

PAPYROLOGICA BRUXELLENSIA

— 26 —

**SIGLA AND SELECT MARGINALIA  
IN GREEK LITERARY PAPYRI**

Kathleen McNAMEE

BRUXELLES

FONDATION ÉGYPTOLOGIQUE REINE ÉLISABETH

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With good wishes!

Kathy

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FONDATION ÉGYPTOLOGIQUE REINE ÉLISABETH

PAPYROLOGICA BRUXELLENSIA

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TABLE OF CONTENTS

Sigla in Greek Literary Papyri . . . . .	7
The Inflection of Marginal Notes in Literary Papyri . . . . .	65
Appendix I: Texts with Anomalous Marginalia . . . . .	73
Appendix II: Marginal Notes Inflected Anomalously . . . . .	75



## Sigla in Greek Literary Papyri

If we leave aside the signs normally used to mark new sections in an ancient text-- the paragraphus, the diple obelismene, the coronis, and the like--, and also the decorative space-fillers at the ends of lines, there are roughly three hundred Greek literary papyri from Egypt in which sigla appear in the margin or between the lines. Their function is readily apparent and utilitarian in about a hundred texts. For the others, although the precise meaning of the marks is obscure, I think one can detect patterns of usage. Indeed it is reasonable to expect such patterns, since the great majority of the papyri in question are from a single city and were written in the space of two centuries. The chief advantage of identifying any patterns will of course be felt by editors of new papyri, but students of known texts may also benefit from the resolution of earlier uncertainties. The material presented here was collected from all published literary papyri for which editors have reported either critical sigla or marks accompanying corrections or variant readings.<sup>1</sup> While I have tried to present the collected information in as orderly a way as possible, I do not want to overstate its systematic nature. It was human scribes who added signs to papyri, and their work is full of human whim. Conventions existed, but it will be obvious from the start that particular sigla are not used in the same way by every scribe.

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<sup>1</sup>Evidence has been collected from all published literary papyri, as listed in R.A. Pack, *The Greek and Latin Literary Texts from Graeco-Roman Egypt* (2nd ed. Ann Arbor 1965) and F. Uebel, *APF* 21 (1971) 167ff, as well as from texts published after those catalogues. Sigla are organized according to function in three tables: Table 1, Aristarchan signs in papyri of Homer; Table 2, symbols with utilitarian function; Table 3, sigla of uncertain meaning. For treatments of two of the usual symbols for punctuating text see G.M. Stephen, "The Coronis," *Scriptorium* 13 (1959) 3-14 (also A. Kerkhecker, *ZPE* 71 [1988] 16-24); and R. Barbis, "La diplè obelismene: Precisazioni terminologiche e formali," *Proc. XVIII Intern. Congress of Papyrology* (Athens 1988) 473-76.

The best place to begin is with the best known ancient system of sigla, namely that developed by Aristarchus for texts of Homer.<sup>2</sup> In the first place it was a real system, and evidently supplanted those that came before. We also have the advantage of knowing the meanings Aristarchus assigned to his signs,<sup>3</sup> so their application in papyri is easy to check. The ways these marks are used by scribes, moreover, suggest explanations for sigla in texts of other authors.

Most of the seven signs of Aristarchus had a precise meaning related to the text.<sup>4</sup> They draw attention to spurious lines, questionable readings, lines out of place. The exception was the diple, a general-purpose symbol indicating that a line contained some noteworthy point-- linguistic, historical, or otherwise. Two features of the use of these sigla in surviving papyri attract immediate attention. First, in cases where they fit the prescription of Aristarchus<sup>5</sup> it is not the text-related signs but the all-purpose diple that appears most frequently. Secondly, only a little over half the texts containing Aristarchan sigla have all the marks in the right place at the right time.<sup>6</sup> A mistake in the choice or positioning of one of these symbols is curious, given the precise and exacting nature of Aristarchan scholarship that each one presumably represents. Why these oddities?<sup>7</sup>

