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LOCAL CUSTOMS IN THE FORMULAS OF SALES OF WINE FOR FUTURE  
DELIVERY

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# Local Customs in the Formulas of Sales of Wine for Future Delivery

(A Supplement to P.Heid. V)

I had just finished the manuscript of an article with the title given above, based on a comparison of Byzantine sales of wine for future delivery, when P.Heid. V came into my hands. In that publication the local formulas of sales for future delivery, not only those of wine, turned out to be studied and explained, so that a separate publication of my article seemed no longer of any use. However, after reading the sections in P.Heid. V which concern the formulas found in sales of wine for future delivery, I came to the conclusion that I had gathered some more information concerning this subject than can be found in P.Heid. V. I therefore present here some additional notes on P.Heid. V and the sales of wine for future delivery.

First of all, some additions have to be made to the list given in P.Heid. V, pp. 296-301<sup>1</sup>.

Text	Date	Nome	Produce	Remarks
P.Matrit. 6 <sup>2</sup>	IV	?	?	=S. Daris, <i>Dieci Papyri Matritenses</i> Nr. 6

<sup>1</sup> To be changed in the list at Nr. 37 is the volume number of P.Oxy.: P.Oxy. XLIX 3512. The date of Nr. 93 (PSI X 1122) has been corrected by J.M. Diethart-K.A. Worp, *Byz. Not.*, p. 82 (Oxy. 10.1.1) to VI/VII. They also corrected the subscriptions of the notaries of Nr. 70 (P.Flor. I 65, l.c., p. 83 Oxy. 16.2.1), Nr. 134 (BGU XII 2209, l.c., p. 67 Herm. 9.9.1), Nr. 138 (SB XVI 12492, l.c., p. 68 Herm. 11.2.3) and Nr. 141 (P.L.Bat. XVI 11, l.c., p. 79 Oxy. 2.1.1). K.A. Worp has suggested that this text has to be dated in the Arab period (*ZPE* 45 (1982), pp. 224-226). I do not think that the vision of M. Schnebel, cited and approved in P.Heid. V p. 228, n. 21, that the viticulture in Egypt ceased to exist after the Arab conquest, can be upheld any longer: cf. e.g. the date of Pap.Flor. XVIII 8 and see also P. Heine, *Wein-studien. Untersuchungen zu Anbau, Produktion und Konsum des Weins im arabisch-islamischen Mittelalter*, Wiesbaden 1982, pp. 1-6. See also the various coptic sales of wine for future delivery, e.g. CPR IV 38-40, 82-83, 91, Pap.Flor. XVIII 11, mainly dating from the Arab period. The article of P.J. Sijpesteijn cited at Nr. 93 was published in *ZPE* 33, not 53. At Nr. 89 the edition has fallen out: S. Daris, *Aeg.* 66 (1986), pp. 134 ff. It is a pity that no reference is made to lists of sales on future delivery, in which also documents belonging to the Roman period can be found, except for O. Montevicchi *Aeg.* 24 (1944), pp. 131-158. Additions to that list appeared in BGU XII 2176 and 2198, R.S. Bagnall, *GRBS* 18 (1977), p. 85, n. 1, P.Ups.Frid. 5, P.J. Sijpesteijn, *ZPE* 62 (1986), p. 138, n. 1 and Pap.Flor. XVIII (1989), p. 43. Not listed in *Aeg.* 24, nor in the supplementary lists are P.Fay. 89 (A.D. 9, Ars., vegetable seed and barley) and P.Gen. I 24 (A.D. 96, Ars., vegetable seed). To be added is P.L.Bat. XXV 25 (A.D. 95/96, Ars., vegetable seed). To be deleted from the list appearing in *ZPE* 62 (1986), p. 138, n. 1 is SB XIV 12088: this is not a sale on future delivery, but a loan of money with interest in kind. Listed in BGU XII 2176 but not in P.Heid. V is SB I 4676. On this text see below **Herakleopolite Nome**. Related texts are P.Mich. XI 615, a petition concerning a wine sale (Oxy.(?); cf. l. 5 *παρὰ ληνόν*). The parallels cited in the Intr. are also Oxyrhynchite, and CPR IV 34 (=W. Till, *Aeg.* 33 (1953), pp. 201-208), a Greek-coptic model of sales in advance of reed, vats and an unknown product, reprinted in H. Harrauer-P.J. Sijpesteijn, *Neue Texte aus dem antiken Unterricht*, MPER NS XV, 112. For further literature see also the texts discussed below.

<sup>2</sup> Subscription of a sale in advance, provenance unknown. The Hermopolite and Antinoite nome are ruled out since *τιμή* is not in the genitive; the Oxyrhynchite since *τιμήν* is not followed by *πλήρης* (cf. P.Heid. V, pp. 329-330). The Herakleopolite nome could be a possible provenance for this text. Some of

CPR XIV 6	V/VI	Herakl.	?	
CPR XIV 5	530-533	Ars.	Flax	
P.Vindob. G 28694	541 (?)	Ars.	Flax	Ed. by B. Eder, Pap.Flor.XIX, pp. 155-157
P.Heid. Inv. G 1898	581	Oxy.	Wine	Ed. by Th. Kruse, <i>ZPE</i> 88 (1991), pp. 138-140
P.Vindob. G 21242	VI	Ars.	Vegetable seed	Ed. by B. Eder, Pap.Flor.XIX, pp. 153-155
P.Cairo Mus. inv. SR 3805 (11)	VI	Antaio-polite	Wool <sup>3</sup>	Ed. by A. Hanafi, <i>BACPS</i> 3 (1986), pp. 149-157
P.Vatic.Aphr. 9	VI	Antaio-polite	Wine	Cf. P. Mich. XV 748 Intr. and J. Gascou, <i>Aeg.</i> 61 (1981), p. 277
CPR XIV 4	VI	Ars.	Wine	
CPR XIV 7	VI	Ars.	Barley	
Pap.Flor. XVIII 8	669	Oxy.	Wine	= R. Pintaudi-P.J. Sijpesteijn, <i>Tavolette lignee e cerate</i> (Pap.Flor.XVIII)
Pap.Flor. XVIII 10	VII	Oxy.	Grass-seed	To be edited by P.J. Sijpesteijn, <i>Tyche</i> 6 (1991) <sup>4</sup> .
P.Lond. III 1303	498	Herm.	Vats	

Naturally, some of these texts could not be known by Dr. Jördens, since they were published after P.Heid. V. Those edited in CPR XIV were known by Jördens, but could not be incorporated in P.Heid. V (see pp. 14-15, note 6). I shall return to CPR XIV 4, Pap.Flor. XVIII 8 and P.Vatic. Aphr. 9 later on in discussing some texts individually.

The formulas in the sales for future delivery have been studied and described adequately by Dr. Jördens, so I shall not repeat them here *in extenso*. I only have some additions to the formulas used in the Oxyrhynchite nome.

In the Oxyrhynchite nome there are two types of contracts : those in which the price received is not specified (which I will call type **1**) and those with exact specification of the price (type **2**). The formulas of both types are different. To type **1** belong P.Oxy. XLIX 3512, SB V

Rom, *ZPE* 54 (1984), pp. 95-96. Read in line 2 Ἀμμωνί(ου) καὶ Ἀννία[. In line 6 traces of the subscription of a notary are still visible: read δι' [.

<sup>3</sup> The existence of another sale of wool for future delivery (the other being P.Sakaon 95 = P.Heid.V p. 296 Nr. 1) makes it all the more likely that P.Lond. V 1777 + 1895 (P.Heid. V, p. 297 Nr. 29) is indeed a sale of wool in advance (cf. the editors note on l. 8).

<sup>4</sup> I would like to thank P.J. Sijpesteijn for granting me to have a look at his article prior to publication. Apparently, at the time of writing his article, he was not yet familiar with P.Heid. V, and, consequently, not aware of other parallel texts, especially the Hermopolite contract P.Flor. III 314 (with the corrections of P.Prag. I 46, comm. on ll. 9-11), nor of the Greek-Coptic model contract MPER NS XV 112 cited above n. 1. Sijpesteijns supplement of l. 6 ἐντεῦθεν τῆς συμπεφωνη]μένης has to be changed into τῆς πρὸς ἀλλήλους συμπεφωνη]μένης (cf. P.Flor. III 314, ll. 7-8 and P.Heid. V, p. 308). In l. 10 I "read" [νέοις καλοῖς πεπ]ε[ισσωμένοις, cf. MPER NS XV 112, ll. 27-28, where πεπισ]σομένοις has to be restored at the beginning of l. 28. Probably καλοῖς also has to be supplemented in BGU XII 2205, l. 15. Other readings of MPER NS XV 112 can be adjusted as a result of the comparison of the Greek and Coptic part of this text: read in ll. 17-18 τῷ μ[εγαλοπρ(επεστάτῳ) (?) υἱῷ τοῦ τῆς μα]καρ[ί]ας μνήμης Θεοδώρ[ου] ἀπὸ τῆς Ἑρμοπο[λι]τῶν | [χαίρειν. Ὁ]μολο[γῶ ἐσχη]κέναι καὶ πεπληρῶσθαι etc., which is the equivalent of the Coptic lines 22-25 ΠΝΟΣ-ΔΙΠΛΗΡΟΥ. Supplement in l. 19 [τιμῆς μεγάλων] κούφων (=ΤΤΙ]ΜΗ - - ΝΚΟΥΦΟΝΝΟΣ (l. 25); the upper part of ς is still visible above the gap). I am not able to solve the difficulties in l. 16. ερηο can also be read as Ἐρηο which is expected (cf. l. 12 ὠμογῆν), but the rest of

8264, P.Flor. I 65, P.Mich. XV 734, P.Lond. V 1764 and P.Heid. V 358. For type **1** we find the following characteristics:

1. the contract starts with ὁμολογῶ ἐσχηκέναι παρὰ σοῦ ἐντεῦθεν τὴν τιμὴν πλήρης (cf. P.Heid. V, p. 307)
2. the return of the wine is described as ὄνπερ οἶνον παρὰ ληνὸν ἀπὸ γλεύκου ἀδόλου σοῦ παρέχοντος τὰ κοῦφα ἐπάναγκες ἀποδώσω σοι (cf. P.Heid. V, pp. 312 and 323<sup>5</sup>)
3. in the guarantee clause we find ἀναδέχομαι δὲ τὴν τοῦ οἴνου καλλονὴν καὶ παραμονὴν (cf. P.Heid. V, pp. 325-326).

