

## The Spathion Jar in the Papyri\*

In recent papers Ph. Mayerson (hereafter M.) suggested that the *σπαθίον* (sometimes spelled *σπατίον*),<sup>1</sup> a Greek technical term found in the papyri from Egypt for a container of (mostly) liquids, should be identified with a Syriac measure "Sabitha/Sapation" known from the Syriac version of Epiphanius' *De Mensuris et Ponderibus*.<sup>2</sup> This Syriac measure is known to have been reckoned in the city of Askalon as the equivalent of 22 sextarii vs. that of 14 sextarii in the city of Gaza.

Though at first sight M.'s suggested identification seems illuminating for the question of the Greek word's problematical etymology,<sup>3</sup> in the final analysis his argument is not convincing.

1. His lapidary statement "In Egypt, however, *σπάτιον* designated a wineskin" (*ZPE* 121 [1998] 227 middle) is not backed up by any (circumstantial) evidence; on this topic see below.

2. References to *spathia* together with other jars/containers like the *diploun*, the *dichoron*, the *keramion*, or the *knidion* (cf. below)

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\* All dates are A.D., unless otherwise stated.

<sup>1</sup> See the author's "A note on Syriac *Sabitha* and *Kollathon* in the Papyri," *BASP* 36 (1999) 83-6, esp. 84, repeating views expressed earlier in his paper "Σπάτιον / σπάθιον—A Wineskin," *ZPE* 121 (1998) 226-9 (M. and other authors accentuate proparoxytonon; according to LSJ s.v. *σπαθίον*, one should accentuate paroxytonon).

<sup>2</sup> This Syriac version was edited by J.E. Dean, *Epiphanius' Treatise on Weights and Measures—The Syriac Version*. Studies in Ancient Oriental Civilisation 11 (Chicago 1935). For the Greek text, cf. E. Mouslas, *Τὸ περί μέτρων καὶ σταθμῶν ἔργον Ἐπιφανίου τοῦ Σαλαμίνος*, *Εὐλογία* 44 (1973) 157-98. To be sure, there is also an Old-Georgian version of Epiphanius' text, cf. M.-J. van Esbroeck, *Les versions georgiennes d'Épiphane de Chypre: Traité des poids et des mesures* (CSCO 460 [Georgian Text] - 461 [French Translation]; *Scriptores Iberici* 19 [Louvain 1984]).

<sup>3</sup> Usually the noun *σπαθίον* is regarded as the diminutive form of the noun *σπαθή*, cf. G. Wagner in *O.Douch* II 84.1n. and K.A. Worp in *ZPE* 101 (1994) 102, note to l. 6.

within a single context suggest that the manufacturing material for the spathia was not intrinsically different from that of the other containers.

3. M. neglects the evidence provided by the text of *SB XIV 11552.16-7* (III) in which the sailors of a ship will be provided with, among other things, κ[ρῆ]ω[ς] [μ]ο[ρ]ο[χ]εῖ-| [ου c] παδίων δέκα.<sup>4</sup> It is evident from a comparison of this passage with three entries for "οἶνου σπαδίων (I. σπαθίων)" in the administrative list found in *SB XIV 11593.18, 25, 42* (IV) that the spelling σπαδίων should be taken as an error for σπαθίων<sup>5</sup> and that in *SB XIV 11552.16-7* we are dealing with "10 spathion-jars of preserved calf meat;" it is out of the question, of course, that one is dealing here with 10 wine skins used for packing preserved meat.<sup>6</sup>

While returning to the traditional interpretation of the spathion as a type of earthenware jar we think that there is good reason to pay some further attention to the term and its use. First we present a listing in chronological order of all attestations of the term in a sense of a jar known to us mostly via the Duke Data Bank of Documentary Papyri (PHI CD-ROM #7); all references concern οἶνου σπαθία ("spathia of wine") unless indicated otherwise ("- " indicates that the commodity or a precise amount of spathia is not indicated in the text):