The first peculiarity, the prevalence of the diple, is actually also the norm in mediaeval manuscripts that preserve Aristarchan sign, and the diple is the sign referred to most often in the scholia to Homer. In fact the scholia that treat the lines marked by diplai in Homeric papyri suggest a reason for their prominence. What they mainly offer are lectional help and pragmatic explanations of content. Discussions in any way scholarly-- and these abound in the fuller versions of "Aristarchan" scholia-- were largely passed over by the people who selected the sigla for these texts.<sup>8</sup> This, on reflection, is probably what we should expect to find, since the texts we are dealing with are likelier to have belonged to ordinary readers than to learned ones. Ordinary readers had no pressing need to know the details of Aristarchus' textual or scholarly researches. For them the primary value of any commentary would have been the help it gave them in making sense of archaic text. Under these conditions it is natural that diplai-- particularly diplai connected with notes offering simple exegesis-- would predominate, and that textual notes would be of minor interest to the annotator. Indeed, obeli are preserved in only a dozen Homeric texts. As for Aristarchus' quibbles with Zenodotus', these were joys reserved to specialists. The dotted diple that draws attention to them is found in only two papyri of Homer. One of these is nearly contemporary with Aristarchus himself; the other is a beautifully written edition whose sigla send the reader to such elementary scholia, and are so often misplaced, that the book owner's scholarly inclinations cannot have been extremely strong.<sup>9</sup>

The commonest of Aristarchan sigla, then, is the most general, and in papyri it usually directed the reader to elementary notes. What about the errors? About 40% of Homeric papyri with Aristarchan marks deviate now and then from his system. In view of the learned precision of his scholarly work the rate seems very high. If we take a pragmatic point of view, however, the situation looks less chaotic. In the first place, the Aristarchan signs in the majority of Homeric papyri seem to have been written by the same scribe who copied the main text.<sup>10</sup> They will have been present in exemplars, therefore, and subject to the same sorts of scribal lapses as any other material. The errors among them will have been the slips of a hired hand, not of a scholar or serious student. Occasional misrecognition and misplacement of a mark will

<sup>2</sup>Table 1. Aristarchus seems to have introduced the dotted diple and the obelus with asteriscus, but other

sigla were already in use: a simple dot (his stigme) appears in two papyri of the 3rd cent. B.C., not apparently as a stichometric sign (*P.Heid.* 4.2 etc., Homer; P.Berol. inv. 9781, oratory); the diple is used in *P.Heid.* 4.2 etc., as well as in *P.Tebt.* 3.692 (2nd cent. B.C., Soph.); the obelus was used by Zenodotus; the antisigma by Aristophanes.

<sup>3</sup>The A-scholia to the *Iliad* and the *cod. Marcianus* 454 (*Venetus A*) provide the most extensive evidence: H. Erbse, *Scholia Graeca in Homeri Iliadem (Scholia Vetera)* (Berlin 1969-77) I xiii-xiv, xlvi and following; T.W. Allen, ed., *Homeri Ilias* (Oxford 1931) 196-205. The significance of Aristarchan symbols (as well as others) is also set out in two redactions in *cod. Rom.Gr.* 6 ("Anecdota Romanum," Rome, Bibl.Naz.; saec. X), of which the relevant portion has been re-edited by F. Montanari, *Studi di filologia omerica antica* 1 (Pisa 1979) 43-75, esp. 54-55 (there is a bibliography of previous editions on pp. 48-49). A Latin version survives in *cod. Paris.* 7530 ("Anecdota Parisinum," saec. 8, ed. A. Reifferscheid, *Suetonii Reliquias* [1860] 137-41; G. Dindorf, *Scholia Graeca in Homeri Iliadem* 1 [Oxford 1875] p. xlvi-1; Keil, *Grammatici Latini* vii 535); the list given by Isidore of Seville is similar: *Etymologiae sive Origines* 1.21, ed. W.M. Lindsay [Oxford 1911]). For views on Aristarchus' contribution to Homeric scholarship see H. Erbse, "Über Aristarchus Iliasausgabe," *Hermes* 87 (1959) 275-303; R. Pfeiffer, *History of Classical Scholarship* (Oxford 1968) 210-19, 225-33. On critical signs in general see A. Gudeman, *RE* 11.2 (1922) 1916-27.

