

## XII.—Critical Notes on Graeco-Roman Ostraca

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This paper seeks to present and justify a number of new readings in the texts of ostraca from Karanis<sup>1</sup> in the University of Michigan collection. These readings are offered as a critical supplement to the monumental edition of ostraca published by Professor Leiv Amundsen.<sup>2</sup> Unfortunately, the ostraca were returned some time ago to the Egyptian Museum at Cairo and are now available for study only through photographs.<sup>3</sup> No attempt is made here to discuss the ostrakon texts exhaustively inasmuch as Professor Amundsen has in hand the preparation of a commentary on the entire corpus.

### 1. Σάμιον, A WINE MEASURE

*O. Mich.* 1.249 bears a text of ten lines written in the fourth century A.D. The nature of the text is indicated in the first two lines, which contain the following words, as given in the edition: λόγος οἴνου σάκ(κων), "account of sacks of wine." Each of the remaining eight lines consists of a personal name<sup>4</sup> and the notation σάκ(κος) α, "1 sack."

Nowhere else has σάκκος been used as a liquid measure, and the object itself, manufactured as a rule from goat's hair, was not adapted to the storage or transport of wine.<sup>5</sup> The *saccus vinarius*

<sup>1</sup> Now Kom Aushim in the Fayyum (Egypt).

<sup>2</sup> *O. Mich.* 1 = Leiv Amundsen, *Greek Ostraca in the University of Michigan Collection* (Mich. Stud., Human. Ser., 34, 1935). For a bibliography of critical articles on the Michigan ostraca see *TAPhA* 72 (1941) 440, footnote 7. To the material listed there add: "Parerga Ostracologica," *TAPhA* 73 (1942) 64-85; "Diplomatic Notes on Michigan Ostraca," *CPh* 39 (1944) 28-39; "Michigan Ostrakon 267," *CW* 37 (March 6, 1944) 163-165; "Critical Notes on Karanis Ostraca," *Berytus* 8.ii (1946) 84-93.

I am indebted to my colleagues, Dr. O. M. Pearl and Dr. E. M. Husselman, for a thorough scrutiny of all my readings.

<sup>3</sup> For more details see *TAPhA* 71 (1940) 623 f.; 72 (1941) 439 f.; 73 (1942) 64 f.

<sup>4</sup> On κ(ε)φ(αλαιωτής) in line 3 see *CPh* 37 (1942) 143. In line 6 the ostrakon has "Ἀρπαρος instead of "Ἀρπαλος, although the names are doubtless identical. *O. Mich.* Inv. 9831 (to be published as *O. Mich.* 3.1034), 2 has 'Ἀρπάρον κ(λ)ῆ(ρος) in a list of landholdings.

<sup>5</sup> Theodor Reil, *Beiträge z. Kenntnis d. Gewerbes im hellenist. Ägypten* (Borna-Leipzig, 1913) 126.

was something quite different; this was usually a linen or hair cloth for straining wine.<sup>6</sup> In this sense the papyri use *σάκκος τρίχινος*.<sup>7</sup> The *σάκκος*, however, is commonly found in Egypt as a container or measure of grains.<sup>8</sup> A familiar equation is 1 donkey = 1 sack = 3 artabas,<sup>9</sup> and the artaba is universally a dry measure.<sup>10</sup> For holding liquids jars of all sizes were available in abundance,<sup>11</sup> and animal skins were used as elsewhere in the Orient.<sup>12</sup>

A new inspection of a photograph of the ostraca has yielded a significant observation. The *κ* of *σάκ(κος)* resembles no other *κ* on the ostraca, although six sure examples of the letter are available for comparison, whereas it is practically identical in form with *μ*, of which there are two clear examples in the personal names. This fact becomes impressive when the word is found repeated nine times. While it is not impossible for *κ* and *μ* to look so much alike in cursive writing that they might be confused, they do not look alike on this ostraca. I suggest that *σαμ( )* be read, and as a wine measure this is likely to be *Σάμ(ιον)*, "Samian jar," which has occurred heretofore in a Zenon papyrus of the third century B.C. and in a receipt of the sixth century A.D. In the one occur re-

<sup>6</sup> Hug in *RE s.v.* "Saccus," col. 1624; Joachim Marquardt, *Privatleben d. Römer* 1<sup>2</sup> (Leipzig, 1886) 334, footnote 6.

<sup>7</sup> *P. Cair. Goodsp.* 30.39.15; *P. Hamb.* 10.39 with ed.'s note. Cf. F. Preisigke and E. Kiessling, *Wörterbuch d. griech. Papyrusurkunden s.v. σάκκος*, 2; *LSJ s.v.* (II.2).

<sup>8</sup> Used in conveying grains from threshing-floor to granary: S. L. Wallace, *Taxation in Egypt from Augustus to Diocletian* (Princeton, 1938) 34; from granary to harbor: F. Preisigke, *Archiv f. Papyrusforschung* 3 (1906) 45, footnote 2.

<sup>9</sup> *O. OsL.*, p. 50.

<sup>10</sup> Ulrich Wilcken, *Griech. Ostraka* (Leipzig-Berlin, 1899) 1.739.

<sup>11</sup> This commonplace needs no supporting bibliography, but the following references may interest the general reader: P. Montet, *Les scènes de la vie privée dans les tombeaux égyptiens de l'Ancien Empire* (Publ. Faculté des lettres, Strasbourg, 24, 1925) 255, 273; W. C. Hayes, "Daily Life in Ancient Egypt," *National Geogr. Magazine* 80 (1941) 454 f., 494 f.; C. Ricci, *Cottura della Vite*, Studi d. scuola papirologica Milano 4.i (1924) 66-74.

<sup>12</sup> Preisigke, *Wörterbuch s.v. δέρμα*. Cf. J. G. Wilkinson, *Manners and Customs of the Ancient Egyptians*, ed. S. Birch (London, 1878) 1.375 and footnote 1; A. Wiedemann, *Herodots zweites Buch* (Leipzig, 1890) 451; E. W. Lane, *Manners and Customs of the Modern Egyptians* (reprinted in Everyman's Library, 1923) 327 ff. The modern Egyptian use of *sakka* for "water-carrier" (Lane, *ibid.*) is not pertinent to a discussion of *σάκκος* in the Graeco-Roman period. The *οὐνηγῆ σαργάνη* (*P. Flor.* 2.175.32 [corrected by S. G. Kapsomenakis, *Voruntersuch. Gramm. Papyri nachchristl. Zeit*, Münch. Beiträge 28 (1938) 33-35]; 269.6-7) was a basket used in gathering grapes from the vine, not in transporting wine. See Michael Schnebel, *Landwirtschaft im hellenist. Ägypten*, Münch. Beiträge 7 (1925) 280 f.; Ricci, *op. cit.* (see footnote 11) 53: "cestoni in cui si ponevano i grappoli appena colti, quelli che i Romani chiamavano 'corbes,' 'corbiculae,' 'fiscinae.'"

peatedly *κεράμια Σάμια* and *ἡμικάδια Σάμια*, together with Milesian jars of the same kinds;<sup>13</sup> in the other *Σάμια* replaces *κοῦφα*.<sup>14</sup> Adjectives derived from place names were, of course, usual for designating jars of various shapes and sizes. Best known, perhaps, are the *Κνίδιον* and the *Ῥόδιον*.<sup>15</sup>

With this slight correction of the reading we obtain a memorandum entitled *λόγος οἶνον Σαμ(ίων)*, "account of Samian jars of wine," and each name is followed by *Σάμ(ιον) α*, "1 Samian jar."