<i>P.Lond.</i> III 1266 (p. 38f.) A.7 (II/III): στ. 6	<i>P.Oxy.</i> LVI 3860.16 (IV): στ. 8
<i>P.Lond.</i> III 1266 B.5 (II/III): στ. 12	<i>P.Oxy.</i> LVI 3874.35 (IV): στ. 2
<i>P.Lond.</i> III 1266 C.5 (II/III): στ. 12	<i>P.Oxy.</i> LVI 3875.2,3 (IV): στ. 1
<i>P.Oxy.</i> XLI 2983.14 (II/III): στ. 1	<i>P.Ross. Georg.</i> III 6.4 (IV): στ. 1
<i>SB XII 10913.5</i> (III?): στ. 10	<i>P.Ross. George V 61 Fr. D. 4, 6, 9</i> (IV): στ. 4
<i>SB XIV 11552.16-7</i> (III): κρέω[ς] [μ]ο[ρ]ο[χ]εῖ-[ου c] στ. 10	<i>P.Ryl.</i> IV 627.67, 98 (IV): στ. 8

<sup>4</sup> On balance one may probably better restore κ[ρῆ]ω[ς] [μ]ο[ρ]ο[χ]εῖ-| [ου c] παδίων.

<sup>5</sup> An indication of this error was not given in the *ed.princ.* of *SB XIV 11552*, hence the editors of the *Sammelbuch* did not mention the error in a critical apparatus for this text. For evidence on the interchange of aspirated and voiced dentals (θ > δ, δ > θ), cf. F.Th. Gignac, *Grammar*, I 96-7.

<sup>6</sup> An Askalonion is used as a container for packing calf meat in *SB XX 14574.2*.

<i>P.Laur.</i> I 17.9, 16 (III): στ. 2, 1	<i>P.Ryl.</i> IV 627.76: γάρου{c} στ.
<i>P.Oslo</i> III 161.5 (III): γάρου{c} στ. 1	<i>P.Ryl.</i> IV 627.79: [δ]λοράκ(ων) στ.
<i>P.Oxy.</i> LVI 3854.3, 4, 6 (III): στ. 10, 12, 12	<i>P.Ryl.</i> IV 627.294: γλευκος στ.
<i>P.Fuad.</i> I Univ. 9.5, 7 (III/IV): στ. [ ]: στ. 10	<i>P.Ryl.</i> IV 629.36, 76, 106 (IV): στ. 1
<i>P.Oxy.</i> XIV 1771.4, 9 (III/IV): στ. 12 στ. 18 + 12, 2	<i>P.Stras.</i> VII 637.27 (IV): στ. 7
<i>P.Oxy.</i> XXXIV 2728.17, 22, 26 (III/IV): στ. 10	<i>SB XIV</i> 11593.18, 25, 42 (IV): στ. 4, 2
<i>P.Oxy.</i> XXXIV 2728.18: στ. [17 <sup>7</sup> ]	<i>SB XIV</i> 11983.5,63 (IV): στ. 1
<i>P.Oxy.</i> XXXIV 2728.19, 20, 23: στ. 3,20,40	<i>SB XIV</i> 11983.85: στ. 2
<i>P.Oxy.</i> X 1298.14, 18 (IV): στ. 66	<i>SB XIV</i> 12173.14 (IV): γάρου στ. 1
<i>BGU I</i> 21.ii.18 (IV): στ. 24	<i>SB XIV</i> 12576 <sup>7</sup> .34, 14 (IV): στ. 1, 1
<i>BGU I</i> 21.iii. 7, 21: στ. 2	<i>SPP XX</i> 75.17 (IV): στ. 2
<i>P.Abinn.</i> 4.5, 11 (IV): ελαιου στ. 1, 2	<i>Anal.Pap.</i> 10-11 (1998/9) 108 #3.2, 4, 6 (IV): στ. 136, 144, 144.
<i>P.Abinn.</i> 7.16 (IV): στ. 4	<i>ZPE</i> 134 (2001) 169 #5.6 (IV): στ. 2
<i>P.Abinn.</i> 8.5 (IV): στ.	<i>P.Oxy.</i> LVI 3862.23 (IV/V): οίν. (?) στ. 2
<i>P.Abinn.</i> 75.10, 15, 16, 18, 23, 29, 32, 47 (IV): στ. 1	<i>SB XX</i> 14956.ii.44 (IV/V): γάρου στ. 1
<i>P.Abinn.</i> 75.5, 6, 8, 27, 44: στ. 2	<i>P.Ant.</i> III 194.4, 5 (IV): στ. 10
<i>P.Abinn.</i> 72.2, 3, 4, 43: στ. 4	<i>P.Oxy.</i> XVI 2043.7, 9 (V): στ. 4, 32
<i>P.Abinn.</i> 75.13, 13, 41, 17: στ. 3, 8, 9, 15	<i>P.Oxy.</i> XVI 2048.2 (V ? Cf. XLVIII 3425): οίν. 'Οασιτικού στ. 4
<i>P.Col.</i> VIII 239.5, 6 (IV): στ. 3, 1	<i>P.Oxy.</i> XVI 2048.3: οίν. έντοπιου στ. 4
<i>P.Hamb.</i> IV 267.4 (IV): στ.	<i>P.Oxy.</i> LXIII 4387.4, 5 (V): στ. 30
<i>P.Nag. Hamm.</i> 17.2 (IV): στ. 3410	<i>P.Oxy.</i> I 155.3 (VI): στ. 20
<i>P.Oxy.</i> X 1297.10 (IV): στ. 1	<i>SB XX</i> 14533.4 (VI): στ. 1
<i>P.Oxy.</i> XXXIV 2729.30, 35 (IV): στ.	<i>T.Var.</i> 30.11 (?): στ. 20
<i>P.Oxy.</i> XXXIV 2729.38: γάρου στ. 1	<i>T.Var.</i> 31.4 (?): στ. 5 & 1
<i>P.Oxy.</i> XLVIII 3387.3,4 (IV): στ. 1	
<i>P.Oxy.</i> XLVIII 3425.2 (IV): οίν. 'Οασιτικού στ. 4	

