the first cent. B.C. (3).

- 1.b. Spelling at for a. (Grammatik, pp. 97-98).
- P. Lille I 23, 3 *(221 B.C.): ἀρτάβαις διακοσίας (accus.).

 This text has wrongly been dated to the third century, cf. infra, pp. 156-160.
- The other examples, given on p. 98, are rightly explained by H. Schmoll as writing errors, often due to the vicinity of a diphtong or a iota: ξυλοκοπία καὶ σησαμείαι (sic) καὶ ἐμπνοισμός (PSI V 500, 3; 257 B.C.), καλῶς ἀν ποιήσαις γράψαις (for γράψας) (PCZ III 59496, 6), σεμιδάιλιος for σεμιδάλιος (P. Col. Zen. II 77, 28). The form ἱεραιτίας in SB I 3975, 6 is a faulty reading by U. Wilcken: the tablet in fact has κρότωνος (4).
 - (1) T. REEKMANS, Parerga Papyrologica, Chron. Ég. 27, 1952, p. 405.
- (2) Three new copies of the same text have since been recovered; cf. P. M. Fraser, *Ptolemaic Alexandria* II, p. 332, n. 50.
 - (3) Cf. Pros. Ptol. VIII 4338 add.
 - (4) Cf. my note in Chron. Ég. 48, 1973, p. 328.

- 2.a. Spelling ω for ωι (Grammatik, pp. 109-111).
- 2.a.1. In the middle of a word.
- P. Hib. II 198, 166 (mid 3rd cent. B.C.): $d\theta \omega \sigma \varsigma$.

 The unsteady spelling of $\theta \omega \dot{\eta} \theta \omega \iota \dot{\eta}$, $d\theta \tilde{\omega} \sigma \varsigma d\theta \tilde{\omega} \iota \sigma \varsigma$ is not caused

by the omission of the *iota*, but by the use of different suffixes: $-\bar{\alpha}$ $-\eta$, $-o\varsigma$) (Attic) (1) and $-i\bar{\alpha}$ ($-i\eta$, $-io\varsigma$) (Ionic) (2).

— P. Lille I 27, 10 (III B.C.): ἐν τῶι Ἡοώωι.

The reading was checked on the original by M. Muszynski. The text is dated before 234 B.C. by F. Uebel, *Die Kleruchen*, p. 77, n. 5.

- --- *P. Mich. Zen. 69, 1 (240 B.C.): Ἡρώδης.
- H. C. Youtie, who has kindly checked the papyrus on my request, confirms that «the papyrus has most clearly $H_{\varrho\omega}i\delta\eta_{\varsigma}$.» (letter of 29 June 1975).
- SB I 4528 *(III B.C.) : Ἡρ ϕ δης.

The photograph of this text in E. Breccia, *Iscrizioni greche e latine*, tav. XXXV, no 117 suggests a much later date than that proposed by the editors. The ligature of T and H on l. 5 $(A\Sigma TH)$, for instance, is hardly possible in the Ptolemaic period (3).

- --*P. Lille I 23, 7-8: $^{\circ}$ H $\varrho \phi \delta \eta \varsigma$.
 This text is to be dated in the second cent.; see below pp. 156-160.
- PSI VII 869, 2 (III B.C.; Zenon archive): ἐπὶ ζωωτῶι χίτωνι.

 The photograph of this papyrus, provided by prof. M. Manfredi, confirms the textual corrections proposed by T. Reekmans (Chron. Eg., 43, 1968, pp. 170-171). The spelling of ζωιωτός, used three times in the text, is not consistent:
- (1) Already found in early fifth century inscriptions; cf. K. Meisterhans E. Schwyzer, *Grammatik der Attischen Inschriften*, p. 66 with n. 581.
- (2) See the discussion of both groups by E. Ruesch, Grammatik der Delphischen Inschriften, pp. 130-131.
- (3) We thank Prof. J. Bingen who has backed our opinion with his palaeographical experience.

- 1. 2: ἐπὶ ζωωτῶι χίτωνι
- 1. $7: [\zeta]\omega\iota\omega\tau\tilde{\omega}\nu \ d\pi o i\sigma\varepsilon\iota\nu$
- 1. 11: ζωιωτὸν ὅτε τόκος (legit T. Reekmans)
 The text will be reedited by Prof. T. Reekmans as P. L. Bat. XX 62.
- 2.a.2. Dative singular, 2nd declension.
- —*P. Mich. Zen. 2, 3 (259 B.C.): συνθεῖναι αὐτῷ. In a letter dated 21-9-74 H. C. Youtie informed me that the papyrus in fact has αὐτῶι.
- *PCZ III 59439, 4 (mid. 3rd cent.)