<sup>4</sup>The obelus (—) marked spurious lines, the diple periestigmene (✗) passages where Aristarchus disagreed with a reading of Zenodotus, the asteriscus (✗) genuine Homeric lines found incorrectly elsewhere in the poem, the asteriscus plus obelus (✗—) genuine lines that belonged elsewhere in the poem, and the diple (>) any of a variety of noteworthy features (παρατίθεται πρὸς τοὺς γλωσσογράφους ἡ ἔτεροδόξους ἐκδεξαμένους τὰ τοῦ ποιητοῦ καὶ μὴ καλῶς: ἡ πρὸς τὰς ἄπαξ εἰρημένας λέξεις, ἡ πρὸς τὰ ἐναντία μαζίμενα, καὶ ἔτερα σχήματα πάμπολλα καὶ ζητήματα *Anecd. Romanum*). On antisigma and stigme see below, n. 31.

<sup>5</sup>Homeric texts in which sigla conform to Aristarchan practice (Table 1): *Brit.Libr.inv.* 128, *Brit.Libr.inv.* 136, *P.Berol.inv.* 8440, *P.Berol.inv.* 9774, *P.Berol.inv.* 16985, *P.Cairo inv.* 60566, *P.Cairo Goodspeed* 1, *P.Gr.Mon.* 38, *P.Haw.* 24-28, *P.Köln* 1.37, *P.Lund* (Årsb.Lund 1934-35), *P.Oxy.* 3.445 etc., *P.Oxy.* 4.687 etc., *P.Oxy.* 8.1086 etc., *P.Ryl.* 1.51, *PSI inv.*? (*Ann.Sc.Pisa* 2.26), *PSI* 1.8, *P.Soc.Pap.Alex.inv.* 212, *P.Tebt.* 1.4.

Elsewhere it is not clear whether the signs were used according to his system (usually because confirmatory sigla and relevant scholia are lacking in other sources: so in *Brit.Libr. inv.* 271 etc., *P.Berol.inv.* 7807, *P.Berol.inv.* 11761, *P.Lips. inv.* 338, *P.Lit.Pisa* 2, *P.Mil.Vogl.* 6.259, *P.Oxy.* 11.1398, *P.Oxy.* 15.1818 (○ at lines prematurely copied; place for insertion not preserved), *PSI* 15.1456).

<sup>6</sup>Deviations from Aristarchan usage (most of the following texts also employ Aristarchan sigla with conventional meanings): *Brit.Libr.inv.* 128 (— for ✗? at 23.757; ✓ for > at 23.850; > at 23.550-51 instead of 551-52, 680 instead of 679; ✗ to mark a variant word at 23.657 [✗ ed.]), *P.Gr.Mon.* 38 (> at *Il.* 12.346 and 359, where ✗ is wanted), *P.Haw.* 3.195 (— at *Il.* 2.401-402, but athetesis not possible), *P.Haw.* 24-28 (— at *Il.* 2.794 instead of 791-95, at 875-876 instead of 874-875; > instead of ✗ at 2.727, 839; ✗ instead of > at 2.745, 856; ✗ at 2.484 but not at 485, 486; > for ✗ at 2.741; ○ precedes variants added in the margin, probably by a later hand than that which added the other sigla), *PIFAO inv.* 75 (> at *Od.* 17.359, where the scholia to *Il.* 22.329 indicate that — is wanted), *P.Köln* 1.37 (— at *Il.* 24.46 where > is wanted), *P.Mich. inv.* 6653v (✗ where — ✗ is wanted), *P.Oxy.* 3.445 (○ with > at 6.174, ✗ at 6.490-92 but not 493, > instead of > at 6.181, 186), *P.Oxy.* 4.687 (> for ✗ at *Il.* 3.211), *PSI* 1.8 (— at *Od.* 5.111 [— also appears]), *PSI* 1.10 (— instead of > at *Il.* 11.612), *PSI* 2.113 (— instead of > at *Il.* 1.473, — at 471, 475), *P.Soc.Pap.Alex.inv.* 212 (> at 7.318, not 319), *P.Strassb.inv.* Gr. 2675 (< for > at 9.350), *P.Tebt.* 1.4 (○ at 2.204, while scholia prescribe \* at 203-205), *PSI* 15.1458 (> where ✗ is wanted). Note too the sigla >, \* (stichometric?), and ✓ written at the right of the col. in the pre-Aristarchan *P.Heid.* 4.2 etc. (3rd cent. B.C.).