## 2. A RECEIPT FOR *είκοστή*

*O. Mich.* 1.133 is a receipt issued at Karanis in the late third century A.D. for twenty-four drachmas, but in its present form there is no indication of the purpose of the payment. The text as printed in the edition is reproduced here.

α (ἔτους) Παῦνι ιδ Ι[ . . . ]μένης Κ( )  
καὶ Δημᾶς (δραχμὰς) εἰκοσιτέσσαρες, (δραχμαὶ) κδ.

When these lines are collated with an excellent photograph, several interesting observations emerge. (1) The number of the year, which the editor has set down doubtfully as alpha, has almost exactly the same shape as the lower part of the first delta in line 2. The identification of the latter as delta takes account of a curved stroke which stands detached above the line, but in no way explains the oblique stroke which runs downward from the left side of the supposed delta. If the letter is indeed delta, there remains the puzzle of this superfluous, unrelated writing. If it is alpha, as the date in line 1 strongly suggests, then the supralinear curve is a mark of abbreviation or a compressed letter used to abbreviate a word.<sup>16</sup> (2) The name of the month likewise raises considerable

<sup>13</sup> *P. Cair. Zen.* 1.59015 recto (pp. 30 ff.) = F. Preisigke and F. Bilabel, *Sammelbuch griech. Urkunden aus Ägypten* 3.6781 = *Annales du service des antiquités de l'Égypte* 23 (1923) 86 f.

<sup>14</sup> *PSI.* 5.474.9. Vitelli had some doubt of the reading because, if I take his note correctly, "non abbiamo esempi," but that deficiency has since been remedied. Vitelli's interpretation is thoroughly sound: "κοῦφα di Samos, come determinazione metrologica."

<sup>15</sup> Ulrich Wilcken, *Griech. Ostraka* 1.764 ff.; *Grundzüge u. Chrestomathie d. Papyruskunde* 1.i.lxxi f.; *Archiv f. Papyrusforschung* 4 (1908) 245, 255, 554; 6 (1920) 400 f.; Friedrich Hultsch, *Archiv f. Papyrusforschung* 3 (1906) 433; Ricci, *loc. cit.* (see footnote 11); Angelo Segrè, *Atti R. Acad. Torino* 54 (1918-19) 395 f.; W. E. Crum and H. I. Bell, *Wadi Sarga*, *Coptica* 3, pp. 20 ff.; Lionel Casson, *TAPhA* 70 (1939) 6 f.; *PSI* 5.535 introd.

<sup>16</sup> For such treatment of supralinear letters used to mark abbreviations see Wilcken, *Grundzüge* xl.

doubt. Between pi and alpha is another letter, to all appearances a rho, and by relation to  $\pi\rho$  the alpha is clearly placed above the line. Whether this position was adopted for the purpose of abbreviation or only to avoid some defect in the surface of the ostrakon, is a nice problem. The scribe did not descend to the line to make a new start immediately after alpha, and the photograph shows two parallel curving white scratches which may be the defect he sought to avoid. On the other hand, the second line was written right through this supposed obstacle. (3) At the end of line 1 the editor records K( ), seemingly a proper noun. Whereas one-letter abbreviations are frequent enough with ordinary words, it is not often that names are treated in this way.<sup>17</sup>

With the aid of these criticisms and in reliance on the photograph, a text may be proposed which does disclose the purpose of the payment.

*O. Mich.* 1.133 (revised)

α (ἔτους) πρα . . . δι[ἐργ(αψε)] Μένης<sup>18</sup> (εἰκοστής)<sup>19</sup>  
καὶ ἀλ(λων) κα[θ]η(κόντων)<sup>20</sup> (δραχμάς) εἰκοσιτέσσαρας, (γίνονται)  
(δραχμαὶ) κδ.

The payment is made for the tax of one-twentieth and other customary levies associated with it. Since the payment is in money, the *εἰκοστή* is not likely to be the charge of one-twentieth on grains,<sup>21</sup> although this statement is subject to the reservation that arrears of grain were sometimes discharged in money.<sup>22</sup> It is possibly the fee exacted in connection with a transfer of property, i.e., the *ἐγκύκλιον*. In a bank document of 162 B.C. the correspond-

<sup>17</sup> This does not mean that they are never so treated. E.g., *O. Mich. Inv.* 9827 (to be published as *O. Mich.* 3.1021) δι(ἀ) . . . κτη(νῶν) Μαγ( ) καὶ Π( ); Wilcken, *Griech. Ostraka* 564.6 K(αμῆνις), a signature; *O. Osl.* 21.3 ἀπὸ K(αυῆς); *O. Theb.* 48.5 A( ), a signature, 53.1 M(εμνοῦλων).

<sup>18</sup> In reading *μενης* I follow Amundsen, but no other Menes has occurred on the ostraca in the Michigan collection while Manes, the son of Maron, is found repeatedly (see indexes to *O. Mich.*). Dr. Pearl has suggested that *Αὐνῆς* is also a possible reading.

<sup>19</sup>  $\kappa^+$  ostr. For *εἰκοστή* given as  $\kappa^-$  and  $\kappa^\wedge$  see *P. Ryl.* 2.188.4-5 note.

<sup>20</sup> The reading is largely conjectural. The first letter is either  $\eta$ , as read by Amundsen, or  $\kappa$ , and I have preferred the latter because of the parallel in *BGU* 3.992.ii.11. For the tendency of these letters to resemble each other in cursive hands see *TAPhA* 71 (1940) 647 f.; 73 (1942) 78, crit. note to *O. Mich.* 1.260.2 *ad fin.*

<sup>21</sup> Examples in the Michigan collection are *O. Mich.* 1.171, 172; *P. Mich.* 6.399-411, 414-417. For a brief bibliography see *P. Mich.* 6, pp. 102 f.