 περὶ τοῦ | προσαγγέλματος οὖ δέδωκά σοι περὶ τῶν Θοτέως |

 ἱερήων · καλῶς ἀν οὖν ποιήσαις συναποστείλας | τινὰ μετ' ἐμοῦ,

 ἶνα καταγάγω αὐτω ποὸ τοῦ αὐ/τὸν πωλῆσαι.

I have written out the whole passage here in order to show that the problematical form $a v \tau \tilde{\varphi}$ does not fit the context very well. As the editor (C. C. Edgar) pointed out, one would rather expect $a v \tau \tilde{\alpha}$ (= $\tau \tilde{\alpha}$ levela). Edgar leaves room for two interpretations: $a v \tau \omega = a v \tau \tilde{\varphi} =$ the messenger, or $a v \tau \omega = \text{slip}$ of the pen for $a v \tau \tilde{\alpha}$. He prints $a v \tau \omega$ but in his introduction to the text he seems to prefer $a v \tau \tilde{\alpha}$: « He had given Zenon a report about the pigs of Thoteus and now asks him to send someone to help him to bring them (= $a v \tau \tilde{\alpha}$) down before Thoteus sells them ».

- *P. Col. Zen. 7, 4 (257 B.C.): $\chi a \varrho (\zeta o \iota)$ är $\xi \mu o \iota \times a \iota \tau \tilde{\omega} \theta \epsilon \tilde{\omega}[\iota]$. The text was reedited by C. C. Edgar in JEA 21, 1935, p. 123 on the basis of a photograph. The corrected version gives $\tau \tilde{\omega} \iota \theta \epsilon \tilde{\omega}[\iota]$, the aberrant $\tau \tilde{\omega}$ in the editio princeps being merely a printing error.
- *PSI IV 393, 7 (241 B.C.) = C.P.Jud. 14 : ἐπεδείξαμέν σοι τῆι ις καὶ [.]ι τῷ τῷν | παρὰ ᾿Αγήνορος -- συναποσταλέντι καὶ Θεοπόμπωι τῶι φυλακίτηι.

We could check this doubtful passage on a photograph which prof. M. Manfredi kindly put at our disposal, but we were unable to reach a satisfactory solution. The name of the official looks like $\Lambda a\mu\pi\alpha\chi\varrho\ell$ $\tau\tilde{\omega}\iota$, but this would be a new name; it is moreover followed by some doubtful signs which cannot be reconciled with $\tau\tilde{\omega}\iota$, although this is what can be expected. Perhaps a new scrutiny of the original will

solve the problem, but I consider it preferable not to use this passage as evidence for an early omission of the *iota*.

- P. Lille I 21, 23-24: μέτρω δοχεικῶι | το συμβεβ<λ>ημένω | πρὸ<ς> τὸ χαλκοῦν | καὶ σχυτάλη δεικαία
P. Lille I 23, 23-24: μέτρω τῷ συν/βε[β] λημένω πρὸς τὸ | χαλκοῦν καὶ [σ]κ[ν]τά/[λ]η [δι]καία

The naukleros receipts P. Lille I 21-22-23 are dated in the 26th year of a king whom the editors identify with Ptolemy III on palaeographical grounds. The papyri, now in the Cairo Museum (¹), seem to be inaccessible for the moment. Luckily three unpublished fragments from the same source are still in the Sorbonne and prof. J. Scherer kindly allowed me to use them as evidence here.

P. Sorb. inv. 110 a

 $12~\mathrm{cm}~ imes 6.5~\mathrm{cm}$; upper part, bottom missing; writing along the fibres.

("Ετους) λδ Χοίαχ $\overline{\iota\beta}$ πυροῦ [(ἀρτά β ας)] 'Αχ

"Ετους τ[ε]τάρτου καὶ τριακόστου

5 [[ἔτους]] Χοίαχ ιβ δμολογεῖ Πετόσειρις ναύκληρος τοῦ τῆς βασιλίσσης κερκουροσκάφης ἀχαράκτου οὖ

10 [μισθωτής - - -]

II. 3-11. « The thirty-fourth year, Choiach 12. Petosiris, naukleros of the Queen's ship, without emblem, [the misthôtês] of which [is - - -], acknowledges [that he has embarked - - -] »

⁽¹⁾ Cf. P. Lille I, Préface, p. 2: « Les papyrus — d'El-Lahoun appartiennent au musée du Caire et doivent y revenir ». This has been confirmed by Prof. J. Scherer.