Characteristic for type **2** is the element ἤδη after ἐντεῦθεν and, of course, the mentioning of the money received. It is never expressed that this money is received as the price of wine<sup>6</sup>, but a statement follows, that in return for this money an amount of wine will be repaid: καὶ ὑπὲρ αὐτῶν (or καὶ ταῦτα) ὁμολογῶ παρασχεῖν / διδόναι σοι<sup>7</sup>. For some of the texts belonging to type **2**, viz. P.Mich. XI 608 and SB XIV 11617, these are the only characteristics: they go on with ὄνπερ οἶνον etc. I have called these type **2a**.

Others, however, (type **2b**, P.Col. VIII 245, P.L.Bat. XVI 11, P.Mich. XV 743 and 748, PSI X 1122) have also different formulas concerning the return of the wine and in the guarantee clause. Here we find, directly after the mentioning of the amount of wine to be returned, the date of the return, the guarantee clause and a clause concerning the provision of the vats: καὶ ὑπὲρ αὐτῶν (or similar) ὁμολογῶ παρασχεῖν / διδόναι σοι οἴνου (measure) κνίδια or σηκώματα X ἐν τῇ τρύγῃ τοῦ Μεσορῆ μηνὸς τῆς παρούσης number ἰνδικτίονος (οἴνου) ῥύσεως of the "coming" indiction or erinemesis ἐνεχόμενος εἰς τὴν καλλονὴν τοῦ οἴνου<sup>8</sup> (or *vice versa*) μέχρι ὅλου τοῦ Τῦβι μηνὸς σοῦ παρέχοντος τὰ κοῦφα<sup>9</sup>. Ἀνυπερθέτως is missing in the type **2b** formulas, P. Col. VIII 245 excepted.

To sum up the different elements in the formulas of sales of wine for future delivery I had made the following outline:

Nome	Price and qualification of the wine	Vats	Elements in the guarantee clause	Other peculiarities
Antin.	τελείας καὶ ἀξίας τιμῆς οἴνου νέου καλλίστου (εὐαρέστου)	μικρὰ ἀγγία or κάδοι + capacity	ὄξος, ὀζόμενος, ἀποίητος until Tybi	καὶ ταῦτα/τούτους ἐτοίμως ἔχω παρασχεῖν

<sup>5</sup> I do not regard the element παρὰ ληνόν as a part of the quality designation of the wine (so P.Heid. V, p. 315, n. 132 and p. 323). In my opinion these words specify the place of the return. See also my previous article The Meaning of Various Words related to Wine. Some New Interpretations, *ZPE* 90 (1992), pp. 265-276.

<sup>6</sup> The only exception is Pap.Flor. XVIII 8, but here this statement is due to influences of the formulas of other nomes. The reconstruction of the beginning of P.Mich. XI 608 has to be changed. On both texts see below **Oxyrhynchite Nome**.

<sup>7</sup> Supplement probably παρασχεῖν instead of ἀποδοῦναι in SB XIV 11617, l. 14.

<sup>8</sup> For P.Mich. XV 743 ll. 18ff. see the commentary on these lines. Supplement however ἐνεχόμενος | εἰς instead of ἀναδεχόμενος. It cannot be established with certainty to which type Pap.Flor. XVIII 8 and P.Heid. V 359 belong. The formulas of the first are very peculiar; those of the latter seem to be a mixture of the formulas of both type **2a** and **2b**. On both texts see below **Oxyrhynchite Nome**.

<sup>9</sup> Only in P.Col. VIII 245 the clause concerning the provision of the vats is found on a different spot,

Ars.	τιμὴν οἴνου μούστου εὐαρέστου	κοῦρι	until Tybi	σοῦ τὰ κοῦφα παρέχοντος
Herakl.	τὴν συμφωνηθεῖσαν τιμὴν οἴνου νέου ἐπιτηδείου	διπλᾶ + capacity	ὄξος ἢ ὄζάριον un- til Pharmouthi	σοῦ παρέχοντος τὰ κοῦφα is standing between διπλῶν X and γίν. διπλᾶ X
Herm.	τῆς τελείας τιμῆς οἴνου (νέου μούσ- του)	κνίδια or μέτρα	ὄξος, ὄζόμενος, ἀποίητος until Tybi or Phamenoth	the wine to be delivered is described as οἶνος (νέος) κάλλιστος καὶ εὐάρεστος
Oxy.	τὴν συναρέσασαν or συμπεφωνημένην καὶ ἀρέσασαν τιμὴν πλήρης οἴνου (only in type 1)	σηκώματα + capacity; once κνίδια + capacity in type 2b	ἀναδέχομαι τὴν καλλονὴν καὶ πα- ραμονὴν in type 1 and 2a, ἐνέχομενος εἰς τὴν καλλονὴν in type 2b until Tybi	ὄνπερ οἶνον παρὰ ληνὸν ἀπὸ γλεύκου ἀδόλου σοῦ παρέχοντος τὰ κοῦφα ἐπάναγκες ἀποδώσω in type 1 and 2a,

This outline is partly based on new readings, some of which may be found in P.Heid. V. Below I shall discuss several texts individually and also propose other new readings and interpretations. These texts will be ordered by nome.

**Antaiopolite Nome:** P.Vatic.Aphr. 9 is definitely a sale in advance. In the original interpretation of this text Aurelios Iohannes agrees to have received an amount of must (οἴνου γλεύκ(ου)s), l. 10). The receipt is dated, however, in the month Mecheir (=January-February). It is impossible that there would be any must six months after the vintage. J. Gascou and P.J. Sijpesteijn (cf. above) are therefore quite right to see in this contract a sale on future delivery.

Thanks to the edition of P.Cairo Mus. inv. SR 3805 (11), we now have two sales on future delivery from this nome<sup>10</sup>. With the aid of this text some of the readings and supplements of P.Vatic.Aphr. 9 can be corrected. Useful in this respect are also contracts of loans from this nome, the formulas of which apparently are very close to those of the sales on future delivery (cf. A. Hanafi, *BACPS* 3 (1986), p. 153). A good example of such a loan contract is P.Mich. XIII 670 (a loan of grain), signed by the same notary as P.Vatic.Aphr. 9. The formulas are also similar to those of the Thinite nome (SB I 4504-4505). The average length of the lines written by the first hand in P.Vatic.Aphr. 9 is about 33-36 letters. Including the corrections of J. Gascou, *Aeg.* 61 (1981), p. 277 and J.D. Thomas, *Byzantion* 54 (1984), p. 395, I would like to propose the following readings, all checked on the plate accompanying the edition:

- 5 Αὐρήλιος [Ἰωάννης NN                    μητρὸς NN                    ]
- 6 ἀπὸ κώμ[ης Ἀφροδι(ίτης) τοῦ Ἀνταιοπολίτου νομοῦ]
- 7 Αὐρηλίῳ Κυρ[ίλλῳ (?) NN                    ἀπὸ τῆς]
- 8 αὐτῆς κώμ[ης] χαίρειν. Ὁμολογῶ ἐσχηκένα]
- 9 καὶ πεπληρ[ῶσθαι παρὰ σοῦ τῆς τελείας τιμῆς]
- 10 οἴνου γλεύκ(ου)s [κνιδίων ἑκατὸν τεσσαράκοντα]
- 11 γί(νεται) οἴν(ου) γλεύκ(ου)s κ[ν(ίδια) ρμ καὶ ταῦτα ἐτοίμως ἔχω]

<sup>10</sup> In his article "Notes on Absentee Landlordism at Aphrodito" (*BASP* 22 (1985), pp. 137-169, J.G. Keenan treats P.Cairo Masp. II 67127 and P.Ross.-Georg. III 37 also as sales on delivery (pp. 163-164). This view is incorrect. Both contracts are sales on credit, not sales in advance. Therefore, his interpretation of παρὰ σοῦ, as being an expression of "to you" in these texts, has to be rejected. The translation by the editor of P.Ross.-Georg. is perfectly all right. A similar sale on credit of wine is CPR V

- 12 παρασχεῖν σο[ι ἐν τῷ καιρῷ τῆς τρύγης]  
 13 τῆς σὺν θεῷ [μελλούσης number ἰνδικ(τίονος)]  
 14 μεγάλῳ μέτρ[ῳ ἐν]  
 15 τοῖς καινοῖ[ς κούφοις  
 16 ε.[.] . . . . [  
 17 Τὸ γρά[μμα] το[ῦτο ἐθέμην σοι εἰς ἀσφάλειαν]  
 18 ἐφ' ὑπογραφ(ῆς) [ἐμῆς καὶ τῶν ἐξῆς μαρτυρούντων]  
 19 καὶ ἐπερωτηθ(εῖς) ὡμολ[ό]γη[σα

l. 7 Κυρ[ίλλῳ (?), J.D. Thomas;

l. 8 ἐσχηκέναι: ἀπειληθέναι ed., but cf. the Cairo text, l. 6 (though partly supplemented) and P.Mich. XIII 670, l. 8; l. 9 τῆς τελείας τιμῆς τῶν τοῦ, J. Gascou. Τῶν τοῦ, apart from being unnecessary, makes the restoration too long. Probably one has to read παρ]ᾶ σοῦ τιμῆς | τελείας in P.Cairo Mus.inv. SR 3805 (11), ll. 5-6 (cf. the editors note on l. 5);

ll. 10-11 κνίδια ὀκτωκαίδεκα and [κν(ίδια) τη ed.; the figure is based on the reading of the V<sup>o</sup>, where the ed. read διδιπλᾶ θ. In my opinion we have to read διδιπλᾶ ο and therefore the figure 140 in ll. 10 and 11. With ἑκατὸν τεσσαράκοντα the lacuna in l. 10 is filled exactly. On the measure see P.Köln IV 192, comm. on ll. 7-8 and the literature cited there;

l. 11 καὶ ταῦτα: ἄπερ ed., but cf. the Cairo text, l. 8, P.Mich. XIII 670, l. 10 and both Thinite contracts;

l. 12 the supplement in this line is rather short, but perhaps the most likely: nor in P.Mich. XIII 670, l. 11, nor in the Thinite contracts is the date of the return expressed by the name of a month. Alternatively one could add καρπῶν after τρύγης or supplement ἐν Μεσορῇ μηνὶ καιρῷ τρύγης];

ll. 14-15 ἐν | τοῖς καινοῖ[ς κούφοις: ] | τοῖς καὶ νοῖ[ ed.; cf. the Thinite contracts where we find ἐν κούφοις (see below **Thinite nome**);

ll. 15-16 for the expected phrase cf. the note on these lines in the edition and the Cairo text, ll. 11-13;

l. 16 ε.[.] . . . ] καὶ ± 5 [ ed., which is much too long;

l. 17 ἐν[εχ]ύρ[ου λογῶ] καὶ [ὑποθήκης δικαίῳ - καὶ εἰς σὴν ἀσφάλειαν] ed.; ὑποθήκης δικαίῳ was rejected by J.D. Thomas, thus making the reading of the start of this line also unlikely. This was confirmed by checking the plate. The new reading corresponds to P.Mich. XIII 670, l. 16;

l. 18 [ἐμῆς ὡς πρόκ(εῖται) ed.; for my restoration cf. e.g. P.Lond. V 1692, l. 19.