<sup>7</sup>Occasionally when a papyrus diverges from tradition it preserves the correct form of the siglum: in *P.Haw.* 24-28 at 2.741 > (standing for ✗?) is preferable to the > of *Ven. A*, since the scholia discuss a reading of Zenodotus; at 2.801 the papyrus correctly has a ✗ where *Ven. A* has >; at 2.839 the > of the pap. is preferable to the ✗ of *Ven. A*. In *P.Berol.inv.* 16985 at *Il.* 22.497 the scholia indicate a diple (which the papyrus has) while *Ven. A* has —.

<sup>8</sup>K. McNamee, "Aristarchus and 'Everyman's Homer,'" *GRBS* 22 (1981) 247-55.

<sup>9</sup>*P.Tebt.* 1.4; *P.Haw.* 24-28 (for its errors see above, n. 6). It would be easy to imagine that the owner was more interested in the aura of learning conferred by sigla than in the scholarly work they represent. If this were generally true for texts with misplaced sigla, though, we should find the signs scattered wildly; in fact the deviations from what Aristarchus intended are almost always minor.

<sup>10</sup>It is difficult to be certain who wrote a siglum, given their size and intermittent use, but of the 16 texts with erroneous Aristarchan signs, the marks were fairly certainly the work of the original scribe in 7 cases (*P.Haw.* 24-28, *P.Mich.* 6653v, *P.Oxy.* 3.445 etc., *P.Oxy.* 4.687 etc., *PSI* 1.8, *PSI* 2.113, *PSI* 15.1458) and probably also in another 7 (*P.Gr.Mon.* 38, *P.Hamb.* 3.195, PIFAO inv. 75, *P.Köln* 1.37, *P.Soc.Pap.Alex.* inv. 212, *P.Strassb.* inv. Gr. 2675, *P.Tebt.* 1.4). Among other papyri with Aristarchan signs, sigla seem generally to be written by the original scribe (quite certainly in *Brit.Libr.* inv. 271 etc., *P.Lips.* inv. 338, *P.Lit.Pisa* 2, *P.Oxy.* 15.1818; probably also in *Brit.Libr.* inv. 136, *P.Berol.* inv. 7807, *P.Berol.* inv. 8440, *P.Berol.* inv. 9774, *P.Berol.* inv. 16985, *P.Lund* [Årsb.Lund, 1934-35], *P.Mil.Vogl.* 6.259, *P.Ryl.* 1.51, *P.Cairo Goodspeed* 1, *PSI* inv.? [*Ann.Sc.Pisa* 2.26], *PSI* 15.1456).

have been inevitable, for professional scribes will have had no personal interest in the scholarly significance of the signs. Admittedly the persons who commissioned these papyri never took the trouble to correct their mistakes, but again practical considerations suggest an explanation. In the books we are talking about the slight misplacement of a sign or the substitution of one for another-- even within Aristarchus' precise system-- would not have been greatly confusing. Any reader who had a text prepared with sigla presumably had access to Aristarchus' opinions on the marked lines. Otherwise he could scarcely have made sense of something like the diple, which has no intrinsic meaning.<sup>11</sup> But in any case none of the papyri with Aristarchan signs is so heavily marked that such a reader would have had trouble locating the right comment for a dislocated siglum, or recognizing the reference for a miswritten mark. If he was in the habit of consulting his commentary when a diple prompted him, he would be just as likely to look into it for explanations of other sigla; these are abundantly preserved in the Aristarchan scholia to Homer. The substitution of one sign for another would have been fairly insignificant.