<sup>22</sup> Wilcken, *Griech. Ostraka* 1.290 f.; A. C. Johnson, *Roman Egypt*, Econ. Survey of Ancient Rome, ed. Tenney Frank, 2 (Baltimore, 1936) 491. See also section 3 of this article.

ing phrase is τὴν εἰκοστὴν τοῦ ἐγκυκλίου καὶ τὰλλα τὰ καθήκοντα.<sup>23</sup> This is substantially the same as the reading of the Michigan ostrakon, and with it may be compared a phrase of equivalent force, ὑπὲρ ἐγκυκλίου καὶ ἄλλων.<sup>24</sup> The rate of the ἐγκύκλιον varies in the Ptolemaic period, between one-twentieth and one-tenth.<sup>25</sup> In the Roman period it is usually one-tenth, sometimes possibly one-fifth.<sup>26</sup> Milne suggests, however, that a charge of one-twentieth at Tentyra may also be the ἐγκύκλιον;<sup>27</sup> and there may have been an ἐγκύκλιον of one-twentieth in the Mendesian nome.<sup>28</sup> Similarly the tax of one-twentieth on manumissions and inheritances is in effect a tax on transfer of property.<sup>29</sup>

The significance of πρᾶ . . . ι has so far eluded me. This sequence of letters in a receipt for money inevitably points to πρᾶ(κτορσιν) ἀργυρι(κῶν), especially since practors are known to have functioned as collectors of the ἐγκύκλιον.<sup>30</sup> Such a reading is nevertheless impossible unless much closer writing is assumed here than anywhere else on the ostrakon. If another arrangement — πρ(ἀκτορσιν) ἀργυρι(κῶν) — is considered, this objection does not weigh so heavily. If the entire complex of letters could be interpreted as πράκτορι, it would not weigh at all. At the same time, none of these suggestions is sufficiently convincing when applied to the ostrakon. Another approach to the problem is the acceptance of νι as read by Amundsen, and there is no doubt that ν would be satisfactory if the passage could be explained on this basis. Unfortunately, the writing between πρᾶ and νι is much faded.

### 3. THE PRICE OF WHEAT IN 276 A.D.

*O. Mich.* 1.157 is dated in the first year of Probus, i.e., between May and August of 276 A.D.<sup>31</sup> The text is placed by the editor

<sup>23</sup> BGU 3.992.ii.11.

<sup>24</sup> *O. Deissm.* 23 (62 A.D.); *O. Tait.* 4.40 (135 A.D.).

<sup>25</sup> *P. Teb.* 2.350 introd.; *UPZ* 1, p. 511; *P. Col.* 1, pp. 42–45; Claire Préaux, *L'Économie royale des Lagides* (Brussels, 1939) 331–334 (with bibliography, 331, footnote 1).

<sup>26</sup> Johnson, *Roman Egypt* 558 f.; *P. Oxy.* 10.1284 introd.

<sup>27</sup> J. G. Milne, *APF* 6 (1920) 130 f. Cf., however, Wallace (*Taxation in Egypt* 231), who argues that "one-twentieth" is an anachronism characteristic of tax terminology in Demotic and that the actual rate may have been one-tenth.

<sup>28</sup> *P. Ryl.* 2.213.97 note; Wallace, *Taxation in Egypt* 241 f., 332.

<sup>29</sup> Wilcken, *Griech. Ostraka* 1.362 f.; Johnson, *Roman Egypt* 559; Wallace, *Taxation in Egypt* 230.

<sup>30</sup> Cf., e.g., *O. Tait.* 4.40, 41; *O. Theb.* 40.

<sup>31</sup> Thus Amundsen with formal accuracy. An attempt to fix the date more closely is made in the course of this section.

among grain receipts,<sup>32</sup> but the phrase that determines the interpretation presents an unusual aspect:  $\upsilon(\pi\acute{\epsilon}\rho)$   $\tau\iota\mu\acute{\eta}\varsigma$   $\omicron\iota\acute{\nu}\omicron\upsilon$  ( $\acute{\alpha}\rho\tau\acute{\alpha}\beta\alpha\varsigma$ )  $\beta\varsigma$   $\vdash^-$ . The arrangement suggests that the double curve after  $\beta$  is the symbol for  $\frac{1}{2}$ , and this would be entirely reasonable since the same symbol may represent in various contexts  $\delta\rho\alpha\chi\mu\acute{\eta}$ ,  $\acute{\epsilon}\tau\omicron\varsigma$ ,  $\acute{\eta}\mu\iota\sigma\upsilon$ , and  $\kappa\alpha\iota$ .<sup>33</sup> A note appended to the text hesitantly offers  $d = \frac{1}{4}$  as a possible explanation of the curious symbol at the end.<sup>34</sup> If this were true, the receipt would record a delivery of  $2\frac{3}{4}$  artabas, probably of some grain,<sup>35</sup> as the equivalent of an unspecified quantity of wine.

There is, however, an insurmountable obstacle to this interpretation. The form of the final symbol, as reproduced by the editor, is not the conventionalized delta that is usual for  $\frac{1}{4}$ , but resembles rather the large-bellied cursive form of the numeral 2000, which is ordinarily printed as  $\beta$  although it is closer in form to our lower-case b.<sup>36</sup> But even this does not accurately represent the writing on the ostrakon, which does not show the closed loop at the bottom. The numeral can be transcribed neither as  $d$  nor as  $\beta$ ; it is in fact  $\nu = 400$  and has exactly the shape of  $\nu$  in  $\acute{\epsilon}\mu\omicron\upsilon$ , which follows it in the line. Consequently, the double curve that precedes it is not to be rendered ( $\acute{\eta}\mu\iota\sigma\upsilon$ ), but ( $\delta\rho\alpha\chi\mu\acute{\alpha}\varsigma$ ). The two artabas are then valued at 400 drachmas, and it is evidently not a simple coincidence that 400 drachmas would be a fair price for two artabas of wheat in 276 A.D.<sup>37</sup> In this situation what can be the function of  $\omicron\iota\acute{\nu}\omicron\upsilon$ ? The ostrakon ought to have  $\upsilon(\pi\acute{\epsilon}\rho)$   $\tau\iota\mu\acute{\eta}\varsigma$   $\pi\upsilon\rho\omicron\upsilon$  rather than  $\upsilon(\pi\acute{\epsilon}\rho)$   $\tau\iota\mu\acute{\eta}\varsigma$   $\omicron\iota\acute{\nu}\omicron\upsilon$ , and as it happens the photograph completely confirms this conjecture.<sup>38</sup> The new text is  $\upsilon(\pi\acute{\epsilon}\rho)$   $\tau\iota\mu\acute{\eta}\varsigma$

<sup>32</sup> See the headings of the sections on pp. 47–48 of the edition.

<sup>33</sup> E. M. Thompson, *Introduction to Greek and Latin Palaeography* (Oxford, 1912) 81; Bilabel in *RE s.v.* "Siglae," col. 2302–7.

<sup>34</sup> Thompson, *loc. cit.*

<sup>35</sup> The artaba is always a dry measure. See footnote 10.

<sup>36</sup> The form is reproduced in *Stud. Pal.* 20.81 *passim*.

<sup>37</sup> Evidence for the price of wheat in the latter part of the 3rd cent. A.D. is meager, but it is sufficient to illustrate the general rise of prices after 260 A.D. Wheat was selling for 12 drachmas per artaba around 256 A.D. (*P. Flor.* 3.321.9), 300 dr. around 293 (*P. Oxy.* 17.2142.7), 220 dr. and 232 dr. in 294 (*P. Harr.* Appendix, 93.13, verso 3), 1000–1200 dr. in 301 (Diocletian's edict *de pretiis*, ed. E. R. Graser in Tenney Frank, *Economic Survey of Ancient Rome* 5 [Baltimore, 1940] 319.). See A. Segrè, *Circolazione monetaria* (Rome, 1922) 102–105; L. C. West and A. C. Johnson, *Currency in Roman and Byzantine Egypt* (Princeton, 1944) 84, 111.