**Antinoopolite Nome:** Dr. Jördens is quite right to include P.Köln IV 192 among the contracts of this nome. The promise to return the wine runs καὶ ταῦτας (read ταῦτα) ἐτοίμως ἔχω παρασχεῖν which is also the case in P.Ant. I 42 (cf. P. Heid. V, p. 314). It is likely that the same kind of formula has to be restored in P.Prag. I 45 also: analogous to P.Ant. I 42 and P.Köln IV 192 we expect in line 13ff. σοῦ παρέχοντο[ς | τὰ κοῦφα, γί(νεται) οἴ(νου) κάδ(οι) σ, καὶ τούτους ἐτοίμως ἔχω | παρασχεῖν etc. The high trace which is visible on the plate and which is indicated in the edition by an asterisk is probably from the iota of καί.

**Apollonopolites Ano:** numerous corrections on P.Edfu I 2<sup>11</sup> are made by J. Gascou and K.A. Worp, *ZPE* 49 (1982), p. 92. With these corrections the text can now be interpreted as a loan/sale in advance of one solidus, to be repaid in 50 koloba of eight xestai<sup>12</sup> of wine and half a solidus, with an interest of five koloba of wine<sup>13</sup>.

The guarantee clause is also corrected by Gascou and Worp<sup>14</sup>. On the plate they read in line 8 οξοξαρια which they explain as {οξ}ὀξάρια "mot formé sur le modèle de οἰνάριον". The forms

<sup>11</sup> For the date see R.S. Bagnall-K.A. Worp, *Chr.d'Ég.* 56 (1981), p. 120, n. 4.

<sup>12</sup> Rather than 58 koloba. In that case ξέστω μέτρῳ remains unexplained. A capacity of 8 xestai is not uncommon, see P.Oxy. LI 3628, comm. on l. 15. The same suggestion is made by Jördens (P.Heid. V, p. 110, n. 1)

<sup>13</sup> Cf. P.Grenf. II 90, a loan of money from Apollinopolis Magna from the 6th century, in which the annual interest is 5 koloba of wine on each solidus.

<sup>14</sup> Although Jördens was familiar with the article of Gascou and Worp, she did not take over nor refer

of ξ and ζ, however, are very similar in this text: both letters look like ζ, only the bottom part of the ξ goes farther to the left. I therefore read in line 8 ὄξοζαρία. The word ὄξοζάριον is found in SB VI 9593 (Herakleopolite, VI/VII), line 23 in the form ωξωσαρίου. As I will demonstrate below (**Herakleopolite Nome**), this word, on the basis of the formulas in other Herakleopolite texts, has probably to be explained as a miswriting of a case of ὄξος ἢ ὄζάριον in that text. I think the same mistake has also taken place in P.Edfu I 2. Read ὄξ(η ἢ) ὄζάρια. With this reading we have another three-element guarantee clause, just as in the Antinoopolite and Hermopolite nomes.

**Arsinoite Nome:** CPR XIV 4 was not included in Jördens' study. This document is not styled as a receipt, but as a cheirographon (for a discussion of the formulas in this kind of texts in the Arsinoite nome see P.Heid. V, pp. 310-311). In CPR XIV 4 we find all the Arsinoite characteristics for sales of wine on future delivery:

1. the price is described as τιμὴν οἴνου μούστου εὐαρέστου<sup>15</sup> (cf. P.Heid. V, p. 324);
2. the measure to be used at the time of the delivery is the χῶμα;
3. the formula concerning the provision of the jars is σοῦ τὰ κοῦφα παρέχοντος, whereas in the other nomes this formula runs σοῦ παρέχοντος τὰ κοῦφα (cf. P.Heid. V, p. 324).

I do not agree with Jördens' point of view that χῶμα δίκαιον refers perhaps to the quality of the wine instead of being a designation of the measure to be used at the time of the delivery (P.Heid. V, p. 320). At the same spot we usually find χύματι δικαίω, we encounter χύματι τῷ ἐμῷ χωρίῳ in CPR XIV 4, line 11. This has to be a "real" measure and not a quality designation (cf. the commentary ad loc.<sup>16</sup>).

In her list of documents Jördens included SB I 4703 (P.Heid. V, p. 301 Nr. 145) as a sale of wine for future delivery from the Arsinoite nome. In SB this text is described as a "Schuldschein". The suggestion that we deal here with a sale of wine for future delivery can be found in the *editio princeps*. However, nothing in the text points in that direction: nowhere we find a word that can be related to wine, except for line 23-24 παρέχ]οντος τὰ [ ]|. This reminds us of the clause concerning the provision of the vats which usually runs σοῦ παρέχοντος τὰ κοῦφα. One of the characteristics of the Arsinoite texts, however, is the different word order of this clause: in this nome we always find σοῦ τὰ κοῦφα παρέχοντος (cf. P.Heid. V, p. 324), so that it has to remain doubtful whether we are dealing here with a sale of wine for future delivery.

The readings of SB I 4822 have been corrected in P.Heid. V, p. 326<sup>17</sup>. On the original, Dr. Jördens reads εὑρισκόμενον | [ὄ]ξο[ν] ἢ ἀποίητον [ἔως] τοῦ Τῦβι μηνὸς | [ἀ]λλάξω σοι οἴνο[ν] εὐά]ρεστον. On a photocopy of a photograph of this text, kindly put at my disposal by K.A. Worp, I came to a similar reading<sup>18</sup>. This leaves us with a grammatical problem, viz. the double accusative with ἀλλάξω: the clause concerning the exchange of wine has to be either τὸν οἶνον εὐρισκόμενον ὄξος ἢ ἀποίητον ἀλλάξω σοι ἐν οἴνω εὐαρέστῳ or (ἀντὶ) τοῦ οἴνου

<sup>15</sup> οἴνου μούστου εὐαρέστου has probably to be supplemented also in P.Ross.-Georg. V 39 at the end of l. 3.

<sup>16</sup> The statement that χῶμα is attested only in Arsinoite contracts is not true: see Pap.Flor. XVIII 8, l. 7 and the commentary. In BL 3, p. 217 on P.S.A. Athen. 23, l. 15, one of the sales of wine on future delivery from Roman time, we read that, in the opinion of S.B. Kougeas, the phrase ἐν χύματι τοῦ αὐτοῦ ἀμπελώνος there expresses the quality of the wine to be delivered. The reasons for this interpretation are unknown to me, since Kougeas' article ('Ελληνικά 11 (1940), pp. 335-350) was unavailable. Nevertheless, I think that his suggestion has to be rejected: in most sales of wine for future delivery some kind of measure is specified.

<sup>17</sup> For the reading of the Verso, see J.M. Diethart, Pros.Ars. I, Nachträge Nr. 3362 α.

εὕρισκομένου ὄξους ἢ ἀποιήτου ἀλλάξω σοι οἶνον εὐάρεστον. I suppose the writer of SB I 4822 has mixed up these two sentences.

BGU XIII 2332 is a very early text from the Arsinoite nome. That may be the reason that the formulas are a bit different from those employed in later contracts<sup>19</sup>. Apart from that, there is a Herakleopolite characteristic in the description of the wine, viz. the adjective ἐντόπιος. Maybe this influence is due to the fact that the contract was drawn up at a time when the Arsinoites had become part of a larger district. One of the contractors is a *speculator* of the province Augustamnica "consisting of the former Arsinoite, Oxyrhynchite and Heracleopolite nome" (commentary on line 7)<sup>20</sup>. Perhaps the local formulas of these nomes became mixed up a little<sup>21</sup>.

**Herakleopolite Nome:** VBP IV 55 is re-assigned to the Oxyrhynchite nome. On this text see below **Oxyrhynchite Nome**.

As was stated above (note 1) SB I 4476 is not included in the list of documents. Nothing in this text corresponds to the formulas of the other Herakleopolite texts. Either the formulas of this text were unique, or SB I 4476 is not a sale of wine for future delivery.

For P.L.Bat. XIII 2<sup>22</sup> the provenance Herakleopolite nome was suggested by H. Harrauer-B. Rom, *ZPE* 54 (1984), p. 96, because of the type of handwriting and the formulas used. At the same time they confirmed the date proposed in BL 5, p. 63 (VI). In P.Heid. V this text is still treated as if the provenance were unknown<sup>23</sup> and again the date VIth century is corroborated (P.Heid. V, p. 318, n. 168). The provenance Herakleopolite nome is confirmed by the formulas of this document (cf. the characteristics given in the outline above). As a result of the attribution to the Herakleopolite nome, some of the characteristics for this nome as described in P.Heid. V have to be adjusted:

1. in P.L.Bat. XIII 2 there is no "Nachstellung" of πεπληρωσθαι (cf. also P.Heid. V, p. 309, n. 74);
2. διὰ χειρὸς ἐξ οἴκου is missing;

<sup>19</sup> The formulas in the contracts from the Oxyrhynchite nome of Roman time (PSI XII 1248, 1250 and 1252 and P.Rein. II 101) differ also from the Byzantine formulas of that nome. The provenance of P.Rein. II 101 is unknown according to the edition. The Oxyrhynchite nome is suggested by ll. 6-7 ὄνπερ οἶνον ἀποδώσω σοι - - παρὰ ληνόν and may be confirmed by the reading Ἰέρακος in l. 10. This name is taken as a personal name by the editor, but a toponym seems more likely. A κτῆμα Ἰέρακος is attested in the Oxyrhynchite nome in P.Erl. 93 (II/III), being the designation of a vineyard! (cf. P. Pruneti, *I centri abitati dell' Ossirinichite* (Pap.Flor. IX), s.v. Ἰέρακος).