- 1-2. Exactly the same kind of summary (date + cargo) is met with in P. Lille I 22; the amount on l. 2 is rather doubtful.
 - 6-7. Πετόσειοις: Pros. Ptol. V 14037.
- 7-9. τοῦ τῆς βασιλίσσης κερκουροσκάφης: The use of the article before βασιλίσσης is ample proof of the correctness of Wilcken's view that this word does not indicate the name of the ship but that of its owner (¹). Notable is the masculine gender of κερκουροσκάφη, not only here, but also in P. Lille I 22, ll. 5-7 (ο̄ μισθωτής for ο̄ μισθωτής) and in P. Lille I 23, ll. 5-7 (ο̄ μισθωτής). In P. Ryl. IV 576, ll. 13-15, however, the word is feminine (ἐφ' ῆς).
- 10-11. $o\tilde{v}$ [$\mu\iota\sigma\theta\omega\tau\dot{\eta}_{\mathcal{S}}$]: the restoration is based on the formula in P. Lille I 22, II. 7-9 ($\tilde{\delta}$ (for $o\tilde{v}$) $\mu\iota\sigma\theta\omega\tau\dot{\eta}_{\mathcal{S}}$ δ $a\dot{v}\tau\dot{o}[\varsigma$ $II]\dot{a}\varrho\varepsilon\mu\varphi\iota\varsigma$) and 23, II. 7-8 ($o\tilde{v}$ $\mu[\iota\sigma]\theta\omega\tau\dot{\eta}_{\mathcal{S}}$ ' $H\varrho\dot{\psi}\delta[\eta_{\mathcal{S}}]$ δ $a\dot{v}\tau\dot{o}\varsigma$). Probably Petosiris, like Paremphis and Herodes, was simultaneously naukleros and misthotes of the boat (2). It is remarkable that in all three cases the ship belongs to the queen.

P. Sorb. inv. 110 b

 $7.5~{\rm cm} \times 7.5~{\rm cm}$; top and bottom missing, but certainly from the conclusion of the document; writing along the fibres.

[παρὰ τοῦ δεῖνος τοῦ ἀντιγραφομένου παρὰ βασιλικοῦ γραμ-]
ματήος τὸ περὶ Φυρέαν ἐργαστήριον πυροῦ φορικοῦ ἀρτάβα[ς]
{βας} τετρακοσίας / υ

5 μέτρω τῷ σ[υν-]
βεβλημένω π[ρὸς]
τὸ χαλκοῦν
"Εγραψεν Θεόδοτο[ς
Θεοδ[- - -]

10 η.[

1 Ι. [γραμ]/ματέως

⁽¹⁾ U. WILCKEN, Urkundenreferat, Archiv 5, 1913, p. 226.

⁽²⁾ For the difference between naukleros and misthotes, see M. Rostovtzeff, Archiv 5, 1913, p. 298.

Translation: « [--x-acknowledges that he has embarked to Alexandria, having received from Herakleodoros (?), the antigrapheus of the basilikos gram]mateus [to check] the store at Phurea, four hundred (400) artabae of wheat, paid as rent, by measure tested with the bronze measure. Theodoros, son of Theod[--] has written [for him --] ».

- 1. The title can be safely restored on the basis of *P. Lille* I 21-22-23 and *P. Sorb.* inv. 111, where the same official is mentioned. Since the date of *P. Sorb.* inv. 110 b is not preserved, we cannot be sure that Herakleodoros also held this post here.
- 1-2. τὸ περὶ Φυρέαν ἐργαστήριον: the same place-name can doubtless be restored in P. Lille I 23, I. 19, where the editors read τὸ περὶ Φν ... ἐργαστήριον. It seems likely that P. Sorb. Inv. 110b and P. Lille I 23 were written by the same person and that Φυρέα is only an orthographical variant of Πυρρεία, the well-known village in the meris of Themistos (¹).
- 3. πυροῦ φορικοῦ: the same expression in P. Lille I 23, 21 and in P. Tebt. III 823, 11 (ὀλύρας φορικῆς). Cf. Claire Préaux, L'Économie Royale des Lagides, Bruxelles, 1939, pp. 411-412.

P. Sorb. inv. 111

 $15~{\rm cm} \times 7.5~{\rm cm}$; lower part with large margin at the bottom; lacuna of 4 to 6 letters on the right; writing along the fibres.

πυρ[.]ε [
ἀπὸ τῶν γενημ[άτων]
τοῦ κθ (ἔτους) π . . . [Ἡρακλε-]
οδόρου τοῦ ἀντιγ[ραφο-]
5 μένου παρὰ [βασ(ιλικοῦ) γρα(μματέως)]
πυροῦ ἀρτάβας έ[κατὸν]
(γίνονται) ρ μέτρο δοχικῷ [τῷ συν-]
βεβλημένῳ πρὸς τὸ χ[αλκοῦν]
καὶ σχυτάλη δικαί<αι> καὶ [οὐ-]
10 θὲν ἐγκαλῶ.