<sup>38</sup> On the ambiguity of the phrase  $\tau\iota\mu\acute{\eta}$   $\pi\upsilon\rho\omicron\upsilon$  see Wallace, *Taxation in Egypt* 24.

πυροῦ (ἀρταβῶν) β (δραχμάς) υ, which marks the receipt as issued for a payment of 400 drachmas in lieu of two artabas of wheat.

The text of this ostrakon contains also other difficulties, for which I do not have definitive solutions. The payment was made in the first year of Probus for the crop τῆς η (ἐτους) Αὐρηλιανοῦ (line 3), according to the edition. Amundsen has corrected τῆς to τοῦ and, since Aurelian did not live to enter an eighth year, has proposed € (ἐτους) for η (ἐτους). Reviewers have made still other suggestions.<sup>39</sup> The feminine article, however, is the only sure element of the reading. The supposed date, η (ἐτους), could easily be read as ἀρι(θμήσεως), and Αὐρηλιανοῦ is simply not possible. The surprising resemblance of η in this hand to αρ is readily tested in ἡμῶν (line 1), while the use of ἀρίθμησης for payments due on a wheat crop may be compared to its use for monthly requisitions of meat.<sup>40</sup> Although one might venture for the entire phrase τῆς ἀρι(θμήσεως) Αὐρη(λιανοῦ) Σεβ(αστοῦ), I am not able to produce another example of ἀρίθμησης used for an entire reign. Dr. Pearl suggests, not without some palaeographic justification, τῆς ἀρι(θμήσεως) ζ (ἐτους?) Αὐρη(λιανοῦ) Σεβ(αστοῦ). The seventh year of Aurelian began on August 29, 275; but he was succeeded before the end of the year, after a brief interregnum, by Tacitus, who was followed in May or June, 276, by Probus.<sup>41</sup> Since Probus' accession to the throne was probably not known in Egypt until July,<sup>42</sup> when the crops had been harvested and the inundation had begun, there would be no necessary overlapping between the date of the receipt (July–Aug., 276 = 1st yr. of Probus) and the date of the crop (April–June, 276 = 7th yr. of Aurelian). On this view of the doubtful passage, the dates of our ostrakon neglect the short reign of Tacitus; his name, in any case, cannot be read in line 3. While this discussion does not establish an acceptable reading of the line, it does point up two facts: the feminine article τῆς must be retained and η (ἐτους) is a most unlikely reading.

In line 2 the editor has read δι' ἐμοῦ Διοδώρου and on this has

<sup>39</sup> 6th year: J. G. Milne, *JHS* 56 (1936) 97; 7th year: D. M. Robinson, *CPh* 33 (1938) 232.

<sup>40</sup> *O. Mich.* 1.265, corrected in *CPh* 39 (1944) 35 f. In any attempt to determine the bearing of these texts, considerable weight must be given to a criticism from A. C. Johnson (letter, March 4, 1944): "I would not expect ἀρίθμησης in connection with payments in kind."

<sup>41</sup> *P. Oxy.* 12.1476 introd.; Arthur Stein, *APF* 7 (1924) 50 f.; Harold Mattingly, *JEA* 13 (1927) 15.

<sup>42</sup> W. L. Westermann, *Aeg* 1 (1920) 300 f.

patterned his reading of δι' ἐμοῦ Διοδώρου in line 5. Of δι' ἐμοῦ in 2, only μου is beyond doubt; the preceding letters are faded and vague. In 5, δι' ἐμοῦ is sound but the proper name has too many letters; the ostrakon lends itself more readily to δι' ἐμοῦ Σύρου.<sup>43</sup> Consequently, since the receipt is written throughout in one hand, δι' ἐμοῦ must be discarded in 2, where a personal name, perhaps Φίρμου, might not be inappropriate.<sup>44</sup>

#### 4. Ἰβίων Ἀργαίου

*O. Mich.* 1.367 is a receipt issued in the late third century A.D. to a certain Herodian, described as a veteran, for supplying five donkeys to be used in the annual transportation of government grain.<sup>45</sup> The receipt is of the usual type,<sup>46</sup> and the source of the donkeys is given in the phrase δι(ὰ) κτη(νῶν) Ἰβιῶ(νος) Ἀξ( ). This place-name is new,<sup>47</sup> and the editor warns against any attempt to read Ἰβιῶ(νος) Ἀργ(αίου),<sup>48</sup> the name of a well-known Ibion<sup>49</sup> in the Gharaq district near Tebtunis.<sup>50</sup> Nevertheless, that some degree

<sup>43</sup> Other examples of the δι' ἐμοῦ formula in tax receipts in the Michigan collection are *O. Mich.* 1.11, 134, 197, 294. See the basic work of V. Gardthausen, "Di emu der ägyptischen Notare," *Stud. Pal.* 17.1-8.

<sup>44</sup> The use of the father's name in the description of an *Aurelius* is very common, but not so the addition of the grandfather's name. A few examples are *P. Osl.* 2.25.6-7, *P. Oxy.* 10.1256.10-11, *Sammelbuch* 1.1175, 1483, 5692.3, 7, 9.

<sup>45</sup> On this subject, which is of primary importance in the Roman administration of Egypt, see N. Hohlwein, "Le Blé d'Égypte," *Études de papyrologie* 4 (1938) 99 ff.; *O. Osl.* pp. 56-59; *P. Col.* 2.1 rectos 4 and 5 introd. (p. 103 for bibliography); H. Frisk, *Bankakten* 1 introd.; *P. Oxy.* 18.2182 (cf. *CW* 37 [Oct. 4, 1943] 7-9); Wallace, *Taxation in Egypt* 42 ff.

<sup>46</sup> For an excellent discussion of the formulae see Amundsen, *O. Osl.* 17-21 commentary.

<sup>47</sup> It has no parallel in the lists compiled by A. Calderini, "IBION nei nomi di luogo," *Mélanges Maspero* 2 (1934-37) 345-355.

<sup>48</sup> Amundsen: "αξ ostr.; not Ἀργ(αίου)."

<sup>49</sup> This is the name applied to lands which were devoted to the nurture of the sacred ibis, and subsequently to the villages that grew up in their vicinity. See Calderini, *op. cit.* (footnote 47) 345 f., 354 f., and especially Westermann and Hasenoechl, *P. Col.* 3, pp. 119 f.