Herein lie two important general principles which should govern the rest of this discussion. First: as early as Aristarchus the siglum most heavily used was one that had no particular meaning and served only as a reference mark to a hypomnema, or at least as a sign that there was an interesting feature in the line. Secondly, flexibility is rife. Many Homeric papyri preserve non-Aristarchan sigla,<sup>12</sup> and even within a fairly well defined system like Aristarchus' a scribe could deviate from orthodoxy and still not sacrifice sense.

This flexibility is one of the salient features of sigla as they were used by ancient scribes. Indeed, Aristarchus' marks were widely adapted for texts of other authors. He himself used them in editing the *Theogony*,<sup>13</sup> and papyri of the *Works and Days* and the *Catalogue* preserve several, although not always with obvious significance.<sup>14</sup> Texts of Alcaeus, Archilochus, Corinna, Herodotus, Hippoanax, and Sappho contain various of his signs, again usually with unclear meaning,<sup>15</sup> and ancient sources supply a little more information about adaptations of the system. The scholia to Pindar mention the obelus,<sup>16</sup> and from Diogenes Laertius we learn that certain Aristarchan marks in texts of Plato corresponded roughly in meaning to those in Homeric texts.<sup>17</sup> Two of the signs were also adapted for Biblical use by Origen, who almost four centuries after Aristarchus' death used them in preparing his Hexapla.<sup>18</sup> Hephaestion's account of sigla in lyric and dramatic manuscripts, on the other hand, is concerned strictly with marks that indicate divisions in poetic texts. The system he describes includes an asteriscus, but its function is not Aristarchan. It also probably differed in appearance from Aristarchus', for the symbol  $\ddot{\circ}\ddot{\circ}$ , not  $\times$ , is the form it takes in papyri when it indicates the end of a poem.<sup>19</sup> Hephaestion deals exclusively with marks of punctuation, but he makes an apt observation which summarizes the flexible significance of sigla in general in ancient literary texts:  $\tau\alpha\ \sigma\mu\epsilon\iota\alpha\ \tau\alpha\ \pi\alpha\pi\ \tau\iota\varsigma\ \pi\iota\mu\pi\alpha\iota\varsigma\ \alpha\ll\alpha\varsigma\ \pi\alpha\pi\ \alpha\ll\alpha\varsigma\ \kappa\epsilon\iota\tau\alpha$ .

To return to the evidence, let us look now at sigla whose meaning was fairly constant from author to author and century to century. These are marks of the sort that a diorthotes (as opposed to a textual critic or a reader with a special interest in textual variants) might employ. The *ancora*, first, normally written  $\mathcal{C}$  or  $\mathcal{L}$ , was used almost exclusively to mark a place where text had been omitted and (or) to draw attention to the necessary restoration in the top or bottom margin.<sup>20</sup> It may appear with a diagonal penstroke, particularly to mark the two lines between which an omission has

<sup>11</sup>While strictly speaking these opinions need not have been written-- they could have been originally

the oral explanations of Aristarchus himself and later of other grammaticoi-- the material was soon enough organized in writing by Aristarchus' student Aristonicus. On the question of the genesis of the scholia to Homer see Pfeiffer (above, n. 3: they originated in a commentary by Aristarchus); also M.L. West, ed., *Hesiod Works and Days* (Oxford 1978) 65 on the question of whether Aristarchus wrote commentaries on Hesiod (he did not: apparent references to it are from Aristonicus' treatise on the sigla affixed by Aristarchus to the text).

<sup>12</sup>Non-Aristarchan critical sigla in post-Aristarchan Homeric papyri (Table 3): P.Berol.inv. 7807 (✓), *P.Oxy.* 2.223 (✓, /, and —; see also Table 2D), *P.Oxy.* 3.550 descr. (÷), *P.Oxy.* 4.770 (▷), *P.Oxy.* 15.1820 (✓), *PSI* 1.8 (/, once written —: perh. an expunged obelus), *PSI* 1.10 (✓ and —, the latter perh. an expunged obelus), *PSI* 13.1298 (✗); perh. *Brit.Libr.inv.* 128 (✗ or ✗?); *P.Rein.* 2.69 (✓✗: not a siglum but an interl. n.?), *PSI* 2.113 (✗ ed., but the plate is obscure).