- 4. I. /οδώρου 7. l. μέτρφ
 - (1) Cf. P. Tebt. II, Appendix, p. 400.

Translation: «[---] out of the produce of the 29th year from (?) [Hêrakle]odôros the antigrapheus of the royal scribe, hundred (100) artabae of wheat by measure tested with the bronze measure and with a just smoothing-rod; and I make no [complaint]. »

- 1. This line deviates from the usual pattern and could not be restored.
- 2. The text is dated in the 29th year: $\varkappa\theta$ and $\varkappa\varepsilon$ both seem possible on the photograph, but the papyrus clearly favours the first reading (checked by M. Muszynski).

The antigrapheus [--]odoros is most probably identical with Herakleodoros, who was in office during the 26th year (P. Lille I 21-23; Pros. Ptol. II 1788). The syllabical word-division practically excludes such names as $M\eta$ - $\tau \varrho \acute{o} \delta \omega \varrho o \varsigma$, $A\theta \eta$ - $v \acute{o} \delta \omega \varrho o \varsigma$. The name of the antigrapheus is usually introduced by $\pi a \varrho \acute{a}$ or $\delta \iota \acute{a}$, but neither of those fits the remaining traces.

- 5. The traces are hardly recognizable.
- 10. The end of the line is indecipherable.

The new fragments clearly belong to the same dossier as P. Lille I 21-23; not only do they come from the same find-spot (El-Lahoun), but they also mention the same places (Phurea) and persons (Herakleodoros), contain the same formulae, and were written by the same kind of uneducated people.

There can therefore be no doubt that they also belong together chronologically and that the 26th year mentioned in P. Lille I 21-22-23 belongs to the same reign as the 29th in P. Sorb. inv. 111 and the 34th in P. Sorb. inv. 110a. Since Euergetes reigned for 26 years at most (¹), he no longer enters into consideration. One has the choice between Philadelphos (260/59 - 252/51), and a date in the second century under Philometor (156/55 - 148/47) or Euergetes II (145/44 - 137/36).

According to $Pros.\ Ptol.\ V\ 14037\ A.\ Bataille dated\ P.\ Sorb.\ inv.\ 110a$ in 252/51; this would imply a date in the first half of the third century for the whole archive. Although it seems rather daring to contradict an authority in the field of palaeography such as A.Bataille, especially

⁽¹⁾ The attribution of the receipts to the 26th year of Euergetes I was just possible by assuming that the financial calendar was used here. Cf. H. Hauben, An annotated list of Ptolemaic naukleroi, ZPE 8, 1971, p. 263, n. 16; J. Bingen, Chron. Ég. 50, 1975, p. 243.

since the barely literate handwritings of the Sorbonne texts do not lend themselves very well to palaeographical dating, I am convinced that a date in the second century is in this case preferable.

Neither of the three fragments presents any of the letter-forms typical of the third century: no wedge-shaped alpha, no nu with final upright stroke carried up above the line, no tau without right-hand portion of the cross-bar, no o-mega with flattened second curve. On the contrary, some second-century characteristics will be found in the loop of the alpha, the large bêta (P. Sorb. inv. 110 a, l. 8), the cursive êta (P. Sorb. inv. 111, l. 8), the tau of which the second part of the cross-bar is added separately and attached to the following letter (esp. in P. Sorb. inv. 111, ll. 3 and 9), and the o-mega of the ordinary minuscule type (1).

All this would not perhaps in itself be sufficient proof for a date in the second century; but confirmation is provided, in my opinion, by the uncertainty in the use of the *iota adscriptum* and by the fact that in three instances (*P. Lille I 22, 23* and *P. Sorb.* Inv. 110a) the queen is mentioned as owner of the ship. If the texts indeed belong to the reign of Philadelphos, this would be rather surprising, considering, as H. Hauben rightly remarks « that Arsinoe II had died nearly twenty years before » (²). There is no difficulty in the second century, when either Kleopatra II or III could be the owner of the boat.

If a date in the second century is accepted, *P. Lille* I 21 and 23 no longer testify to an early omission of the *iota adscriptum* in the dative.

— P. Lille I 18, 4 (233/32 or 208/07): Σώσ φ

This passage is not mentioned by Mayser-Schmoll, although it contains a certain example of a dative in $-\omega$ on l. 4: $\mu \dot{\varepsilon}[\tau] \varrho(\eta \sigma \sigma r)$ $\Sigma \dot{\omega} \sigma \omega \ \varkappa \tau \lambda$.