<sup>20</sup> New evidence concerning the province Augustamnica can be found in P.Oxy. L 3576-3579. P.Oxy. L 3577 is a letter from a *praeses Augustamnicae* issued in Herakleopolis. On *speculatores* see now P.Nepheros 20 and "Anhang".

<sup>21</sup> Such a mixture of formulas is known from Pap.Flor. XVIII 8. On this text see below **Oxyrhynchite Nome**.

<sup>22</sup> The corrections of P.L.Bat. XIII 2 by J. Bingen in *Chr.d'Ég.* 41 (1966), p. 189, confirmed by H.C. Youtie (BL 6, p. 68) are rendered inaccurately in BL 5, p. 63; read in l. 7 ἐ(κ) ξεστῶν ἐπὶ διπλῶν etc. and in l. 8 (γίνεται) οἴ(νου) ἐ(κ) ξ(εστῶν) ζ δι(πλῶ) etc. Only in this text the content of the διπλῶ is repeated. Cf. P.Oxy. LI 3628 commentary on l. 5 for the possible equation of διπλοῦν, κνίδιον and σήκωμα and the varying capacities of these measures. The supplement οἴνου in P.L.Bat. XIII 2, l. 9 has to be deleted.

3. here too the price is described as συναρέσασαν. Συναρέσασαν therefore is not restricted to the Oxyrhynchite nome<sup>24</sup>.

SB VI 9593: the orthography in this text is wanting. Numerous corrections have been made already<sup>25</sup>, but there are still some difficult passages, especially the guarantee clause (ll. 23-26). This passage can be explained if we compare these lines with the guarantee clause of the other Herakleopolite texts.

The clause can take different forms, but is basically the same. It runs εἰ δὲ εὐρεθῆ ὄξος [ἢ ὄζαριον | γενόμενον] ἐκ τοῦ αὐτοῦ οἴνου ἕως μ[ηνὸς | Φαρμοῦ]θι τοῦ αὐτοῦ ἔτους ὁ[μολογῶ | τὰ ἴσα] με ἀλλάσω σε ἐπ[ὶ καλοῦ οἴνου ἀνυπερθέτω]ς in SB XVI 12639.

P.Coll.Youtie II 93 (with BL 7, p. 38) has ἀλλάσον (read ἀλλάσσω, misprinted in BL 7) σοι | ἐὰν εὐ[ρ]ῆς γενόμενον ὄξος ἢ ὄζαριον ἐπὶ καλοῦ οἴνου ἕως | μ[ηνὸς] Φαρμοῦθ[ι] τοῦ αὐτοῦ ἔτους.

In SB VI 9593 one has to read in lines 23-26 (with the corrections of Sijpesteijn and Diethart, cf. note 25): καὶ τ(οῦ) εὐρίσκαμένου ὠξωσαρίου | ἐκ τοῦ αὐτοῦ οἴνου ἀλλασοντεσο<sup>υ</sup> | ἀνυπερθέτος καὶ ἄνεου πάσις | ἀντιλογίας which in plain Greek would be καὶ τοῦ εὐρισκομένου ὄξωσαρίου ἐκ τοῦ αὐτοῦ οἴνου ἀλλάζονται (παρὰ) σοῦ ἀνυπερθέτως καὶ ἄνευ πάσης ἀντιλογίας. In view of the two other formulas listed above, I would rather suggest a different interpretation: ὠξωσαρίου must indeed be read as ὄξωσαρίου; however, this is not an existing word, but has to be explained as a miswriting of a case of ὄξος ἢ ὄζαριος; the explanation of ἀλλασοντεσο<sup>υ</sup> as ἀλλάζονται (παρὰ) σοῦ would result in a very unusual situation in which the wine that turns out to be sour would have to be replaced by the buyer! Two solutions seem possible in explaining this phrase: read either καὶ τὸ εὐρισκόμενον ὄξος ἢ ὄζαριον ἐκ τοῦ αὐτοῦ οἴνου ἀλλάσσω ἐν τῷ ἴσῳ or καὶ τοῦ εὐρισκομένου ὄξους ἢ ὄζαρίου ἐκ τοῦ αὐτοῦ οἴνου ἀλλάσσω τὰ ἴσα. In the last case the writer would have made the same mistake as the writer of P.Coll.Youtie II 93 in rendering ἀλλάσσω as ἀλλάσον. In l. 17 the word επτηκουντα has probably not to be interpreted as ἐβδομήκοντα, but rather as ὄγδοήκοντα. For this phenomenon see the article of D. Hagedorn, *ZPE* 67 (1987), pp. 99-101. The correctness of this interpretation is confirmed by the reading of the verso, which was checked on my request by H. Harrauer and J. Diethart. They reported that the correct reading of the number of artabai of barley and dipla of wine is κριθ(ῆς) (ἀρτάβας) λ κα[ῖ] οἴνου δ[ι(πλᾶ)] π. The last number is definitely not ὀ. The supplement <ὀ> in l. 18 has to be corrected into <π> accordingly. For διπλᾶ in ll. 16-17 read διπλῶν.

SB XVI 12639: two corrections on this text are proposed in P.Heid. V. The first concerns the reading and supplement of ll. 13-14. This passage was read by the editor as απ[ - - / - - ]ς. In P.Heid. V p. 309 and note 71 it is suggested that the correct reading and restoration of these lines would be διὰ χειρὸς ἐξ οἴκου. On my request the reading was checked on the original by H. Harrauer, who also provided me with a photocopy of the papyrus. He reported that the original reading is certain. I therefore propose to supplement the passage to ἀπ[ὸ χειρὸς | εἰς χεῖρα]ς. The other correction is rather hidden on the same page, note 73 and concerns ll. 14-16: instead of [- τὴν πρὸς ἀλλήλους συ]μπεφωνηθεῖσαν τ[ελείαν καὶ | ἀξίαν τ]ιμὴν read and supplement [- τὴν μεταξὺ συ]μπεφωνηθεῖσαν π[ρὸς ἀλλήλους τ]ιμὴν. The reading π[ρὸς] instead of

<sup>24</sup> It was suggested in P.Heid. V, p. 309, n. 73 that συναρέσασαν occurs only in the Oxyrhynchite nome. However, this participle is also attested in the Arsinoite nome (cf. P.Heid. V, p. 311, n. 88) and now in the Herakleopolite.

<sup>25</sup> See P.J. Sijpesteijn, *ZPE* 24 (1977), pp. 105-106, P.J. Sijpesteijn-K.A. Worp, *Mnemosyne* 30 (1977), p. 142, n. 1, J.M. Diethart, *CPR* X, p. 10 and J.M. Diethart-K.A. Worp, *Byz.Not.*, p. 56 (Herakl.

τ[ελείων is confirmed by H. Harrauer. The division of the lines is probably μεταξύ in ll. 14-15 and ἀλλήλους in ll. 15-16. In line 5, I read [τοῦ ἐνδο]ξωτάτου. Restore in line 22-23 probably εὐτυ|[χοῦς and not εἰσι|[ούσης.

**Hermopolite Nome:** the documents originating from this nome will be treated here in a chronological order.

P.Strasb. I 1: to be dated in 435, see R.S. Bagnall-K.A. Worp, *BASP* 17 (1980), p. 29. The notary's subscription is corrected in J.M. Diethart-K.A. Worp, *Byz.Not.* p. 63 (Herm. 5.10.1). I assume one has to read γίν(εται) οἴ(νου) κνίδια φ in line 7 instead of γίνο(νται) (*sic*) κνίδια φ. For the μέτρον Διοσκουρίδου (l. 9) see P. van Minnen, *ZPE* 67 (1987), p. 120.

SB XVI 12489 + CPR IX 25: on the basis of the other Hermopolite texts σοι has to be supplemented at the end of line 7. In line 8 probably add τῆς before τρύγης (see also below on P.Palau Rib. inv. 178). The supplement παρ' ἐμοῦ in line 10 has been rejected by D. Hagedorn in *ZPE* 65 (1986), p. 91 (cf. P.Heid. V, p. 297 Nr. 33). To fill up the space, perhaps supplement αὐτῶν as in P.Strasb. I 1 (with BL 1), SB XVI 12486 and 13037, CPR VIII 60 and P.Strasb. VII 696; restore in the same line εἰ δὲ καί, εἰ δὲ or καὶ εἰ instead of εἰ. In line 11 the word order of the supplement οἴνω καλῶ has to be reversed (cf. P.Heid. V, p. 326 and n. 249).

SB XVI 12488: instead of the original reading and restoration ἐν τῷ καιρῷ τῆς τρύγης | [τῆς εὐτυχοῦς εἰσιούσης] τρίτης ἐπινεμήσεως, Jördens proposes ἐν τῷ καιρῷ τῆς τρύγης | [τῷ Μεσορῆ μηνὶ καρπῶν] τρίτης ἐπινεμήσεως (P.Heid. V p. 317, n. 161) because of the deficiency of the month. This new restoration has to be rejected partly: the third indiction in SB XVI 12488 is the future one. In all other Hermopolite texts the coming indiction is styled as such by adding σὺν θεῷ, εὐτυχοῦς or εἰσιούσης (the latter always standing in second place in combination with one of the others). Apart from that, the word ἰνδικτίονος or ἐπινεμήσεως is always accompanied by the article. Supplement therefore either τῆς σὺν θεῷ or τῆς εὐτυχοῦς instead of καρπῶν, the first being the most likely on account of the space available.

P.Lond. III 1001: this text is also signed by a notary: l. 33 has † δι' ἐμοῦ Βίκτορος ἐγράφη (checked on microfilm). This Victor is identical with the notary who signs P.Berol. 25401 (= J.M. Diethart-K.A. Worp, *Byz.Not.*, Herm. 2.2.1). This was known to these scholars too, but the commentary on Herm. 2.2.1 has ended up in the wrong place, viz. with Herm. 5.2.1. At the beginning of the Verso read χ(ει)ρ(όγραφον).