Not listed above are the following doubtful "attestations":

1. *P.Oxy.* XIV 1751v.2 σπαθίων is restored in an entry "ὑπέρ τιμῆς σπα[-" ; one may well wonder why not another word starting with σπα- is restored here, e.g. ὑπέρ τιμῆς σπα[γελαιου] ?

2. *O.Douch* II 84.2-5 and 162.2 (cf. also II 145): the measure read as "(σπαθίων)" or "(σπαθία)" is expressed by a monogrammatic symbol consisting of the letters "Chi" + "Rho" (for which cf. II 128.3-6n.); it should, however, be noted that no such symbol for σπαθίων is known from anywhere else, while the correct

<sup>7</sup> We think that the numeral to be restored for the σπαθία should be restored as 17. Adding to these 3 σπαθία (cf. ll. 19-20) one arrives at 20 σπαθία (l. 20). And via adding up the 10 σπαθία from l. 17, the 20 σπαθία from l. 20 and the 10 σπαθία from l. 22, one arrives at 40 σπαθία in l. 23.

reading of *O.Douch* II 84.1 (cf. Pl. <sup>4</sup> 6) seems to be  $\zeta\lambda\acute{\alpha}\nu\upsilon$  or  $\psi\tau' \text{ 'Avou}(\ )$  [or  $-\alpha\lambda\acute{\iota}\upsilon\upsilon$  for  $-\alpha\nu\upsilon$  ?]), rather than  $\sigma\pi\alpha\theta\acute{\iota}\alpha$ . Therefore, in both of these texts it seems incapable to prefer the editor's alternative reading, i.e.  $\chi\rho(\eta\eta\tau\eta)$  (cf. for this measure *O.Douch* II 173.3, 4; III 321.2 ff.; IV 358; 386.4, 5; 390; 448.5).

3. *SB XVI* 12806, republished in *O.Douch* III 327; here, too, the  $\sigma\pi\alpha\theta\acute{\iota}\upsilon\upsilon$  in l. 2 of the *ed.princ.* has been substituted by the  $\chi\rho\eta\eta\tau\eta$ .

4. *P.Ant.* I 46<sup>v</sup>.12 [IV],  $\sigma\pi\alpha\delta\acute{\iota}\upsilon\upsilon$   $\kappa\alpha\iota\nu\acute{\omicron}\nu$  ( $\tau\alpha\lambda.$ ) 24, where the editor takes  $\sigma\pi\alpha\delta\acute{\iota}\upsilon\upsilon$  as standing for  $\sigma\pi\alpha\theta\acute{\iota}\upsilon\upsilon$ ; he interprets this, however—probably in view of the following amount of 24 talents—, as "a new knife" (i.e. really the diminutive of  $\sigma\pi\acute{\alpha}\theta\eta$ ), rather than as a type of jar.