<sup>13</sup>Suidas α 3924 Ἀριστόνικος· ἔγραψε περὶ τῶν σημείων τῶν ἐν τῇ Θεογονίᾳ Ἡσιόδου; sch.Th. 117, 573, sch.z 947-55; sch. W.&D. 104a, 207-212, 276b, 649a, Prolegomenon Ac (p. 2 Pertusi) (references collected by R.L. Fowler, *ZPE* 33 [1979] 26). M.L. West presents the evidence for the work of Aristonicus and Aristarchus on Hesiod in his ed. of *W.&D.* (Oxford 1978) p. 65.

<sup>14</sup>Papyri of Hesiod with Aristarchan signs: *P.Oxy.* 17.2075 etc. (obelus at *cat.* M-W fr. 25.26-33, part of which also occurs elsewhere in *cat.*), *P.Oxy.* 28.2487 (obelus at M-W fr. 129.47-50), *P.Oxy.* 45.3224 (obelus at *W.&D.* 181 [unless a preceding asteriscus has been lost in the lacuna], diple and asteriscus at 182 and 184, asteriscus and obelus at 185, and chi or asteriscus at 186. None of the lines marked with the asteriscus is known to have occurred elsewhere).

<sup>15</sup>Aristarchan sigla in authors other than Homer and Hesiod: (1) Obelus: P.Berol.inv. 13284 (Corinna), P.Haun.inv. 301 etc. (Sappho; at 3 consecutive lines), *P.Köln* 2.59 (Alc.; 7 consecutive lines), *P.Oxy.* 18.2174 (Hippon.), *P.Oxy.* 22.2311 (Archil.; at 4 of 5 consecutive lines, the unmarked line being bracketed), *P.Ryl.* 1.55 (Hdt.; with diple). Obelus-like marks in subliterary texts or treatises (*Brit.Libr.inv.* 131v, *P.Oxy.* 35.2741), can hardly have indicated spurious lines; they are listed in Table 3. (2) diple periestigmene: *P.Oxy.* 18.2163 (Aeschylus). (3) Asteriscus: *P.Oxy.* 3.442 (oratory). Simple dots (stigmata?) also appear (P.Berol. inv. 10567, Nonnus; P.Berol.inv. 13284, Corinna; *P.Oxy.* 37.2812, comm. on tragedy), but whether they had stichometric or critical significance is usually impossible to tell. In P.Berol.inv. 13284, at least, the stichometric explanation is unlikely, since two dots occur in the space of four lines. For sigla in texts of lyric see R.L. Fowler (above, n. 13) 24-28.

<sup>16</sup>Sch. *Ol.* 2.48c and f; references collected by Fowler (above, n. 13) 27.

<sup>17</sup>Diog.Laert. 3.66; roughly the same in meaning as in texts of Homer were the diple (πρὸς τὰ δόγματα καὶ ἀρέσκοντα Πλάτωνι), the diple periestigmene (πρὸς τὰς ἐνίσιν διορθώσεις), and the antisigma periestigmene (?) πρὸς τὰς διττάς χρήσεις καὶ μεταθέσεις τῶν γραφῶν (on the antisigma in Aristarchus, see below, n. 31). Diogenes adds the chi (X) πρὸς τὰς λέξεις καὶ τὰ σχήματα καὶ ὅλως τὴν Πλατωνικὴν συνήθειαν, the chi periestigmene (·χ·) πρὸς τὰς ἐκλογὰς καὶ καλλιγραφίας (evidently different from the asteriscus which was used πρὸς τὴν συμφωνίαν τῶν δογμάτων), the obelus periestigmene πρὸς τὰς εἰκασίας ἀθέτεσις, and the keraunion (?) πρὸς τὴν ἀγωγὴν τῆς φιλοσοφίας.