According to the editors the text belongs to the period of Euergetes or Philopator. In view of the spelling (l. $4: \Sigma \acute{\omega} \sigma \varphi$; l. $8: \varkappa \alpha \tau \acute{\alpha} \sigma \chi \eta \varsigma$) a date towards the end of the third century (208-207) seems preferable.

⁽¹⁾ For a survey of the characteristics of 3rd and 2nd century Ptolemaic hands, see F. C. Kenyon, *The Palaeography of Greek Pappri*, Oxford, 1899, pp. 35-41 and W. Schubart, *Griechische Palaeographie* (Handbuch der Altertumswissenschaft I, 4, 1925), pp. 23-41. Cf. also *P. Lille* I 22 (plate XII in the *ed. pr.*).

⁽²⁾ H. HAUBEN, ZPE 8, 1971, p. 261, n. 9.

- *P. Tebt. III 823, 14 (185 B.C.): μέτρ ϕ τ $\tilde{\phi}$ σον β ε β λημέν ϕ This text was included by mistake among the third century examples.
- BGU VI 1289, 12 *(π B.C.) : Θευφίλω

This private account is wrongly dated by the editors to the third cent. B.C. The large amounts indicate that the copper standard is used here. This gives as *terminus post quem* the 12th year of Philopator (210 B.C.) (1). The 10th year, mentioned on 1. 14 of the text, can therefore be no earlier than that of Epiphanes (196/95 B.C.).

— SB I 4302, 11 (*III B.C.): 'Αριστομάχω τῶι [- - - σ]τρατηγῶι The papyrus is not dated. The first editor, G. Botti (²) attributed it to the third century on palaeographical grounds. He was followed by Preisigke (SB I 4302, with question mark) and by Anna Swiderek (P. Alex. 549, description p. 10), but the date should be checked carefully before this text can be used as evidence. It is at least remarkable that in petitions of this kind the formula ἐάν [σοι φαίνηται] (l. 25)

seems more characteristic of the second and first centuries, whereas

--- *BGU VI 1470, 10 (III-II B.C.): [πολλὰ] δ' ὅ γ' ἐν πόντω πάθεν ἄλ[γεα] (Odyss. I, 4)

in the third $\varepsilon \tilde{l}$ σοι δοκε $\tilde{\iota}$ is more usual (3).

Dr. W. Müller, who kindly checked the ostracon in the Berlin Museum at my request, sent me the following comments: «An der fraglichen Stelle steht entgegen der Lesung von E. Kühn --- $\pi\omega\nu\tau\omega\iota$ (l. $\pi\delta\nu\tau\omega\iota$); das ω ist deutlich und klar unterschieden vom o derselben Hand, und das Iota adscriptum am Schluss des Wortes unterliegt keinem Zweifel. Uebrigens gehört die Schrift eher in das 3. als in das 2. Jh.a.» The strategos [So]krates, mentioned on l. 1 of the ostracon is perhaps identical with the homonymous strategos Pros. Ptol. I 332 (170 B.C.) (4).

— PSI VII 860 l. 6 (III B.C.; Zenon archive): [...] $\lambda \eta \nu \omega \beta$ This document, not listed in Mayser-Schmoll, was brought to my notice by prof. T. Reekmans, who (on the basis of a photograph kindly

⁽¹⁾ Cf. T. REEKMANS, Monetary History and the dating of Ptolemaic Papyri, Studia Hellenistica 5, 1948, pp. 15-23.

⁽²⁾ G. Botti, Bull. Soc. Arch. Alex. 2, 1899, p. 66, nr. 1.

⁽³⁾ Cf. Anna Di Bitonto, Le petizioni al re, Aegyptus 47, 1967, pp. 17-18.

⁽⁴⁾ Cf. Pros. Ptol. VIII 2137 add.

provided by prof. M. Manfredi) made several improvements on the editio princeps. He now reads line 2 and line 6 as follows:

- I. $2: \dot{\epsilon}v \ \tau \tilde{\eta}\iota \ \dot{\iota}\delta\dot{\iota}\alpha\iota \ \lambda\eta(v\tilde{\omega}\iota)$
- 1. $6: [\vec{\epsilon}v \ \tau \tilde{\eta}\iota \ i\delta i] \alpha \ \lambda \eta v \tilde{\omega}$

Be it noted that II. 1-4 are in a fluent cursive hand, whereas II. 5-12 were written by a different person in rather clumsy capitals. The personal name on I. 1 is not $K\lambda\epsilon\delta\delta\sigma\eta$ but $K\lambda\epsilon\delta\beta\sigma\nu\lambda\delta\varsigma$.

2.a.3. Subjunctive forms of δίδωμι, 3rd pers. sing.