<sup>50</sup> Grenfell and Hunt, *P. Teb.* 2, p. 380. The name recalls the great διῶρυξ Ἀργαίρις, which in its southern stretch approached Tebtunis and Kerkeosiris. Cf. *CW* 37 (March 6, 1944) 163-165. A connection between the names of this canal and of Ἰβίων Ἀργαίου is unlikely, but it is interesting to note that the canal was probably dug during the reign of Euergetes I (246-221 B.C.; *P. Teb.* 2, p. 368) and that the evidence for the Ibion now goes back to 183 B.C. (*P. Teb.* 3.793; Calderini, *op. cit.* [see note 47] 351). In general, the names attached to lands of the sacred ibis appear to belong to persons of low estate, probably ἰβιαβοσκοί, both Greek and Egyptian (Calderini, *op. cit.* 355), much as the names of κληροί were derived from former holders of the allotments (*P. Oxy.* 3.483.5 note).

of doubt remained is suggested by the query that follows 'Ιβίων 'Αξ( ) in the editor's index of place-names.<sup>51</sup>

On purely methodological grounds the reading is suspect simply because it is new and different,<sup>52</sup> and to this formal suspicion is added the disturbing observation that the editor is not so confident of 'Αξ( ) as he is distrustful of 'Αργ(αίον). Some test must be found to resolve the uncertainty, and this is provided in large part by the ostrakon itself. Unfortunately, the text contains no other example of ξ, but in the first line is the word *Καρανίδ(ος)*, which provides an excellent opportunity to study the formation of *αρ*. Although the writing in the third line is on a larger scale and slightly more angular, it is evident at a glance that the comparison must be taken seriously. In both places the final stroke of alpha is drawn horizontally across the ostrakon to meet the open loop of rho, which is continued downward in a full curve to the left to form the tail of the letter. In the first line this curve is drawn back to the right and upward in order to join the following alpha, whereas in the third line it is drawn to the right but downward into a cursive gamma, which much resembles the form often given to this letter when it is used as an abbreviation of *γίνεται*.<sup>53</sup> It is this gamma that the editor transcribes as the lower oblique of his double mark of abbreviation. Perhaps the most conclusive piece of evidence is *O. Mich.* 1.52, also a text of the late third century, where the same way of writing *αργ* may be observed in the word *σαργ(άνην)*.<sup>54</sup>

The palaeographic analysis leaves no doubt that 'Αξ( ) is to be rejected and that the village in question is the familiar 'Ιβίων 'Αργαίον. In the Michigan ostraca from Karanis there is no other

<sup>51</sup> *O. Mich.* 1, p. 209, s.v. 'Ιβίων.

<sup>52</sup> In the study of literary materials it is an old rule that of two variant manuscript readings the *lectio difficilior* is to be preferred, and this rule rests on the comparative individualism of literary composition. In the great body of documentary materials, however, the routine language of officialdom and the tendency of the inexperienced to take refuge in formulaic expression are much in evidence. Here, what is new and distinctive frequently owes more to the modern editor than to the ancient writer. To escape suspicion, novelty must be embodied in a self-evident reading.

<sup>53</sup> See, e.g., *P. Mich.* 6.382 (recto) 2.15; plate 3a.

<sup>54</sup> In 52.4 *ναῦλα λί(τρας)* ρλ should be read in place of *λί(τρας) ἐκα(τόν) τρ(ιάκοντα)*, ρλ. For delivery of 1 sargane plus naulon see also *O. Mich.* 1.179, 180 (corrected in *CPh* 37 [1942] 144); *O. Osl.* 22. The sargane held 150 lbs. of chaff (Boak, *Études de papyrologie* 5 [1939] 97).

specific mention of this place,<sup>55</sup> but five transportation receipts have the phrase *διὰ κτηνῶν Ἰβιῶνος* without further qualification.<sup>56</sup>

### 5. A RATE OF TAXATION AT TALİ

*O. Mich.* 1.163 consists of three lines which were written during the third century A.D. They are presented by the editor in the following form:

κληρονόμοι <sup>57</sup> ἴ-  
 ουλίου τῶν (ἀρουρῶν) θ  
 σί(του) <sup>58</sup> (ἀρτάβην) α (ἡμισυ).<sup>59</sup>

This text appears to be a receipt issued to the heirs of Julius<sup>60</sup> for the delivery of  $1\frac{1}{2}$  artabas of wheat<sup>61</sup> in discharge of obligations on nine arouras. This payment could not be complete since it would be much too low. The average rate of taxation on land was one artaba on the aroura,<sup>62</sup> and this is considerably below the average level of rents.<sup>63</sup> Since the surface of the ostrakon shows a blot after *κληρονόμοι*,<sup>64</sup> the editor suggests that “-μοις is perhaps possible. If so, [the text is] probably an order for delivery [to the heirs].” It is not easy, however, to fix the purpose of such a delivery. If it is the annual advance of seed for land held in lease, this again would not account for the disproportion between the area of the land and the quantity of wheat, inasmuch as the normal allowance was one artaba for each aroura.<sup>65</sup>

The whole of the preceding interpretation hinges on τῶν, which requires (ἀρουρῶν), but on the ostrakon the word is clearly recog-

<sup>55</sup> *O. Mich.* 1.90 (cf. *AJPh* 63 [1942] 74-77) is an order written by the secretary of the Ἰβιῶν εἰκοσιπενταρούρων, a village also in the Gharāq district (*P. Tch.* 2, p. 380; Calderini, *op. cit.* [footnote 47] 352 f.).

<sup>56</sup> *O. Mich.* 1.421.5, 423.3, 437.4, 442.2 (corrected in *CPh* 39 [1944] 32), Inv. 9472 (to be published as *O. Mich.* 3.1061).

<sup>57</sup> Amundsen: “-μοις is perhaps possible.” If we may judge from the spacing of letters elsewhere on the ostrakon, a final sigma is unlikely. The effect is probably produced by the rough surface on which the ink has run to some extent.

<sup>58</sup> σ/ ostr.; σ| § Amundsen. See footnote 57.

<sup>59</sup> This is the resolution of the symbol used on the ostrakon and retained by Amundsen.

<sup>60</sup> This mode of expression, which omits the names of the heirs, is common usage in tax registers and land lists. Cf., e.g., *P. Mich.* 4.223.2817, 224.3529.

<sup>61</sup> For σῖτος = πυρός see Schnebel, *op. cit.* (see footnote 12) 94 f.

<sup>62</sup> Wallace, *Taxation in Egypt* 18 f.

<sup>63</sup> *Ibid.* 11.

<sup>64</sup> See footnote 57.

<sup>65</sup> Goodspeed, *P. Chic. Kar.* p. 9; Viereck, “Quittungen über Lieferung von Saatkorn,” *H* 30 (1895) 108, 110.

nizable as Ταλί, in spite of a slight fading of the ink. Tali was a village near Tebtunis in the southern part of the division of Polemon.<sup>66</sup> With this correction the text is amenable to a different construction.

*O. Mich.* 1.163 (revised)

κληρονόμοι Ἰΐ-

ουλίου Ταλί (ἀρούρας) θ

σί(του) (ἀρτάβης) α (ἡμισυ).

The memorandum now reads: "The heirs of Julius [possess] at Tali 9 arouras, [which are taxed] at  $1\frac{1}{2}$  artabas of wheat [on the aroura]." <sup>67</sup> The genitive of the rate, as (ἀρτάβης) might be called, is a special instance of the genitive of quality, and it can be paralleled in a papyrus of the late second century B.C. *P. Teb.* 1.10.4 has (ἀρούρας) δέκα (ἀρταβῶν) πεντήκοντα, a phrase in which the total rent is indicated.<sup>68</sup> On the ostrakon the genitive reports the rate for each aroura and so is equivalent to the more usual accusative with ἀνά.<sup>69</sup>

The text as now constituted looks very much like an excerpt from a land register or a taxing list.<sup>70</sup> In a report of inundated and irrigated land at Crocodilopolis in Upper Egypt <sup>71</sup> a typical entry runs as follows: <sup>72</sup>

κληρονόμων ἸΑρτεμιδώρο(υ) Ἰσαγώρο(υ) β(ασilikῆς) (ἀρουραι) γ (ἡμισυ),  
α (ἀρτάβης) (ἀρούρης) (τέταρτον?).