5. *SB XVIII* 13613.10-11, where the editorial reading " $\sigma\phi\alpha\lambda\acute{\iota}\alpha$  (l.  $\sigma\pi\alpha\theta\acute{\iota}\alpha$ )" has now been corrected into  $\langle\acute{\alpha}\sigma\phi\acute{\alpha}\lambda\acute{\iota}\tau\alpha\rangle$ , cf. *BL X* 221.

6. *P.Laur.* IV 186 B.2-6, 8-11 (VII), where the abbreviation  $\psi\alpha\theta(\ )$  should not be taken as an erroneous spelling of  $\sigma\pi\alpha\theta(\acute{\iota}\upsilon\upsilon)$ . For the correct interpretation  $\psi\alpha\theta(\acute{\iota}\upsilon\upsilon) = \psi\acute{\iota}\alpha\theta\acute{\iota}\upsilon\upsilon =$  "small basket" cf. *P.Neph.* 5.11n. Likewise, the reading  $\psi(\alpha\theta\acute{\iota}\alpha)$  in *P.Laur.* IV 185 A.14, 15 (VII; cf. Plate CXIX) looks exceptional and doubtful to us (we are not even certain of the reading of a letter  $\psi$ ) and we do not think that this can be taken as an attestation of the jar name abbreviated as  $\sigma\pi(\alpha\theta\acute{\iota}\upsilon\upsilon)$ .

First of all we note that the term *spathion* is attested from the late II/early III onwards (cf. the 4 toll receipts in *P.Lond.* III 1266 and *SB XII* 10913). The majority of its attestations, however, are found in fourth century papyri; only a few later texts mention it, cf. *P.Ant.* III 194, *P.Oxy.* XVI 2043, 2048, LXIII 4387 (all V), *P.Oxy.* I 155 and *SB XX* 14533 (both VI). The usual spelling is  $\sigma\pi\alpha\theta\acute{\iota}\upsilon\upsilon$ ; next to this the spelling variants  $\sigma\pi\alpha\tau\acute{\iota}\upsilon\upsilon$  or  $\sigma\pi\alpha\delta\acute{\iota}\upsilon\upsilon$  do occur, but they are not frequent.<sup>8</sup> Furthermore, we note that the term is attested in all more or less important regions of Egypt, hence it appears not to be a "technical" word used only on a limited, regional/local basis.

The largest amount of *spathia* is found in *P.Nag.Hamm.* 17.2, 3410  $\sigma\pi$ .<sup>9</sup> This, however, is the only case of hundreds of  $\sigma\pi\alpha\theta\acute{\iota}\alpha$ , much higher than the next highest number of 144  $\sigma\pi\alpha\theta\acute{\iota}\alpha$  men-

<sup>8</sup> For  $\sigma\pi\alpha\delta\acute{\iota}\upsilon\upsilon$ , cf. above, *SB XII* 11552.17, 11593.18, 25, 42; *P.Ant.* I 46<sup>v</sup>.12.

<sup>9</sup> It should be noted that only here the abbreviation  $\sigma(\pi\alpha\theta\acute{\iota}\alpha)$  is used, whereas elsewhere one finds usually  $\sigma\pi(\alpha\theta\acute{\iota}\upsilon\upsilon)$  or  $\sigma\pi\alpha\theta(\acute{\iota}\upsilon\upsilon)$ , only rarely (e.g. *P.Oxy.* XLVIII 3387.4) as " $\sigma(\pi\alpha)\theta(\acute{\iota}\upsilon\upsilon)$ ."

tioned in *Anal.Pap.* 10-11 (1998/9) 108 #3.<sup>10</sup> Most amounts are in the range between 1-10 σπαθία. Fractions of σπαθία do not seem to occur, and we also do not find terms like \*ἡμισπαθίον (or, for that matter, \*δισπαθίον). This is remarkable in that the occurrences in the papyri of "halves" or "doubles" of a standard jar are numerous (cf. terms like, e.g., ἡμικνίδιον and διλέσβιον, διπλοκέραμον, διπλοῦν, and δίχωρον).