The two passages cited by Mayser-Schmoll for a subjunctive 3rd pers. sing. $d\pi o \delta \tilde{\varphi}$ are due to a faulty interpretation of the texts. Both in $P.\ Hib.\ I\ 86$, 10 and 102, $9\ d\pi o \delta \tilde{\omega}$ is a first person sing. and is regularly written without $iota: \dot{\epsilon} \dot{\alpha} v\ \delta \dot{\epsilon}\ \mu \dot{\gamma}\ d\pi o \delta \tilde{\omega}$, $d\pi o v \epsilon \delta \omega \ \sigma o \iota$. (Grenfell-Hunt rightly translate: if I fail to repay it, I will forfeit to you).

In $BGU \times 1946$ (213-12 B.C.) (not in Mayser-Schmoll) the editor reads on l. 11: $\dot{\epsilon}\dot{\alpha}v$ $\delta\dot{\epsilon}$ $\mu\dot{\eta}$ $\dot{\alpha}\pi\sigma\delta\tilde{\phi}$ - - - $\dot{\alpha}\pi[\sigma]\tau\epsilon\iota/[\sigma\acute{\alpha}\tau\omega]$. On the accompanying photograph (Tafel XII), however, are visible some faint traces after the o-mega, which I thought could be the remains of a iota. In his letter of 12-6-75 Dr. Müller points out that in this case the papyrus really has $\dot{\alpha}\pi\sigma\delta\tilde{\omega}$: « $\dot{\alpha}\pi\sigma\delta\tilde{\phi}$ ist korrekt; was Sie nach der Tafel als Iota adscriptum zu erkennen glauben, ist in Wahrheit eine Papyrusfaser in dunkelbrauner Färbung, die auf dem Foto schwarz wirkt und den Gedanken an ein ι suggeriert, fälschlich».

- 2.b. Spelling $\omega\iota$ for ω (Grammatik, pp. 112-113)
- 2.b.1. The three cited examples for $-\omega \iota$ instead of $-\omega$ in the middle of a word are apparently all authentic.

PSI IV 403, 4 (Zenon archive): ἀναγνῶιναι

P. Gurob 7, 9 (ca. 212 B.C.): παράσχωιμαι (reading checked on the original in Trinity College Dublin).

BGU VI 1266, 9 (203 B.C.): Σωιστράτης

- 2.b.2. At the end of the word.
- *P. Petrie II 13, 6, 20 (mid 3rd cent.): δοκῶι (Konj.)

 The correct reading 'Αμαδόκωι is given in P. Petrie III 42 G 4 and in the Berichtiqungsliste I, p. 354.

— Wilcken, Ostraca 1490, 2: ἔχωι

The text is dated by B. P. Grenfell (*Berichtigungsliste* II A, p. 114) to the second century (174 or 163 B.C.).

— *P. Petrie I 15, l. 19 (237 B.C.) : ἕως ἀν ζῶι

This text will shortly be reedited as P. Petrie. Wills 3. With the aid of a new fragment, $\tilde{\epsilon}\omega\varsigma$ $\tilde{\alpha}v$ $\tilde{\epsilon}\gamma\dot{\omega}$ $\zeta\tilde{\omega}$ $\tilde{\nu}\pi\dot{\eta}\varkappa oo[\iota\ \tilde{o}]v/[\tau\epsilon\varsigma]$ can now be read with certainty (1).

— *O. Mich. 1. 10 (*235 B.C.): ἐλλογῶι

The ostracon was not written in 235 B.C. (so the editor and Mayser-Schmoll), but in 211/10 B.C. as was pointed out by H. I. Bell (2).

A careful examination of the photograph which Amundsen appended to the original publication (plate I) necessitates a few textual corrections on ll. 8-10, read as follows in O. Mich. 1:

καὶ κειρίας ἤπητρα 'Βμ[καὶ αὐτὰ λυκίδια έκα[τόν ἐλλογῶι (δραχμ.) 'Βξ.[

On II. 8 and 10 I recognize, instead of ' $B\mu$ and ' $B\xi$.[, $\Sigma\mu$ (= 240) and ' $B\Sigma$.[(= 2200), respectively. The doubtful hapax legomenon $\lambda\nu\kappa l\delta\iota a$ (3) conceals the personal names Glaukias and Ask[lêpiadês]. I therefore propose the following reading of the passage:

καὶ κειρίας ἤπητρα Σμ καὶ ἄς Γλανκίαι ᾿Ασκλ[ηπιάδ..] ελλογωι (δραχμὰς) ἮΣ.[(4)