PUG I 30: correctly assigned to the Hermopolite nome by Jördens (P.Heid. V p. 308, n. 67). This provenance is confirmed by the reading of lines 10-13: κ( ) must be a designation of a kind of jar. In line 13 the amount to be delivered must be repeated: γίνεται οἴνου κ( ) .jvδ; perhaps γίνεται οἴνου was further abbreviated, but there is no space for the mentioning of the capacity. This too is a Hermopolite characteristic<sup>26</sup>. The most likely solution for κ( ) is κ(νιδία), a common measure in this nome.

P.Palau Rib. inv. 178: the provenance of this text is established as Hermopolite (cf. P.Heid. V, p. 320, n. 191). Corrections to this text are proposed on p. 315, note 128 and p. 318, note 168. In the latter note, Jördens correctly proposes to supplement σοι after ἀποδώσω in line 4 (cf. also above on SB XVI 12489 + CPR IX 25, line 7). For line 5 she proposes ἐ[ν τῷ καιρῷ τῆς τρύγης τῷ Με]σορῆ μηνὶ ῥύσεω[ς xy ἰνδ(ικτίονος)] instead of the original reading [- ἐν τῷ καιρῷ τρύγης τῷ Με]σορῆ μηνὶ τῆς εἰ[σιούσης x ἰνδ(ικτίονος)]. Dr. Jördens is undoubtedly right in ascribing the stroke visible on the plate above the second o-micron of οἴνου to a rho. However, this leaves no room for the article before καιρῷ. The rest of Jördens proposition has to

<sup>26</sup> The capacity of the μέτρα or κνίδια is never mentioned at this point in the Hermopolite texts

be rejected. The word ῥύσις does not appear in any of the other Hermopolite contracts and the indiction has to be accompanied by the article and probably an expression describing it as the future one (cf. above on SB XVI 12488). Supplement therefore ἐ[ν και]ρ[ῶ] τῆς τρύγης τῷ Με]σορῆ μηνὶ τῆς (e.g.) ἐὺ[τυχοῦς x ἰνδ(ικτίονος)] With this restoration, the description of the month is identical with that in SB XVI 12488, 12489 (for both texts, see above) and 13037. For the reason of supplying ἐὺ[τυχοῦς rather than εἰ[σιούσης see above on SB XVI 12488.

P.Strasb. VII 696: I have been able to check the readings of this text on a photograph, kindly put at my disposal by K.A. Worp. The earlier corrections as listed in P.Strasb. Index Nr. 501-800, p. 112 turned out to be right<sup>27</sup>. Not adapted in P. Strasb. Index is the sequence of hands which has to change as a result of the new readings: the subscription of Aur. Theodoretos, writing for Aur. Lilous, is of course also in the second hand, which starts in line 17. Hand 5 must be hand 3 and hand 6 hand 4. The notary's subscription is in a fifth hand.

Read in line 1-2 - - ἐν οἴνω νέω] κα[λλ]ί[στω καὶ εὐα]ρέστ[ω] μ[έτρω τοῦ] | ὅλου χωρί[ο]υ. Despite the editors reservations, I read ἀποίητος instead of ἄ...[.]τος in line 3. In lines 12-13 read ἐτ[ο]ίμως ἔχω [δί]δοιναί.

SB XVI 12401: like P.Amst. I 47 and 48 (sales of wine for future delivery) and SB VI 9051 (sale of wheat for future delivery)<sup>28</sup> this document is addressed to someone of the monastery of Abba Apollos. In preparing this article, I have discussed this text with H. Harrauer who kindly verified my suggestions on the original. As a result of the re-allocation of some fragments of this papyrus, several readings could be corrected, notably the readings of ll. 1-3, already doubted by K.A. Worp, *Chr.d'Ég.* 59 (1984), pp. 145-148. I shall return to this text in a separate article to appear in *Tychè*.

SB XVI 12491: the editor restored in lines 2-3 ὄνπερ] | οἶνον ὁμολο[γῶ] παρα[σχεῖν]. With this restoration line 2 contains ± 5 letters less than the other lines; maybe we have to supplement καὶ τοῦτον] | οἶνον. The text continues after παρα[σχεῖν with ὑμῖν παρὰ ληνὸν ἐν τῷ] | μηνὶ Μεσορῆ. Παρὰ ληνόν, however, is typical for the Oxyrhynchite contracts. Apart from that, the combination μηνὶ Μεσορῆ instead of Μεσορῆ μηνί (cf. line 8 Τῷβι μηνός) is surprising. I expect in line 3 instead of παρὰ ληνόν an adjective or participle qualifying μηνί, e.g. ἐν τῷ παρόντι or εἰσίοντι] | μηνὶ Μεσορῆ. The document would have been written then in Mesore or Epeiph. The period between the delivery and the drawing up of the contract becomes rather short, but is not unparalleled (cf. the table in CPR XIV, pp. 31-32, SB XIV 11617 (with *BASP* 15 (1978), p. 237.4) and below **Oxyrhynchite Nome** on P.Mich. XV 748). If this solution is accepted, the supplement τῆς σὺν θεῷ εἰσιούσης in line 4 has to be changed into καρπῶν τῆς παρούσης, καρπῶν being found in P.Lond. III 1001, P.Amst. I 47 and 48 too.

<sup>27</sup> For the subscription of the notary see now J.M. Diethart-K.A. Worp, *Byz.Not.*, p. 67 Herm. 10.1.2.

<sup>28</sup> In P.Heid. V the reading and supplements of two lines are doubted. The first one is the restoration of l. 8, which, in the opinion of Jördens, can not be upheld (see P.Heid. V, p. 318, n. 169). The supplement however, is based on the reading of P.Lond. III 1001, a sale for future delivery of wine and wheat, also from the Hermopolite nome (cf. also above) and is very well possible. The other line is l. 10, the readings of which should be checked on a photograph (P.Heid. V, p. 322, n. 215). It is true that the quality designation of the wheat does not follow the usual pattern, but all the adjectives used are also listed as possible qualifications of wheat and other products (P.Heid. V, p. 322-323). Moreover, the formulas of SB VI 9051 are peculiar in other passages too (cf. P.Heid. V, p. 308 and n. 66). The only serious objection to the restoration as proposed by the edd. is the fact that καθαρῶ is missing in l. 9. Perhaps the other solution for this part of the text, proposed by the edd. in the *editio princeps*, viz. τρίτης

**Oxyrhynchite Nome:** for the distinction I made between the different types of contracts in this nome see above and the outline.

VBP IV 55 is correctly assigned to the Oxyrhynchite nome by Jördens (see P.Heid. V, p. 330, note 289). Other indications that the text is written in the Oxyrhynchite nome are the fact that εὐτυχοῦς is missing in the date before ἰνδικτίονος) in l. 30<sup>29</sup> and the form of the subscription of the notary: if VBP IV 55 is disregarded, the formula δι' ἐμοῦ NN ἐτελείωθη is attested only once in the Herakleopolite nome (J.M. Diethart-K.A. Worp, Byz.Not. Herakl. 12.1.1). In the Oxyrhynchite nome, however, the formula *di emu NN eteleioth* is by far the most frequent. A misreading of a subscription in Latin as a subscription in Greek is not uncommon. A notary Onnophris<sup>30</sup> is not yet attested in the Oxyrhynchite nome.

The restoration Σε[φώ] in l. 10 was based on the misreading of l. 14 and is no longer obligatory (see the corrections in P.Heid. IV, p. 290). Equally possible is Σέ[σφθα], although the original restoration is perhaps more likely from a geographical point of view<sup>31</sup>. Instead of Πρά(ος) (l. 8) and Πρά(ο)υ (V<sup>o</sup>) read Πραο(ῦς) and Πραο(ῦτος), a common name in the Oxyrhynchite nome. For the meaning of ἐπάνω (l. 7 and V<sup>o</sup>) see P.Mich. XV 748, comm. on l. 7.

Also attributed to the Oxyrhynchite nome is P.Rein. II 102 (see P.Heid. V, p. 308, note 60). Corrections on this text can be found in P.Heid. V p. 315, note 130, p. 318, note 168, p. 326, note 254 and p. 327, note 255. I had made a reconstruction of the text on the basis of the Oxyrhynchite type 1 formulas (cf. the outline above). Most of the corrections Jördens proposes were included in that reconstruction.

In my opinion the text would have run like this:

- 1a [ ὁμολογῶ ]  
 1 [ ἐσχηκέναι παρὰ σοῦ ἐντεῦθεν τὴν πρὸς ἀλλή-  
 2 [ λους συμπεφωνημένην ] καὶ ἀρέσασάν μοι τιμὴν  
 3 [ πλήρης οἴνου σηκωμάτων διακοσίον τριάκοντα  
 4 [ ὧν number -κον ] τα πενταξεστιαία  
 5 [ καὶ number τετραξεστιαία (γίνεται)  
 6 [ ὁμοῦ οἴν(ου) σηκ(ώματα) σλ ὄν ] πε[ρ οἴνον] π[αρὰ λ]ηνὸν  
 7 [ ἀπὸ γλεύκους ἀδόλου σο]ῦ παρέχοντος τὰ κούφα  
 8 [ ἐπάναγκες ἀποδώσω ] σοι ἐν τῇ τρύγῃ τοῦ  
 9 [ Μεσορῆ μηνὸς τοῦ ] ἐνεστῶτος ἔτους  
 10 [ οἴνου ῥύσεως τῆς σὺ ] ν θ(εῶ) ἑκτῆς ἰνδικτίωνος  
 11 [ ἀνυπερθέτως. Εἰ δὲ εὐ ] ρηθίη ὄξυ  
 12 [ ἢ φαῦλα ἐμὲ τὸν εὐρισ ] κόμενον ἀλλάξειν  
 13 [ καὶ παρέξειν σοι ] ἐν πρώτῳ οἴνω  
 14 [ εἰς συμπλήρωσιν τῶν σηκωμάτ ] ων διακοσίων  
 15 [ τριάκοντα

<sup>29</sup> Characteristic for the Herakleopolite nome, cf. K.A. Worp, *Chr.d'Ég.* 59 (1984), pp. 346-347. We find εὐτυχοῦς before ἰνδικτίονος in the dating formula of SB XVI 12639 and SB VI 9593. In the other Herakleopolite texts, the dating formula is either broken off or incomplete. Perhaps τῆς εὐτυχοῦς has to be restored also in P.Coll.Youtie II 93 at the beginning of l. 1.