It is easily observed that a spathion is predominantly a container for wine, but other commodities are also packed in spathia, cf. *SB XIV* 11552.16-7 (κρέως μοσχίνου = "calf meat"), *P.Abinn.* 4.5, 11 (both with ἐλαίου = "oil"), *P.Oslo* III 161.5, *P.Oxy.* XXXIV 2729.38, *P.Ryl.* IV 627.76, *SB XIV* 12173.14 and XX 14956.ii.44 (all with γάρου = "spicy fish sauce"), *P.Ryl.* IV 627.79 (with [ό]λοφάκ(ον) = "unbruised lentils") and *P.Ryl.* IV 627.294 (with γλυκέος = "sweet must").

There are a few price indications of wine per spathion (cf. R.S. Bagnall, *Currency and Inflation in Fourth Century Egypt*. *BASP Suppl.* 5 [Atlanta 1985] 66):

**ca. 318:** The price of 1 spath. = ca. 9.5x that of 1 sext. (cf. *P.Ryl.* IV 629-39).

**ca. 337-48:** The price of 1 spath. = ca. 4.5-6x that of 1 sext., especially if the knidion is reckoned at 5 sext. (cf. *SPP XX* 75, *BGU* I 21 and *P.Ant.* I 46).

**ca. 338-41:** The price of 1 spath. = 4-6x that of 1 knidion (cf. *SB XIV* 11593).<sup>11</sup>

**ca. 345/46:** The price of 1 spath. = ca. 2x that of 1 knidion (cf. *P.Oxy.* LVI 3874.34-5).<sup>12</sup>

<sup>10</sup> Cf. also the 66 σπ. in *P.Oxy.* X 1298.14, 18, the 40 σπ. in *P.Oxy.* XXXIV 2728.23, the 32 σπ. in *P.Oxy.* XVI 2043.9, the 30 σπ. in *P.Oxy.* LXIII 4387.4, 5, the 20 σπ. in *P.Oxy.* I 155.3 and in XXXIV 2728.20, the 18 + 12 σπ. in *P.Oxy.* XIV 1771, the 15 σπ. in *P.Abinn.* 75.17, and the 12 σπ. in *P.Lond.* III 1266 B.5 and C.5 and in *P.Oxy.* LVI 3854.4,6.

<sup>11</sup> 1 spathion costs 20 tal., 1 knidion costs 3 tal. 2000 dr. - 5 tal. Actually, Bagnall states (*op.cit.*): "3 tal., 2000 dr./sextarius," but this is an oversight for "3 tal., 2000 dr./knidion."

<sup>12</sup> 1 spathion costs 20 tal., a knidion costs 9 tal.

These price indications appear incompatible with the hypothesis considered below that a ("the" ?) standard size of a spathion may have been the equivalent of 12 sext. It is, however, an open question whether the wine mentioned in the various texts (or even within one single text) was always of the same quality, and it is also uncertain whether in all cases one is dealing with knidia of the same size; after all, knidia are known to have contained 3-5 and 8 sext., while one should also reckon with a 6-sext. knidion.<sup>13</sup>

As to the question in what relationship a spathion stood versus containers of other names like διπλᾶ, κεράμια, and/or κνίδια, one finds the following sequences:

<i>P.Ant.</i> III 194.4,5	διπλᾶ 10, σπαθία 10
<i>P.Oxy.</i> XVI 2043.7	διπλᾶ 14, σπαθία 4
<i>SB</i> XIV 12576 <sup>r</sup> .34	κεράμια 9, σπαθία 1
<i>P.Ryl.</i> IV 627.67,98	κνίδια -, σπαθία -
<i>SB</i> SIV 11983.5	κνίδια 9, σπαθίων 1
<i>P.Oxy.</i> I 155.3	κνίδια 20, σπαθία 20
<i>SB</i> XIV 11983.85	κνίδια 33, σπαθία 2
<i>P.Oxy.</i> LVI 3862.23	μεγάλα κνίδια 85, σπαθία 2
<i>P.Ross.Georg.</i> V 61,D <sup>r</sup> .6	σπαθία 4, διπλᾶ 2
<i>P.Laur.</i> I 17.16	σπαθίων 1, δίχωρον 1
<i>P.Col.</i> VIII 239.6	σπαθίων 1, κεράμια 2
<i>P.Col.</i> VIII 239.5	σπαθία 3, κεράμια 5
<i>P.Abin.</i> 75.2	σπαθία 4, κεράμια 3
<i>P.Laur.</i> I 17.9	σπαθία 2, κνίδια 2, διπλᾶ 2

This listing shows that one finds spathia **either** preceded **or** followed by various type designations of earthenware jars (dipla, keramia, knidia), in other words, there is *no* fixed sequence of, e.g., the type "διπλᾶ X, σπαθία Y, κεράμια Z" (in that case the logical inference would be that the size of an earthenware spathion fell in between that of other earthenware jars like διπλᾶ and κεράμια).