<sup>66</sup> *P. Teb.* 2, pp. 402 f. Tali is frequently mentioned in Tebtunis papyri (*P. Teb.* 1-3; *P. Mich.* 2, 5). In the Michigan ostraca there is only one other occurrence. *O. Mich.* 1.12, presumably found at Tali, is a receipt for ἀφύλισμός κώμης Ταλί (*TAPhA* 71 [1940] 636).

<sup>67</sup> On this rate, "not infrequently found in the Arsinoite nome," see Wallace, *Taxation in Egypt* 13-19.

<sup>68</sup> See editors' introd. Mayser, *Grammatik* 2.ii.136, has an ambiguous description of this passage: the genitive denotes the "Massstab der Produktivität" and means "mit Ertragsfähigkeit von 50 Artaben."

<sup>69</sup> Mayser, *Grammatik* 2.ii.402; Preisigke, *Wörterbuch s.v. ἀνά*.

<sup>70</sup> The same suggestion has been made for *O. Mich.* 1.24, 154. See *AJPh* 61 (1940) 199; 62 (1941) 82.

<sup>71</sup> Kenyon and Bell, *P. Lond.* 3, p. 70: "not the Crocodilopolis of the Fayum, which in Roman times was known as Arsinoë, but the smaller place of the same name in Upper Egypt, near the modern Gebelén." This view has been rejected by Wilcken (*APF* 4 [1908] 534-538), who adduces excellent reasons for placing the village in the vicinity of Ptolemais Hermiou. Cf. Henri Gauthier, *Nomes d'Égypte*, *Mém. Inst. Égypte* 25 (1935) 186.

<sup>72</sup> *P. Lond.* 3.604.116 (p. 74); 47 A.D. Corrections which affect the interpretation of the register as a whole are recorded in *Berichtigungsliste* 1.277.

Here, α (ἀρτάβης), which might also be written (μοναρταβίας), corresponds to (ἀρτάβης) α (ἡμισυ) on the ostracon. In a similar register from the Mendesian nome in the Delta occur entries of the following type: <sup>73</sup>

α (ἀρτάβης) ἐξαφ(εσίων) Ἰσχυρίων ὁ καὶ Σωστράτος Καλλι(μάχου)  
ἀβρ[όχ(ου)] (ἄρουνται) θ, κτλ.

A list of taxes from the Fayum records the name of the landholder, the class of taxation, the village, and the amount of the taxes, but it does not specify the area. A single line will suffice by way of illustration: <sup>74</sup>

[Κ]ράτιππος Πτολεμαίου (μοναρταβίας) Ἡφ(αιστιάδος) (πυροῦ) πα  
(ἡμισυ) (τέταρτον), κτλ.

Since the ostracon was found at Karanis, it may have been prepared in the office of the village secretary at Tali from an ἀπαιτήσιμον κατ' ἄνδρα <sup>75</sup> and sent by official messenger to the secretary of Karanis. The latter would transmit it to the σιτολόγος, and through him to the πράκτωρ σιτικῶν, for collection of the appropriate dues. <sup>76</sup>

## 6. A BILINGUAL MEMORANDUM

*O. Mich.* 1.666 is a brief text of two lines, written probably in the early first century A.D. <sup>77</sup> The editor has placed it among "Notes to Accounts," and his transcript is composed of symbols and numerals seemingly without relation to one another. The second line, however, carries suggestions of the true reading and is therefore worth reproducing for its methodological value:

$\frac{\lambda}{\theta}$  ι L δ φ.

In order to represent the ostracon accurately, this must be converted into

Ἀθ(ὐρ) κδ φ.

<sup>73</sup> *Stud. Pal.* 17, p. 13, 8-9; ca. 200 A.D.

<sup>74</sup> *P. Ryl.* 2.202.17; late 1st cent. A.D.

<sup>75</sup> Wilcken, *Grundzüge* 210.

<sup>76</sup> For the granary operations involved in such a procedure see F. Preisigke, *Girwesen im griech. Ägypten* (Strassburg, 1910) 89-92; Hohlwein, *op. cit.* (see note 45) 98.

<sup>77</sup> Amundsen: "Date: 1 cent. A.D.?" The other ostraca of this type in the Michigan collection (1.300, 301; 2.701, 702) have been dated to the 1st cent. B.C. or the 1st cent. A.D.

The ostracon then bears a record of payment of 500 drachmas, presumably in copper,<sup>78</sup> on Hathyr 24.

Another clue lies in the editor's query: "Are some of the signs demotic?" The first line cannot be read as Greek, but it has the appearance of Egyptian demotic. On this basis the ostracon may be safely assigned to a class known also from other bilingual texts of exactly this kind and more or less contemporary. *O. Mich.* 1.300, 301<sup>79</sup> and 2.702 consist of two lines, the first in demotic, the second in Greek and likewise restricted to date and payment. *O. Mich.* 2.701 also belongs to this group and differs from the preceding only in having two lines of demotic followed by one of Greek.<sup>80</sup>

The Greek portion of these texts reveals nothing concerning the purpose of the payment. It will be necessary, when opportunity permits, to place them before a demotic scholar, who may find in the demotic portion further elements of explanation.<sup>81</sup>

### 7. *εκβου*

*O. Mich.* 1.655 was written in rather vulgar Greek in the late third or early fourth century A.D. As the editor has seen, it is a "Note Concerning Workers," and it appears to be addressed to the two men,<sup>82</sup> Harpalus and Pateucis, whose names occupy the first line. In the following two lines an unspecified job of work is allotted to these persons for the months Phaophi and Hathyr, roughly October and November. The arrangement for December,

<sup>78</sup> *TAPhA* 71 (1940) 643; *Berytus* 8.ii (1946) 88, footnote 29.

<sup>79</sup> These were recovered in the same year as No. 666; their excavation labels bear the date 1928.

<sup>80</sup> Mixed Greek and demotic texts are not infrequent on the ostraca. They may be found easily by leafing through the editions. *O. Mich.* 2.754, 756 belong to this class.

<sup>81</sup> In general, Greek papyrology has an important stake in the extension of demotic studies. See W. F. Edgerton, "Demotica," *Münch. Beiträge* 19 (1934) 281-301; C. Préaux, "Les Égyptiens dans la civilisation hellénistique d'Égypte," *Chronique d'Égypte* 35 (1943) 148-160.