<sup>30</sup> I prefer *Onnophrio(s)* to *Onnophrio(u)* as the solution of the notary's name: Onnophris is a common name in the Oxyrhynchite nome, cf. F. Preisigke, *Namenbuch*, s.v.

<sup>31</sup> See P.Nepheros, p. 13 for a description of the geographical situation and the different nomes

l. 1 ]τολλ.. ed.; l. 3 read διακοσίων; l. 6 ]..[± 6]ε[....]ηδιον ed.; l. 10 ].. ἔκτης ed.; l. 11 εἰ δὲ εὐ]ρηθίη (read εὐρεθείη) P.J. Sijpesteijn, *ZPE* 37 (1980), p. 283; ll. 11-12 ὄξύ[της ed., ὄξυ (read ὄξη) [ἤγουν φαῦλα P.Heid. V, p. 326, n. 254; ἤγουν (though usual) is probably too long; l. 12 ]κόμενον ed., ὀ]ζόμενον BL 7, p. 170; l. 13 ]εμ...ω οἴνω ed., ] ἐπὶ καλῶ οἴνω BL 7, p. 170, also rejected in P.Heid. V p. 327, n. 255.

The guarantee clause would lack the usual ἀναδέχομαι δὲ τὴν τοῦ οἴνου καλλονὴν καὶ παραμονὴν and a date. The date may have been erroneously omitted or might have stood in the bottom part of the contract. The restoration of line 14 is *exempli gratia*.

P.Oxy. XIV 1720, though with some reservations (see P.Heid. V p. 304, note 136), is also considered to be a sale of wine for future delivery. It is listed on p. 297 as Nr. 24 and assigned to the fourth century. This date is confirmed on p. 307, note 53 because of the missing ἐντεῦθεν, a phenomenon that only occurs in the early documents. A new reading of line 6 is proposed on p. 304, note 136.

However, there is a chronological/geographical problem with this text, already exposed by G. Vitelli, *Aeg.* 7 (1924), p. 270 (= BL 2.2, p. 102). The village Βερκύ mentioned in line 2 was part of the Hermopolite nome in the fourth century and was not included in the Oxyrhynchite nome until the sixth century<sup>32</sup>. If this document really is a sale of wine in advance, a sixth century date is contradicted by the missing ἐντεῦθεν, a fourth century date (and therefore a Hermopolite provenance) by other elements of the formulas, such as the price not being in the genitive and the use of σηκώματα. The formulas, however, are also different from the usual Oxyrhynchite ones, so that perhaps the best solution is to regard this text as a receipt for the price of wine, but not as a sale on future delivery<sup>33</sup>.

Additions and remarks concerning the other Oxyrhynchite documents will again be given in the chronological order of the contracts.

SB V 8264: corrections can be found in P.Heid. V, p. 307, note 56, p. 319, note 183 and p. 327, note 255. Ἐξαξεστιαίων σηκωμάτων and (ἐξαξεστιαῖα) (probably written as (ἐξα)ξ(εστιαῖα)) σηκ(ώματα)<sup>34</sup> in ll. 12 and 13 as already suggested in the edition and confirmed by P.Heid. V p. 319, note 183, is not the only possibility. The other amounts of xestai as listed in P.Heid. V p. 319 are equally possible. The restorations concerning the addressee in ll. 5-8 stand to be corrected. Read and restore τῷ θαυμασιωτάτῳ | [NN, υἱῷ] τοῦ τῆς μακαρίας μνήμης | [name of the father ἀπὸ τῆς Ὀξυρυγχι]τῶν πόλεως χαίρ]ειν. The filiation in the Oxyrhynchite contracts is normally expressed with a form of υἱός and the name of the addressee's mother is never given. It has been suggested by P.J. Sijpesteijn, *ZPE* 33 (1979), p. 253 comm. on l. 11 and H. Harrauer, *Pap. Flor.* VII, p. 125 that the supplement ἀναδέχομαι δέ in line 21 has to be replaced by ἐνεχόμενος εἰς. This suggestion has to be rejected: ἀναδέχομαι is characteristic for the type **1** contracts, ἐνεχόμενος for the type **2b** sales (see above). In this text τοῦ οἴνου is missing in the guarantee clause.

P.Heid. V 358: the reading of line 10 should be corrected: nothing is expected between ἐπιμεμήσεως and ἀνυπερ]θῆ[τως. Therefore, the reading is suspect. Probably one has to restore [ἐπιμεμήσεως ἀνυπερθῆτως. Ἄνα]δέ[χομαι δὲ τὴν] | [τοῦ οἴνου καλλονὴν καὶ παραμονὴν μέχρι ὄλου] | [τοῦ Τῦβι μηνὸς etc. which is the usual phrase in all Oxyrhynchite type **1** contracts.

P.Mich. XI 608: together with P.Heid. V 539 this is the only Oxyrhynchite contract in which other products will be delivered apart from wine. The contract belongs to what I have

<sup>32</sup> Cf. also P. Pruneti, *I centri abitati dell' Ossirinichite*, *Pap. Flor.* IX, pp. 39-40.

<sup>33</sup> Cf. SB VIII 9825 (P.Heid. V p. 296, Nr. 19). In my opinion that text is not a sale of wine in advance either. Nothing indicates that the wine will be returned in the future.

called type **2** contracts. The money received is specified (four nomismata) and this money will be repaid in barley, wheat, vegetable seed and wine. As I have explained above in the description of the type **2** formulas, this money is never said to be the price of the products to be delivered. Yet, the editor of P.Mich. XI 608 interpreted and translated ll. 1-4 in that way. He took it that the accusative ἀρτάβα[ς τέ]σσερα[ς] was a mistake for the genitive, depending on a lost τιμήν. In my view the accusative of ἀρτάβα[ς] is correct, but the genitive of οἴνου π[ενταξί]εστιέων σηκωμάτων διακωσί[ων] in ll. 2-3 is a mistake for the accusative. According to the parallel type **2** contracts and the parallel now provided by P.Heid. V 539, the beginning of the contract would have run like this<sup>35</sup>:

ὁμολογῶ ἐσχῆκεναι παρὰ σοῦ ἐντεῦθεν ἤδη χρυσοῦ νομισμάτια τέσσερα e.g. ἰδιωτικῶ ζυγῶ καὶ ὑπὲρ αὐτῶν ὁμολογῶ παρασχεῖν | [σοι κριθῆς ἀρτάβας ὀκτωκαίδεκα καὶ σίτου] |<sup>1</sup> ἀρτ[ά]β[ας] ὀκτωκαίδεκα καὶ λαχανοσπέρμου |<sup>2</sup> ἀρτάβα[ς τέ]σσερα[ς] ἢ ἡμισοῦ καὶ οἴνου π[ενταξί]εστιέων σηκωμάτων διακωσί[ων] (read ἡμισοῦ and οἴνου πενταξεστιαία σηκώματα διακόσια).

P.Heid. V 359: it is obvious that this contract also belongs to the type **2** contracts. The formulas concerning the repayment of the wine are a bit different from the usual ones. It seems to me, we have a mixture of type **2a** and **2b** formulas: τὸν δὲ οἶνον παρὰ ληνὸν | [ἀπὸ γλεύκους ἀδόλου in ll. 10-11 reminds us of the type **1** and **2a** formula ὄνπερ οἶνον παρὰ ληνὸν ἀπὸ γλεύκους ἀδόλου. However, the fact that σοῦ παρέχοντος τὰ κοῦφα is not following immediately after this, points to the type **2b** formulas where this clause usually is found after the guarantee clause (see above and note 9). As I have stated above, the promise to pay back the money received starts in type **2** with καὶ ὑπὲρ αὐτῶν (or similar) ὁμολογῶ παρασχεῖν/διδόναι σοι. In P.Heid. V 359 the two nomismata which apparently are received will be returned in three different products. In my opinion we probably have to supplement at the beginning of line 1: [ὁμολογῶ παρασχ]εῖν Line six and seven summarize the information of the previous lines, viz. the amounts of the several products that will be repaid for the two nomismata. The amount of money received might also be repeated. Analogous to P.Mich XI 608 we probably have to read and supplement in line 6 [γίν(εται) χρ(υσοῦ) νο(μισμάτια) β εἰς ο]ἴν(ου) etc. The nominatives ἀ(ρτάβ)αι in ll. 6 and 7 have to be changed into accusatives accordingly.

P.Lond. V 1764: I was able to check the readings on the microfilm of the London papyri. In line 1 the bottom part of Μεσορή is still visible. Supplement ἐν τῇ τρύγῃ | [τοῦ Μεσο]ρ[ῆ] μ[ηνός]. The editor reads ἀναδεχόμενος | τὴν τοῦ οἴνου καλλονήν etc. in lines 3-4. He remarks: "Very doubtful; but probably ἀναδέχομαι has been corrected to ἀναδεχόμενος". The correct reading of this passage is ἀναδέχομαι δὲ | τὴν τοῦ οἴνου καλλονήν etc.; ἀναδέχομαι δέ is written at the end of the papyrus and -αι δέ is rather compressed; δέ, however, has the same appearance as in ἀναδέχομαι. The reading of the notary's subscription of P.Lond. V 1764 (the lower part of a sale in advance) has been corrected in J.M. Diethart-K.A. Worp, Byz.Not., p. 84 (Oxy. 16.2.13). At the same time they corrected the date to VI/VII. The handwriting of P.Lond. V 1764 is comparable to (if not the same as) that of P.Hamb. III 221 (upper part). This text is dated in 580 which corresponds well with the dates of other documents signed by the notary Pappouthios. The width of both papyri is about 11 cm. and they both refer to a thirteenth indiction.

<sup>35</sup> The only other Oxyrhynchite text in which more than one product (but no wine) will be returned (P.Mich. inv. 3720 =P.Heid. V p. 297, Nr. 49) is not of any help for the interpretation and restoration of

Despite these similarities, they cannot be part of the same document: P.Hamb. III 221 is written against the fibres, the London text is written along them<sup>36</sup>.