<sup>13</sup> Cf. N. Kruit and K.A. Worp, "Metrological Notes on Measures and Containers of Liquids in Graeco-Roman and Byzantine Egypt," *APF* 45 (1999) 96-127, esp. 114-6; *id.*, "Geographical Jar Names," *APF* 46 (2000) 65 ff., s.v. Κνίδιον.

About the size of a diploun, resp. a keramion, it will suffice to say that in Roman Egypt a diploun counted 8 χόεϛ = ± 26.25 l., while in Byzantine Egypt the content of the diploun is attested as ranging between 4.5-8 sextarii. Furthermore, it is known now that in Roman Egypt knidia are attested counting 4 or 12 χόεϛ and that likewise there are κεράμια of 2 and 4 χόεϛ, while in the fourth century the κεράμιον (a "neutral" term par excellence) sometimes appears to contain 3 χόεϛ = 18 sext.<sup>14</sup> It remains, therefore, an open question whether individual scribes preferred to give first the larger jars, then some smaller jar, or vice versa. In this connection it should also be considered that in principle the content of a spathion, too, may have varied, in as far as there may have been *σπαθία μεγάλα* vs. *σπαθία μικρά*, like there were, e.g., *κνίδια μεγάλα* vs. *κνίδια μικρά* (cf. *BGU XII 2179.7n.*; one might assume that the latter have, e.g., only half the size of the first).

While stressing that *spathia* should not be considered "wineskins," we make two other observations: (1) on the terminology and use of wineskins in Egypt, and (2) on the size(s) of the *spathion*:

1. One expects the normal term for "wineskin" to have been in Egypt, as in Classical Greece, *ἀκκόϛ* (= "skin, hide," hence "skin made into a bag," cf. *LSJ* s.v.). Indeed, *askoi* appear in the papyri a number of times between the third century B.C. (in the Zenon papyri, cf. *Pap.Lugd.Bat.* 21, General Index XX) and the fifth century A.D. (*SB XIV 11621*).<sup>15</sup> It is, however, striking that one finds this term used in Egypt virtually exclusively to refer to packing oil or water (in *O.Claud.*) rather than wine. Probably it is no coincidence that during the whole of the Ptolemaic and the first part of the Roman period wineskins were apparently never in frequent use in Egypt (otherwise one would probably have found traces of this practice in the papyrus documentation at large). Larger quantities of wine were normally packed always in earthenware jars rather than

<sup>14</sup> *Ibid.* (1999) 118-9 and 126-7, and (2000) 65 ff., s.v. *Κνίδιον*.

<sup>15</sup> We are not certain that it is inescapable to resolve *οἴνου ἀκκ( )* in *P.Naqḥun* 9<sup>r</sup>.9 into *οἴνου ἀκκ(ούϛ)*, while in l. 8 the same abbreviation *ἀκκ( )* is resolved into *ἀκκ(αλωνίου)*. In both lines, and also in 9<sup>r</sup>.31 (where *ἀκκ( )* is left unresolved), we would consider resolving some form of *Ἀκκ(αλώνιον)*, for which see Kruit and Worp, *op.cit.* (above, n. 13, 2000), esp. fn. 84.

in animal skins,<sup>16</sup> simply because animal skins, given their vulnerability, were probably not well suited for packing quantities of wine larger than for immediate personal use.<sup>17</sup> The attestations of the term *askos* indicate that the contents of such skins were (understandably enough) more susceptible to variation than earthenware vessels; in *SB XII 10906.2-3* one *askos* of oil was considered the equivalent of 1 *metretes*, but in *P.Cair.Zen. I 59012.105* 1 *askos* was the equivalent of 2 *metretai* while in *P.Wisc. II 80.88* 2 *askoi* seem to be the equivalent of 1.5 *metretai*.<sup>18</sup>