<sup>82</sup> The editor has corrected *ἀστν* (line 2) to *ἐστν*, and *ἡμῶν* (lines 2, 3) is probably for *ὑμῶν*, which is suggested by line 5. Interchange of *η* and *υ* in these pronouns is familiar to students of late Greek. Cf. Mayser, *Grammatik* 1.86: "Dem Wechsel zwischen *ἡμεῖς* und *ὑμεῖς* ist wenig Bedeutung beizumessen; derselbe findet sich in den Handschriften sehr häufig. . . ." The genitive in both lines appears to be an extension of the gen. poss., if it is not simply an instance of the late confusion of gen. and dat. (H. Ljungvik, *Syntax d. spätgriech. Volkssprache*, Skrifter Hum. Uppsala 27.3 [1932] 93.)

which occupies the rest of the text, is more complicated, and the actual words of the printed edition will simplify discussion.

καὶ τὸν Χοίακ, ἐὰν μὴ ἐκ-  
 5 βάλλουσιν ἄλλον ἀντὶ ὑμῶν  
 ἐκ β σου τῶν δύο τὸν  
 μισθόν.

It is evident that ἐκ β σου is not intelligible as it stands. The editor has entered σου in his index of Greek words under the personal pronoun, but β is left unexplained. If the spacing is given as ἐκ βσου, and the arrangement of the letters on the ostrakon rather favors it, the solution is not hard to find. Such a combination immediately suggests ἐκ (δισ)σοῦ. This type of abbreviation, in which a numeral is substituted for the whole or a part of a word, is now familiar to students of papyri.<sup>83</sup> One may compare ā for πρότερον,<sup>84</sup> α(αρταβία) for μοναρταβία,<sup>85</sup> γ̄κ for Τρικωμία,<sup>86</sup> η(δραχμος) for ὀκτάδραχμος,<sup>87</sup> and 'Ιβιών κε(αρούρων) for 'Ιβιών εἰκοσιπενταρούρων.<sup>88</sup> Most convincing is β̄στεγον for διστεγον.<sup>89</sup>

On the view that ἐκ (δισ)σοῦ is the natural interpretation of εκβσου a comma may be placed after the fifth line, and the entire passage rendered: "and for Choiak, if they do not send out<sup>90</sup> someone else in your place, [they will pay] double the wages of both." The absence of a verb in line 6 is noticeable. This lack may imply an unconscious repetition of the verb in the preceding clause: <ἐκβαλοῦσιν> ἐκ (δισ)σοῦ. Another rather obvious suggestion is <ἐκδώσουσιν> ἐκ (δισ)σοῦ.

A more serious matter is the use of δισσός in connection with money. In the practice of the papyri this word is applied regularly to the duplication of documents, while διπλοῦς expresses the same idea with regard to money.<sup>91</sup> The only exceptions appear to

<sup>83</sup> Wilcken, *Grundzüge* xlii.

<sup>84</sup> E.g., *P. Mich.* 2.121 (recto) 1.i.2 with ed.'s note (p. 23).

<sup>85</sup> E.g., *P. Ryl.* 2.202.3 and Index ix. Cf. section 5 of this article.

<sup>86</sup> E.g., *P. Petr.* 3.80(a) 1.7 (p. 213, cf. p. xi).

<sup>87</sup> E.g., *P. Ryl.* 2.216.282 (crit. note at bottom of page).

<sup>88</sup> E.g., *P. Mich.* 2.123 (recto) 22.27 (p. 157). The abbreviation is described in *P. Mich.* 5.340.12 note.

<sup>89</sup> *P. Mich.* 2.121 (recto) 2.ii.5.

<sup>90</sup> With ἐκβάλλουσιν in this sense cf. *P. Ryl.* 2.80.1 ἐκβάλετε εἰς τὰ χῶματα . . . ὑδροφύλακας; *P. Bas.* 19.2-3 ἤτησα αὐτήν . . . τέκτονας βαλὶν. See also *P. Flor.* 2.177, cited in footnote 98, and *Ev. Marc.* 1.43. The present indicative with ἐὰν is discussed by L. Radermacher, *Neutestament. Gram.*, Handbuch z. N.T. 1 (1925) 200.

<sup>91</sup> Preisigke, *Wörterbuch* s.vv. The only instance of ἐκ δισσοῦ cited by Preisigke is in a papyrus of the 6th cent. A.D., *P. Cair. Masp.* 1.67118.38.

be *P. Mich.* 5.238.77, where *δισσή* seemingly describes a *ψίαθος*,<sup>92</sup> and *BGU* 1.179.5–6,<sup>93</sup> *ὑπὲρ τόκου* [. . . . .] *ἐμὸν δισσοῦ κεφαλαίον*, a clear reference to money despite the lamentable state of the text. In one other source of an entirely different character *δισσός* is again used of money. The Septuagint at *Gen.* 43.12 reads *καὶ τὸ ἀργύριον δισσὸν λάβετε*, although the parallel passage, 43.15, has *καὶ τὸ ἀργύριον διπλοῦν ἔλαβον*. In v. 12, *διπλοῦν* is a variant reading, but the best authority supports *δισσόν*.<sup>94</sup> The Hexapla records “Ο’. *δισσόν*. “*Ἄλλος διπλοῦν*.”<sup>95</sup> The Michigan ostrakon provides a third example, in which the wages of two men are to be doubled under given conditions.

### 8. *λαγών*

*O. Mich.* 1.336 is a rather long list of persons who are credited with contributions of an unspecified kind in the late third or early fourth century A.D. Each line consists of a personal name followed by a numeral, from 1 to 3, except Col. 1, line 12, which contains a prepositional phrase enclosed within horizontal lines, as if intended as a heading for what follows.<sup>96</sup> In the edition the words are given as *ἀπὸ τοῦ λαγοπράτου* ‘*Ἀτρή*’, and these are preceded by a heavy dot.<sup>97</sup> Such an expression might mean that the persons whose names are listed below are agents of the hare-seller Hatres making deliveries in his behalf. The compound *λαγοπράτης*, although correctly formed, is otherwise unattested either in literature or in documents.<sup>98</sup>

<sup>92</sup> Cf. editor's note *ad loc.* H. I. Bell, *JRS* 35 (1945) 139, suggests *δισή(μον)*.

<sup>93</sup> Corrected in Preisigke, *Berichtigungsliste* 1.24.

<sup>94</sup> Cf. Brooke and McLean, *Old Testament in Greek* 1.i (Cambridge, 1906) 126.

<sup>95</sup> F. Field, *Origenis Hexaplorum . . . Fragmenta* (Oxford, 1875) 1.61.

<sup>96</sup> Horizontal lines are drawn also under Col. 1.10 and Col. 2.1, 8, 13, where no headings are used. They extend the full width of the column, as if to mark off sections of the text. In this they differ from horizontal check marks, which rarely run more than a few centimeters into the column (*P. Mich.* 4, plates 1–4). An oblique check mark precedes Col. 1.6. On the use of the oblique line in this way see *P. Col.* 2, p. 39.

<sup>97</sup> For the dot as an accounting device see *P. Teb.* 3.845 introd.; *TAPhA* 73 (1942) 66, footnote 7.