Pap.Flor. XVIII 8: what we have here is a unique document: first of all it is not written on papyrus, but on a wooden tablet; secondly, it is dated thirty years after the Arab conquest of Egypt. Thirdly the formulas do not match the Oxyrhynchite ones as we know them from other texts, but are a mixture of Oxyrhynchite, Herakleopolite and Arsinoite formulas. The orthography of this contract is very poor. The editors therefore also provided a normalised transcription which is very useful.

As I have stated above, the formulas are a mixture. The contracting parties are both Oxyrhynchites and the document belongs to the Oxyrhynchite type 2 contracts. Many phrases, however, are similar to Herakleopolite and Arsinoite formulas. Oxyrhynchite elements are *ὁμολογῶ - - ἐσχηκέναι παρὰ σοῦ* (ἐν)τεῦθεν ἤδη (ll. 3-4, cf. P.Heid. V, p. 307), *τὴν συναρέσσασάν μοι τιμὴν πλήρης* (l. 6)<sup>37</sup>, *ὄνπερ οἶνον* (l. 7), the date until which the guarantee clause holds, viz. *Tubi* (the Herakleopolite texts have *Pharmouthi*) and the phrase concerning the replacement of bad wine *ἐπὶ τῷ με τὰ προ(κείμενα) ἀλλ(ά)ξαι καὶ τὰ ἴ(α)σα (παρασχεῖν)* (l. 10)<sup>38</sup>. Herakleopolite influences are *ἐξ οἴκου* in l. 4 (cf. P.Heid. V, p. 309), the qualification of the wine as *οἶνος νέος ἐπιτήδειος* in l. 8 (cf. P.Heid. V, p. 324) and the wording of the guarantee clause *εἰ δὲ εὐρεθείη ὄξις ἢ ὄζα[ρία]*<sup>39</sup> (cf. above **Herakleopolite Nome**). Arsinoite are the accusative *με* in l. 4 (cf. P.Heid.V, p. 310), wrongly deleted by the editors, *εἰς ἰδίαν μου καὶ ἀναγκαίαν χρεῖαν*, amount of money, *ὄντα παρ' ἐμοὶ εἰς - - τιμὴν*<sup>40</sup>, (ll. 4-6, cf. P.Heid. V, p. 311) and probably the *χῦμα* measure (cf. above **Arsinoite Nome** on CPR XIV 4).

Why these formulas are mixed up I do not know. But the existence of a text with such a mixture warns us that we have to remain cautious in assigning texts with unknown provenance to a specific nome on the basis of the formulas found.

According to the editors Pap.Flor. XVIII 8 is incomplete because of the incomplete validity clause and the absence of the subscriptions of the contracting parties (cf. the introduction). The last objection is of no concern: the lender never signs and in none of the Herakleopolite sales of wine for future delivery the subscription of the borrower is found<sup>41</sup>. Since there are some Herakleopolite elements in the text, it might be possible that the end of the contract is also based on the Herakleopolite procedures and therefore lacks the subscription. All other Herakleopolite

<sup>36</sup> For P.Lond. V 1764 this was checked for me on the original by A.M.F.W. Verhoogt. He also reported that the Verso is supposedly blank: the papyrus is pasted on card-board.

<sup>37</sup> *πληρου*, l. (ἐκ) *πλήρους* edd. *Πλήρης* is probably the correct solution for *πληρου* in view of the other Oxyrhynchite texts.

<sup>38</sup> *επι τω με τα προ( ) αλλξω και τα ιασα*, l. {ἐπὶ τῷ με} *ἀλλ(ά)ξω καὶ τὰ ἴ(α)σα (παρέξω)* edd. by keeping *ἐπὶ τῷ με* and reading *αλλξω* as *ἀλλ(ά)ξαι* we get a variant of the usual Oxyrhynchite formula *ἐμὲ ταῦτα ἀλλάξαι καὶ τὰ ἴσα παρασχεῖν* (cf. P.Heid. V, p. 326-327).

<sup>39</sup> *ὄξις ἢ ὄζα[ρία]* edd. "Ὄξις is mentioned in the Index as a form of *ὄξύς*. It is translated as "aceto" (vinegar), which is the normal translation of *ὄξος*. The adjective *ὄξύς* should be rendered as "acido" (sour). In my opinion *ὄξις* is a mistake for *ὄξις* just as in P.Rein II 102, l. 11. Instead of *ὄζα[ρία]* one has to supplement *ὄζα[ρία]* which is the usual word in the Herakleopolite guarantee clauses (cf. above **Herakleopolite Nome** and also **Apollonopolites Ano**)

<sup>40</sup> *στα παρ εμου εις την σεναρσασα μοι τιμην*, l. *(ἀπεσχηκ)ότα (= ἀπεσχήκως, comm. on l. 6) παρὰ σοῦ εἰς τὴν συναρέσσασάν μοι τιμὴν* edd. The Arsinoite formulas offer the correct explanation for this phrase.

<sup>41</sup> The fact that there are no signatures in P.Coll.Youtie II 93 therefore is not an indication that the contract was not valid; it remains odd that the document has not been signed by a notary (cf. the

sales of wine for future delivery end with τὸ γραμματίον κύριον καὶ ἐπερωτηθεὶς ὁμολόγησα. The *stipulatio* might be missing thirty years after the Arab conquest. The rest of the phrase was perhaps reduced to its essence due to the lack of space at the end of the wooden tablet.

P.Mich. XV 748: in P.Mich. XV 748<sup>42</sup> (belonging to type **2b**), ll. 8-9 the formula expressing the willingness to pay back the money received is slightly different from the usual one: καὶ ταῦτ(α) ἰ ὁμολογῶ παρ[ασχεῖν σοι ἐν οἴ]νῳ εὐαρέ(στω) κατὰ ἕκαστον πεντήκοντ(α), i.e. for each solidus 50 measures of wine. As the editor rightly remarks (comm. on l. 9) "the word for measure was omitted (either as obvious or inadvertently left out by mistake)". Maybe the obvious measure was the σήκωμα containing 5 xestai which can be found in all type **2b** contracts, P.L.Bat. XVI 11 excepted. Alternatively we have to reconstruct κατὰ ἕκαστον πεντ(α)ξεστιαῖα σηκώματα πεντήκοντ(α). An exact date for the return is missing in this text: l. 10 has ἐπὶ τῆς παρού[σης ± 8 (= εὐτυχοῦς or similar, cf. the comm. on l. 10) ἐνάτ]ης ἰνδ(ικτίονος), ῥύσ(εως) δεκάτης ἰ(ν)δ(ικτίονος). Something is wrong, however, with the supplements in ll. 10 and 11: as the plate clearly shows, the gap in ll. 9-11 is equally large, but the supplements contain 13 letters in l. 9, 15 in l. 10 and 18 in l. 11. In my opinion 13 letters is the correct number. Therefore, and because of the missing date, I would rather suggest ἐπὶ τῆς παρού[σης τρύγης ἐνάτ]ης ἰνδ(ικτίονος) etc.: the text is dated on the 20th Mesore of the 9th indiction, i.e. in the month of the vintage. One or more words of the supplement in l. 11 must be abbreviated.

**Thinite Nome:** both Thinite contracts (SB I 4504<sup>43</sup>-4505) are written by the same scribe. A correction on SB I 4504, line 6 was proposed in BL 7, p. 184: K.A. Worp suggested that Ἄθῦρ κ β ἰν[δ(ικτίονος) (=Nov. 16 613) should be read, instead of Ἄθῦρ κβ ἰν[δ(ικτίονος) δευτέρως]. However, if we compare the date of SB I 4505, line 6, we see that the indiction number is written behind ἰνδ(ικτίονος) and with a number. Therefore the original date is probably correct: read Ἄθῦρ κβ ἰν[δ(ικτίονος) β] (=Nov. 18 613). According to the edition the wine will be delivered including the vats: SB I 4504, l. 21 and 4505, l. 24 σὺν κούφαις. The word κούφη is only attested in these two texts. On the facsimile drawing which accompanies the *editio princeps* of SB I 4504 I preferred the reading κούφοις. On my request the reading of SB I 4505 was checked on the original by H. Harrauer. He reported that on the papyrus ἐν κούφοις has to be read. Κούφη therefore can be deleted from the dictionaries. The remaining problem is whether we have to read σὺν or ἐν in SB I 4504. It is not likely that the writer of both contracts which are so much alike was using two different prepositions. On that ground ἐν is perhaps more likely in SB I 4504 too, although on the drawing σὺν is easier to read. The advantage of the reading ἐν κούφοις is the fact that the vats are not necessarily supplied by the borrower of the wine. It is equally possible that, as in the other nomes, the lender has to supply the vats.

**Provenance unknown:** there remain two texts the provenance of which is unknown. The first is P.Nepheros 34. The editor supposes that this text may have been found in the ruins of the monastery Hathor in the Herakleopolite nome as were several other documents belonging to the correspondence of Nepheros (see P.Nepheros p. 6 and, for the location of the monastery, pp. 11ff.). The provenance Herakleopolite nome is not contradicted by the reading of line 3. Although this line does not correspond exactly with the formulas of the other Herakleopolite texts, we find here also the διπλοῦν which we only encounter in the Herakleopolite contracts.

<sup>42</sup> See also S. Daris, *Aeg.* 63 (1983), p. 152, n. 90.

The other text is P.Lond. V 1881. The sentences in this text do not match with any of the known formulas. The document must be the end of a contract for at the end of line 8 καὶ ἐπερ(ωτηθεὶς) ὁμολόγ(ησα) can be read (on microfilm). As the editor already remarked, we can not be sure if this text is a sale in advance. The text is listed in P.Heid. V, p. 299 as Nr. 86 where we find Oxy ? as the possible provenance. In my opinion this has to be rejected. Not only are the formulas anything but Oxyrhynchite, but also the fact that the months Mesore and Mecheir apparently belong to the same indiction year opposes to this provenance. The phrase expressing the willingness to return the wine runs καὶ τὰ πάντα ἐτοίμως ἔχω παρασχεῖν σοι. The same formula is found in the Antaiopolite, Antinoite and Thinite contracts. The text is listed by mistake among the Hermopolite ones provided with a penalty clause on p. 327, n. 261. The fact that there seems to be some kind of penalty clause in this text, may be another indication towards the Antinoopolite nome, the only one of the three mentioned above where such clauses may be found (cf. P.Heid. V, pp. 327-328). The same applies to the reading πᾶρα πάντα in l. 6, which elsewhere only occurs in the penalty clause of the Antinoite contract P.Prag. I 46, l. 17 (see P.Heid. V, p. 328 and n. 269).