2. In all of the attestations of the term *spathion* there seems to be no direct indication of its size in terms of *choes*, *kotylai* or *sextarii*. One would reckon, however, that at least some people would have wished to indicate (or wanted to know) more or less precisely how much wine would be packed in a *spathion*. If, e.g., it was stated in a letter (cf. *P.Oxy. LVI 3854*) that 10 and 12 *spathia* filled with wine were to be transported to *Oxyrhynchus* for sale on the local market, without some pre-existing idea about the size of an individual *spathion* it would have been anybody's guess (approximately) how much wine was in fact sent in these vessels. This is not a very attractive idea. In fact, in the work of Bishop Epiphanius already referred to above one finds a term "espadjhün" (cf. J.E. Dean, *op.cit.* (above, n. 2) § 35, p. 52). This term is rendered by Dean—apparently following K. Brockelmann, *Lexicon Syriacum*, (Halle 1928<sup>2</sup>/repr. Hildesheim 1961) 35—into Greek as *σπονδεῖον*, but to us looks

<sup>16</sup> One may even ask whether *ἀσκοί* were sometimes made of material other than animal skin; only in *SB VI 9066.11* are the *ἀσκοί* specifically stated to be *δερμάτινοι* ("made of skin").

<sup>17</sup> In order to prevent evaporation and to decrease porosity water skins had to be impregnated with oil. On this subject and on the use of water skins in Mons Claudianus, cf. R.S. Daniel, "Neither Do They Put Old Wine in New Skins," *ZPE* 101 (1994) 61-6. It would be surprising, of course, if only starting with the end of the second century A.D. regular reference would suddenly have been made to such wineskins via the term *σπαθίον/σπαθία*.

<sup>18</sup> From our discussion of the term *ἀκκός* it follows that we do not share some of the views of Mayerson expressed in *ZPE* 127 (1999) 189-92 on this term. For, e.g., the size of the *νέβελ* = 150 or 24 sext., cf. *APF* 45 (1999) 99. If one accepts the equivalence with 150 sext. and accepts that 1 *νέβελ* was equal to 2 *ἀσκοί*, it follows that on average 1 *ἀκκός* should contain 75 sext., i.e., that it was approximately equivalent to 1 *metretes* of oil.

very much like the transliteration of the Greek term "σπαθίων." And if there is indeed a connection between the two words "espadjhün" and "σπαθίων," one automatically gains a fixed capacity for the σπαθίων, because Epiphanius says that the term "espadjhün" stands for a type of jar with a content of 12 sext.

By way of conclusion we suppose that beginning with the third century A.D.—perhaps in fact already slightly earlier, i.e. by the end of the second century—people in Egypt started using a specific type of earthenware vessel, imported from Syria and mentioned by name in Epiphanius' *De Mensuris et Ponderibus*, i.e. the "sháfithá" = σαβιθά = "sapation" = κάμβαθον (various attestations)/ κάμφατον (only in *PSI XIV 1423*)/ κάμαθον (only in *P.Oxy. X 1290*) with a variable content (depending on local circumstances) of 22, 18 or 14 sext.; cf. J.E. Dean, *op. cit.* (above, n. 2) § 41, p. 55.<sup>19</sup>

Next to this vessel a separate jar form, viz. the σπαθίων (σπατίον / σπαδίον), was developed more or less simultaneously (or even earlier) at some unknown place in the Mediterranean.<sup>20</sup> The Greek name of this type of jar was rendered by the translator of Bishop Epiphanius' Greek text into Syriac as "espadjhün"; cf. J.E. Dean, *op. cit.* (above, n. 2) § 35, p. 52. According to the testimony of this ancient author, it contained 12 sext.

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<sup>19</sup> For attestations in the papyri of the κάμβαθον, see our article in *APF* 46 (2000) 127, s.v. Σάμιον; these attestations cover the period III-V.

<sup>20</sup> For further information cf. V. Grace, *Amphoras and the Ancient Wine Trade = Excavations of the Athenian Agora, Picture Book #6* (Princeton 1961) pll. 67-8, and *P.Naqlun*, pp. 170-1, type #4.