However, I have no solution for the form $\varepsilon\lambda\lambda \delta\gamma\omega\iota$. The verb $\dot{\varepsilon}\lambda$ - $\lambda\delta\gamma\dot{\varepsilon}\omega$ is not attested elsewhere in Ptolemaic papyri; moreover, the whole passage, from 1. 3 up to and including 1. 12, apparently depends on $\phi\dot{\varepsilon}\varrho\varepsilon\iota$ $\Gamma\dot{\varepsilon}\nu\eta\varsigma$ (1. 3). The first pers. sing. $\dot{\varepsilon}\lambda\lambda\delta\gamma\tilde{\omega}<\iota>$ seems therefore rather out of place here. But I do not see a plausible alterna-

⁽¹⁾ For the expression $\tilde{v}\pi\tilde{\eta}\pi oog\ \tilde{\omega}\nu$ in a paramone-contract, see P. Fouad II 37, ll. 4-5 with the correction of H. C. Youtie, *Scriptiunculae I*, pp. 192-195. A full account of my new reading in *P. Petrie* I 15 will be given in the forthcoming reedition of the text (*P. Petrie. Wills* 3, ll. 21-22 comm.).

⁽²⁾ H. I. Bell, JEA 24, 1938, p. 137; see also T. Reekmans, Chron. Ég. 27, 1952, pp. 409-410.

⁽³⁾ The word has been included in the recent Supplement on Liddell-Scott-Jones.

⁽⁴⁾ For \ddot{a}_{ς} + dative + $(\delta \varrho \alpha \chi \mu \dot{a}_{\varsigma})$ cf. verso l. 1: $\dot{a}_{\varsigma} \delta \tilde{\eta} (= \delta \epsilon \tilde{\iota}) \mu o \iota (\delta \varrho \alpha \chi \mu \dot{a}_{\varsigma})$ 'A

tive. Just possible, although not very convincing, is $[\gamma \epsilon \nu] \epsilon \alpha \lambda \delta \gamma \omega \iota$ as a professional qualification of Glaukias.

- PSI V 534, 8 (III B.C.): ἕως ἀν τοὺς λοιποὺς ἀποστείλωι The reading is certain (checked by prof. Manfredi).
- PSI IV 352, 2 (254 B.C.) : ἀφεληθῶι

The papyrus is seriously damaged. The first editors read $\mathring{\omega}\varphi \varepsilon \lambda \eta - \theta \tilde{\omega}[[\iota]]$ (with a superfluous iota deleted afterwards). Later Viereck recognized $\mathring{\omega}\varphi \varepsilon \lambda \mathring{\eta}\theta \omega \sigma \iota$ but this was doubted by Medea Norsa who only read: $\mathring{\omega}\varphi \varepsilon \lambda \mathring{\eta}\theta \omega$.. (PSI VIII, Add. et corr., p. xvi; not included in the Berichtigungsliste). It seems preferable not to take this doubtful passage into consideration.

- *P. Petrie II 13, 14, 2. (258-253 B.C.): δεδότωι

Wilcken's correction $\delta \dot{\epsilon} \delta o \tau a \iota$ (P. Petrie III, p. xv) was duly registered in the Berichtigungsliste I, p. 354.

— *P. Petrie II 38b, 6 (242 B.C.) : τιθέσθωι

This form was corrected to $\gamma \iota \nu \acute{\epsilon} \sigma \theta \omega$ in P. Petrie III, p. x1 (sub LIII). The photograph in P. Petrie II, plate XII clearly shows that $\gamma \iota \nu \acute{\epsilon} \sigma \theta \omega$ is not followed by a superfluous iota.

— *P. Petrie II 8 (1A) 3 (246-45 B.C.) : έστωι

In her revised edition of this text (C. Ord. Ptol. 7), Marie-Thérèse Lenger only reads]... $\tau\omega\iota$. This fragmentary passage can therefore no longer be used as evidence in the matter at hand.

--- *P. Hal. 11, 11 (238 B.C.): κάτωι

P. Hal. 11 will be republished shortly in the first volume of the revised Petrie Papyri (P. Petrie. Wills 1, 85-99). Dr. F. Uebel provided an excellent photograph of the papyrus after chemical cleaning, which enabled me to correct the reading $[\tau] \varrho \alpha \chi \dot{\eta} \lambda \omega \iota \, \lambda \dot{\alpha} \tau \omega \iota$ to $[\tau] \varrho \alpha \chi \dot{\eta} \lambda \omega \iota \, \delta \dot{\epsilon} \dot{\epsilon} \iota \tilde{\omega} \iota$. The base (limen) of the xi has almost entirely disappeared, but some faint traces are still visible. The use of $\varkappa \dot{\alpha} \tau \omega$ would have been rather surprising here, since this adverb only occurs in personal descriptions in connection with lips and teeth, whereas for other parts of the body the specifications « left » and « right » are used.