To conclude this article I would like to make some remarks on the price of wine as calculated by Jördens in the Introduction to P.Heid. V 359. On the basis of the Oxyrhynchite type **2b** contracts and the Thinite ones, she calculates the following figures:

P.Col. VIII 245	VI		500 sext./sol.
PSI X 1122	VI	1000 sext. for 2 sol. - $11\frac{1}{2}$ ker.	c. 658 sext./sol.
P.Mich. XV 743	VI/VII	2575 sext. for 6 sol. - 2 ker.	c. 468 sext./sol. <sup>44</sup>
SB I 4504	606/608	525 sext. for 1 sol. - $\frac{1}{2}$ ker.	c. 536 sext./sol.
SB I 4505	613	175 sext. for $\frac{1}{3}$ sol. - $\frac{1}{4}$ ker.	c. 542 sext./sol.
P.Mich. X	VII	50 sekomata for 1 sol./sek.;	
		if each sek. contains 8 sext.	400 sext./sol.
P.L.Bat. XVI 11	VII	220 sext. for 1 sol. at $22\frac{1}{2}$ ker.	c. 235 sext./sol.
P.Heid. V 359	VI/VII	640 sext. for $1\frac{1}{3}$ sol.	480 sext./sol.

Dr. Jördens concludes that the average price is about 400-550 sext./sol. with an exceedingly high price in P.L.Bat. XVI 11 and a low price in PSI X 1122. The figure in this last text however, is wrongly calculated. The 1000 sext. are not paid by 2 sol. less  $11\frac{1}{2}$  ker., but by 2 sol. at 23 ker., resulting in a price of c. 520 sext./sol.. She goes on to compare the Hermopolite prices. For the calculation of these, the fines, presumably including the ἡμιολία<sup>45</sup>, are used. The amounts of

<sup>44</sup> I prefer this calculation over the other given by Jördens and based on a payment of a total of 6 sol. minus 2 ker.. A subtraction of only one third keration pro nomisma seems much too low: in the other Oxyrhynchite texts the nomisma contains 23 ker. (PSI X 1122) and  $22\frac{1}{2}$  ker. (P.L.Bat. XVI 11, Pap.Flor. XVIII 8).

<sup>45</sup> Dr. Jördens means that the price in the penalty clause is probably 1.5 times the market price. Strictly speaking, σὺν ἡμιολίᾳ is an expression used in the description of the price received, meaning that an interest of 50 % is included in the price (see the literature cited in R.S. Bagnall, *GRBS* 18 (1977), p. 94, n. 21 and P.W. Pestman, *JJP* 16-17 (1971), p. 10). In the penalty clause an extra charge of 50 % may occur, so that the price mentioned in that clause is 2.25 times the market price. Cf. e.g. P.Grenf. II 24, an ἄτοκος loan (i.e. also including the interest, see P.W. Pestman, l.c., pp. 7-29, esp. pp. 22-23) of 6 keramia of wine. The 6 keramia to be repaid can presumably be divided in 4 keramia that are borrowed and 2 keramia (=50%) interest. In case this loan is not repaid in time, 9 keramia are to be paid, i.e. 1.5 times the amount of wine including the interest and 2.25 times the amount of wine originally received. This roughly

wine are based on the assumption that (as in SB XVI 12488) each metron/knidion contains 5 sextarii. This leads to the following Hermopolite prices<sup>46</sup>:

SB XVI 12488	538	400 sext. for 2 sol. -12 ker.	400 sext./sol.
SB XVI 12491	VI/VII	1500 sext. for 4 sol.	c. 563 sext./sol.
BGU XII 2209	614	600 sext. for 2 sol.	450 sext./sol.
SB XVI 12492	638	1250 sext. for 4 sol.	469 sext./sol.

These figures thus correspond to the Oxyrhynchite ones. However, they are not as certain and likely as they seem. As I have suggested above, the measure meant in P.Mich XV 748 can also be 5 xestai and not 8. If the price is calculated accordingly, we get 250 sext./sol., which is very close to the price of P.L.Bat. XVI 11. Furthermore, we can also calculate the price of Pap.Flor. XVIII 8:

Pap.Flor. XVIII 8	669	840 sext. for $2\frac{1}{2}$ sol. at $22\frac{1}{2}$ ker.	c. 360 sext./sol.
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Here too, the price is considerably higher than the average 400-550. We can conclude that in the Oxyrhynchite nome the price varies between 235 and 520 sext./sol..

An objection to the calculating method used by Jördens is the fact that the Oxyrhynchite and Thinite prices are transformed into prices per solidus of 24 keratia. The Hermopolite prices are calculated as if the solidi mentioned in the texts contained 24 keratia. This cannot be established with certainty. In fact, it seems more likely that in the Hermopolite nome some keratia were also deducted of the full 24 keratia solidus<sup>47</sup>. Perhaps it is better to compare the prices per solidus without bothering about the amount of keratia in each solidus (as was done for P.Col. VIII 245, where the solidi are weighed ἰδιωτικῶ ζυγῶ and P.Mich. XV 748 and P.Heid. V 359, where no deduction of keratia is specified). Then, we get these prices:

P.Col. VIII 245	VI		500 sext./sol.
PSI X 1122	VI	1000 sext. for 2 sol. at 23 ker.	500 sext./sol.
P.Mich. XV 743	VI/VII	2575 sext. for 6 sol. -2 ker.	c. 429 sext./sol. <sup>48</sup>
SB I 4504	606/608	525 sext. for 1 sol. - $\frac{1}{2}$ ker.	525 sext./sol.

contracts (see P.Heid. V, p. 328). For the comparison of the prices in the Oxyrhynchite and Hermopolite nome, a division of the price mentioned in the Hermopolite clauses by only 1.5 (=the extra charge in case of default) is correct, since the prices in the Oxyrhynchite contracts probably also include an interest of 50% (see R.S. Bagnall, o.c.). The prices calculated in P.Heid. V and here are therefore **not** the market prices.

<sup>46</sup> Not included is the price of P.Lond. III 1001 (539). In that text two products are to be delivered,  $1\frac{1}{3}$  art. of wheat in Payni and 10 knidia of wine in Mesore. The penalty clause (ll. 21-25) runs (with BL 1, p. 298): εἰ δὲ μὴ ἢ δυνηθῶ διδόναι σοι τὸν αὐτὸν σίτον καὶ οἶνον ἢ ἐν [τ]ῇ αὐτῇ προθεσμίᾳ, παρέξω σοι ὑπὲρ τῆς τούτω[v] | τιμῆς χρυσο(ῦ) κεράτια ἕξ εὐθὺς μετὰ τὴν ...αδ.[.] ἰτῆς α(ὐτῆς) προθεσμίας etc. Although two products are to be returned, only one penalty price is mentioned. Do we have to understand that the six keratia are the penalty price to be paid for both products? I do not think so: if the wheat is not delivered in Payni, the wine can still be delivered in Mesore and vice versa. In my opinion, the six keratia are to be paid separately for each product, i.e. 6 ker. in Payni for the wheat and 6 ker. in Mesore for the wine. If we calculate the price of wheat in this text, again considering a charge of 50% to be included the fine, we get a price of 0.333 art./ker.. Compared with the price of wheat of SB VI 9051 (VI) ( $3\frac{1}{2}$  art., a fine of 14 ker., resulting in a price of 0.375 art./ker.) this seems a reasonable price. The price of wine would be (10 knidia, fine 6 ker.) 300 sext./nom. of 24 ker. if the knidia also contain 5 sext./knidion.

<sup>47</sup> This is also suggested by SB XVI 12488: the fine in this text is 2 sol. less 12 ker.. If the solidus really contained 24 keratia it would have been much easier to say  $1\frac{1}{2}$  solidus.

SB I 4505	613	175 sext. for $\frac{1}{3}$ sol. - $\frac{1}{4}$ ker.	525 sext./sol.
P.Mich. XV	VII	50 sekomata for 1 sol./sek.;	
		if each sek. contains 5 sext.	250 sext./sol.
P.L.Bat. XVI 11	VII	220 sext. for 1 sol. at $22\frac{1}{2}$ ker.	220 sext./sol.
P.Heid. V 359	VI/VII	640 sext. for $1\frac{1}{3}$ sol.	480 sext./sol.
Pap.Flor. XVIII 8	669	840 sext. for $2\frac{1}{2}$ sol. at $22\frac{1}{2}$ ker.	336 sext./sol.

As I have explained above, the prices in the Hermopolite nome were calculated assuming that in all texts the metron/knidion contained 5 sextarii. The metron of three sextarii in SB XVI 12401 is regarded as an exception (P.Heid. V p. 111, note 2). The data provided by P.Palau Rib. inv. 178<sup>49</sup> are disregarded. In that texts 50 metra, each containing 3 sextarii, are to be delivered. If not, a fine of 10 keratia has to be paid. If we calculate the price, assuming that the "ἡμιολία" is included in the fine, we get a price of 540 sext./sol. of 24 keratia. This corresponds well with the other figures of the Hermopolites as calculated. But P.Palau Rib. inv. 178 also shows that the metron of 3 sextarii is perhaps not exceptional. With each metron/knidion containing 3 sextarii we get the following prices in the Hermopolites:

SB XVI 12488	538	400 sext. for 2 sol. -12 ker.	400 sext./sol.
P.Palau Rib. inv. 178	VI	150 sext. for 10 ker.	540 sext./sol.
SB XVI 12491	VI/VII	900 sext. for 4 sol.	c. 338 sext./sol.
BGU XII 2209	614	360 sext. for 2 sol.	270 sext./sol.
SB XVI 12492	638	750 sext. for 4 sol.	c. 281 sext./sol.

Although the price is now largely varying, it falls within the same limits as the Oxy-rhynchite ones. It seems that both calculations are equally possible and that no fixed or average price of wine can be established<sup>50</sup>.

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<sup>49</sup> Cf. note 1 and above **Hermopolite Nome**.

<sup>50</sup> The fact that the capacity of the metra is mentioned in three texts only may indicate that the standard capacity of the metron in the Hermopolite nome (if there was such a standard capacity) was not 3 or 5 sextarii. In that case no conclusions can be reached with regard to the price of wine in the