<sup>98</sup> Strangely enough, although one of the administrative divisions of Egypt was known in pre-Hellenistic times as the Hare nome, the later Hermopolite nome (Gauthier, *op. cit.* [see note 71] plate 1; Baedeker's *Egypt* [1929] 221), *λαγώς* is reported in Preisigke, *Wörterbuch*, only from *P. Teb.* 2.333, a notification to a centurion (216 A.D.) that certain persons have disappeared while hunting hares, and *λαγώδιον* only from *P. Flor.* 2.177 (*Berichtigungsliste* 1.151; 257 A.D.), where the hare is stated to be necessary to physicians as an ingredient of medical recipes. To judge from the latter text, the estate of Applan at Euhemeria was a good breeding-ground for hares. Applan writes: *τὸ περιὸν ὀφέλλεται (for -τε) βαλεῖν. ἄτοπον γὰρ ἔστιν αὐτοὺς ὠνεῖσθαι τότε πᾶσι αὐτοὺς παρ᾽ἐχ[οντ]ας*.

Our photograph of the ostrakon, however, places the problem on a different footing since it shows the true reading to be ἀπό τοῦ λαγονος τοῦ Ἀτρή. All the letters are perfectly clear. The nu of λαγονος is an angular letter almost identical in form with the nu of Θεωνᾶς (Col. 1.4), and both are readily distinguished from the numerous examples of pi, which has a rounded top.<sup>99</sup> Since the editor read pi instead of nu, he naturally assumed that the omicron after it was a rho which had lost its tail<sup>100</sup> and that the lunar sigma was the left half of an alpha.<sup>101</sup> The result was λαγοπράτου, a word which encounters no linguistic objection and invites suspicion, if at all, only because it is unparalleled.<sup>102</sup>

The new text, λαγονος, is secure as a reading, but there is no interpretation that is immediately satisfactory. If it is taken as a personal name, the meaning of the line remains essentially what it was with Amundsen's reading. "Lagon" is known as a personal name only from Martial (9.50), where it is used of a boy beloved of Brutus,<sup>103</sup> of whom a statue was made by Strongylion.<sup>104</sup> But even in this one passage a variant reading transmits the form "Langon."<sup>105</sup> In the same way, Plaumann's suggestion that Λα[ά]γονος is the true text in *P. Petrie* 3.56b.2<sup>106</sup> seems at first sight a promising lead and appears to be confirmed by Λαάγωνος in *BGU* 6.1227.3, where the person is the same. Critically, nevertheless, these readings are of dubious value, for Smyly subsequently read Λάμπωνος in the Dublin papyrus.<sup>107</sup> The thought occurs that the form on the ostrakon may be a variant of Λάκων,<sup>108</sup> but at this point it becomes evident that if λαγονος is a personal name it cannot be surely identified with any known name.

<sup>99</sup> These letters, as they appear in contemporary texts, tend to resemble each other and are sometimes confused by editors. See *TAPhA* 72 (1941) 442, 450; *CPh* 39 (1944) 30, footnote 18; *Berytus* 8.ii (1946) 87.

<sup>100</sup> For the same confusion of o and ρ in *O. Mich.* 1.251 see *Berytus* 8.ii (1946) 86.

<sup>101</sup> For the same error in reverse, i.e., α mistaken for σ, see *CPh* 37 (1942) 146.

<sup>102</sup> See footnote 52.

<sup>103</sup> Martial 2.77; 14.171.

<sup>104</sup> Pliny *N.H.* 34.8.19.

<sup>105</sup> Cf. Izaac, *Martial* (Budé Collection) Vol. 2, p. 269, n. to p. 53.6. Pape, *Eigennamen*, and Forcellini, *Onomasticon*, recognize only Lagon. Suidas has Λαγόνος without comment.

<sup>106</sup> Preisigke, *Berichtigungsliste* 1.383.

<sup>107</sup> Schubart and Kühn, note to *BGU* 6.1227.3: "der Papyrus führt auf Λαάγωνος, obwohl Petrie III 56b Λάμπωνος gibt, wie Smyly festgestellt hat."

<sup>108</sup> Preisigke, *Namenbuch s.v.*; Pape, *Eigennamen s.v.*; L. R. Dean, *Cognomina of Soldiers in the Roman Legions* (Princeton, 1916) 97, 211.

When we turn to consider *λαγονος* as possibly a common noun, we are at once struck by the fact that *λαγών* has hitherto been absent from papyri and ostraca, but no objection can be brought on this ground now that the reading is completely sure. In its literal sense, the human or animal "flank," the word is of course not appropriate in the context of the Michigan ostrakon. The metaphorical use to designate a "hollow" is more promising. In various connections it has been applied to the hollow of a cup, the flank of a mountain, the bank of a river, the sides of a grave.<sup>109</sup> There is much in these meanings to suggest the fitness of *λαγών* to serve as a topographical designation. Perhaps like *φιάλη*, a "broad, flat bowl," which was given as a name to a "cultivated bowl" at Karanis;<sup>110</sup> the Coptic *κελωλ*, "cup," which designates the "hollow" of the hill at Jeme (Thebes);<sup>111</sup> and *πάτελλα*, "dish," which is similarly used of a piece of land in a recently published ostrakon,<sup>112</sup> *λαγών* also came to be the name of a tract that had once belonged to a certain Hatres.<sup>113</sup>

If this happens to be the correct interpretation, the line reveals the point of departure for the deliveries in the lines that follow. Beyond this conjecture it is unsafe to go. The context provided by the ostrakon is not sufficiently definite to permit more than a guess regarding the nature of the materials brought from "Hatres' Hollow." They may have been loads of wood transported on donkeys,<sup>114</sup> or naubia of earth and brushwood for repairing dikes,<sup>115</sup> or stone for constructing dams and sluices.<sup>116</sup>

<sup>109</sup> *LSJ s.v.* Usually feminine, it is attested also as masculine in medical writers (*ibid.*). Hipp. *Int.* 25 (ed. Littré 7.230.10) has *ἐς τὸν λαγόνα* with *τὴν* as variant reading; Aret. *S.D.* 2.11 (ed. Hude 81.30) *πρὸς τοὺς λαγόνας* with *τάς* as variant reading.

<sup>110</sup> *CW* 37 (March 6, 1944) 164.

<sup>111</sup> Winlock and Crum, *Monastery of Epiphanius at Thebes*, Metrop. Mus. Art Egypt. Exped. Publ. (New York, 1926) 1.112; Crum, *Coptic Dictionary* (Oxford, 1939) *s.v.*

<sup>112</sup> V. B. Schuman, "Two Greek Ostraca," *TAPhA* 75 (1944) 68 f.

<sup>113</sup> With the eponymous role here assigned to Hatres compare the naming of military allotments (Mitteis, *Grundzüge* 111; Preisigke, *Wörterbuch* 1.804) and ibis-stations (Calderini, *Mélanges Maspero* 2.345-355) after former holders. Cf. footnote 50.

<sup>114</sup> Cf. *O. Mich.* 1.356, corrected in *AJPh* 63 (1942) 73 f.

<sup>115</sup> Friedrich Oertel, *Liturgie* (Leipzig, 1917) 63-78. For further bibliography see *TAPhA* 72 (1941) 442, footnote 13.

<sup>116</sup> *TAPhA* 71 (1940) 631-634.