— PCZ III 59742, 26 (m B.C.) : ὧι πλείωι

The irregular iota after $\pi \lambda \epsilon i \omega$ has probably crept in under the influence of the dative $\tilde{\omega}_i$.

— *C.P.Jud. I 33, 11 (III B.C.) : ['Aπολ]λωνίω<ι>

This severely damaged text was not taken into account by Mayser-Schmoll. Having checked the original in the Bodleian Library Oxford (Ms. Gr. class 43 P) I prefer to read: $[A\pi o\lambda]\lambda\omega \rho l\omega[i]$

- In *P. Lond.* VII 2024, 15 T. C. Skeat reads the form $\mu\iota\sigma\theta\dot{\omega}\sigma\omega\iota$. He notes, however, that the connection of this letter with the Zenon archive is not assured: « On the whole the hand would appear to be later than the age of Zenon».
- In the very fragmentary P. Lond. VII 2098 seems to appear a form μεταβάλωι.



The main purpose of this paper was to prove that disappearance of the *iota adscriptum* remained very exceptional in Egypt until the end of the third cent. B.C. Nearly all the examples given by Mayser-Schmoll are based on erroneous readings, false datings and/or wrong interpretations.

The remaining passages are often fragmentary or dubious (OGIS I 69; P. Hib. II 198; SB I 4528; PCZ III 59439; PSI IV 393: O. Mich. 1; P. Petrie II 8 1A; P. Lonā. VII 2098). Hardly relevant are the examples which can be explained by graphic anticipation or repetition of a neighbouring iota (PSI IV 403: ἀναγνωιναι; P. Gurob 7: παρασχωιμαι; PSI V 534: ἀποστειλωι; PCZ 59742: ὧι πλείωι).

The instances of unquestionable confusion between $\bar{a}\iota$ - \bar{a} and $\omega\iota$ - ω are in fact very rare. I have noted only PSI VII 860 ([$\dot{\epsilon}v$ $\tau \tilde{\eta}$] $i\delta \dot{\epsilon}$] a $\lambda \eta v \omega$; Zenon archive), PSI VII 869 ($\zeta \omega \omega \tau \sigma \varsigma$), P. Ent. 28 ($\tau \tilde{\omega}\iota$ ' $I\pi \pi \omega \iota \tau \tau \omega \tau \omega \tau \omega$) and P. Lille I 27, 10 ($\tau \tilde{\omega}\iota$ ' $H\varrho \dot{\omega}\omega \iota$ - III B.C.). To the last decade of the third century belong P. Lille I 18 ($\Sigma \dot{\omega} \sigma \omega$ - 208/207 B.C.), BGU X 1946 ($\dot{\alpha}\pi o \delta \tilde{\omega}$ - 213 B.C.) and BGU VI 1266 ($\Sigma \omega \iota \sigma \tau \varrho \dot{\alpha} \tau \eta \varsigma$ - 203 B.C.).

The examples are so few indeed that in undated texts aberrations in the use of the *iota adscriptum* after \bar{a} and ω can be considered a useful indication for a date in the second rather than in the third

cent. (e.g. P. Lille I 21-23; BGU VI 1470; WILCKEN, Ostraca 1490; perhaps also P. Lond. VII 2024 and SB I 4302).

That the *iota* was really pronounced in the third cent. can be positively proved by the letters of uneducated people, whose orthography quite often reflects their pronunciation (phonetic writing). In the third cent. letters of that kind there is not a single example of confusion between $\omega \iota$ and ω , $\bar{a}\iota$ and \bar{a} , on the contrary there is a good deal of evidence that $\omega \iota$ and $o\iota$ were closely akin (1).

This critical survey of two paragraphs in the new edition of Mayser's Grammatik has brought to light a serious imperfection in Schmoll's recent « mise à jour ». It is not possible, of course, for the author of a general work to make a thorough inquiry into every exceptional case. But anyone who deals with papyri ought to know that palaeographical datings are but approximative and are easily shifted from one century to another if there is convincing evidence; on the other hand, fragmentary or dubious passages presenting orthographical or grammatical discrepancies are to be distrusted. But the most serious fault of Schmoll's reedition is not systematically having taken into account the corrections of papyrologists, even though these were readily accessible in the *Berichtigungsliste*.

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(1) Cf. E. Mayser - H. Schmoll, Grammatik I2, pp. 114-115.

Addenda:

- 1. (ad pag. 151) This is not true for official inscriptions, where iota mutum appears throughout in several third-century texts. See, ex. gr., F. F. Abbott A. C. Johnson, Municipal Administration in the Roman Empire, New York 1968 (Part II: Municipal Documents), nos. 130, 132, 133, 134, 145, 147, 148 etc. (all of the third cent.)