<sup>18</sup>*Origenis Hexaplorum quae supersunt* ed. Fr. Field (Oxford 1875, repr. Olms: Hildesheim 1964) lii-lx. There obeli marked passages of the Septuagint not found in the Hebrew text, asterisci the parts not present in the Septuagint but preserved in Hebrew and the other Greek versions. Although the meaning of Origen's asteriscus and obelus is clearly derived from their Aristarchan functions, his reasons for using them were apologetic, not text-critical. He sought to produce an authoritative text useful to Christians in discussions with Jews, not to establish the most accurate possible edition: S.P. Brock, "Origen's Aims as a Textual Critic of the Old Testament," *Studia Patristica* 10 (1970) 215-18, repr. in *Studies in the Septuagint: Origins, Recensions, and Interpretations*, ed. S. Jellico (New York 1974) 343-46.

The form of Origen's obelus has been questioned. (see Field, *loc.cit.* ). Although in mss. of the Hexapla it has a variety of forms (—, —, ÷, etc.), Origen speaks only of two sigla, the asteriscus and the obelus (τινὰ μὲν ὠβελίσαμεν ἐν τῷ Ἐβραικῷ μὴ κείμενα, οὐ τολμήσαντες αὐτὰ πάντη πειρεῖν· τινὰ δὲ μετ' ἀστερίσκων προσεθήκαμεν, ἵνα δῆλον ἡ ὅτι μὴ κείμενα παρὰ τοῖς Ο' ἐκ τῶν λοιπῶν ἐκδόσεων συμφώνως τῷ Ἐβραικῷ προσεθήκαμεν. Opp. T. III, pp. 671, 672, quoted by Field pp. liii-liv). His obviously conscious imitation of the Aristarchan system for Homer makes it likely, therefore, that his obelus had the form of its model.

occurred.<sup>21</sup> Most surviving examples are at the left of a column, sometimes with ἄνω or κάτω in the right margin to indicate exactly where the reader should look for relevant material.<sup>22</sup> Interestingly, although the sign may strike the eye as having the shape of an arrow, its "business end" -- the directional pointer -- was normally the open part of its central shaft. Thus ↗ typically served as a pointer upward, ↘ down. Only one papyrus preserves a complete pair, but there are abundant illustrations of the pairing of signs in the work of scribes A and D of the Codex Sinaiticus.<sup>23</sup> Other papyri also confirm the usual directional sense of the signs, either through the presence of a clarifying ἄνω or κάτω or by the actual location of marginal restorations.<sup>24</sup> This is not the realm of absolutes, however: some scribes, including some correctors in the Codex Sinaiticus, used identical ancorae with both omission and restoration.<sup>25</sup> Nor did the conventional role of the symbol as a caret mark keep scribes from dragooning it for other purposes when they saw a parallel need. Thus ancorae occasionally mark errors and variant readings (Table 2A).

<sup>19</sup> Hephaestionis *Encheiridion*, ed. M. Consbruch (Leipzig 1971) 73-76 (περὶ σημείων). Fowler (above, n. 13) gives occurrences of the asteriscus in papyri of lyric; there *P.Oxy.* 32.2617 should probably be excluded, as the sign in question seems to be a form of the chi-rho monogram (☧: see below, n. 68).

<sup>20</sup> See Table 2A. On the anora and other signs of omission see S. Daris, *SP* 7 (1968) 7-22. Papyri provide no evidence for the anora in the role described in *Anecd. Parisinum* (above, n. 3): *anora superior ad aliquod praecipue dictum* (vel ubi aliqua res magna omnino est, Isid.), *anora inferior ad humilius vel inconveniens quid enuntiatum* (similarly Isidore *Etymologiae* 1.21.24, above, n. 3).

<sup>21</sup> Anora used with the diagonal slash: *P.Ant.* 3.160 (a slash is written between two lines where there is an omission, and an anora is written before the second; ↗ is also written at the left of an omission), *P.Gen.* 1 (↗ at left of two consecutive lines, anora below), *P.Med. inv.* 210 (↗ at the left of the text and marginal addition), *P.Oxy.* 6.852 (anora and ↗ at consecutive lines), *P.Oxy.* 10.1247 (↗ and anora interlinear, beside each other, above words to transpose), *P.Oxy.* 50.3538 (↖ beside text, with ↗ below it in a different hand).

<sup>22</sup> Anora at left margin with ἄνω or κάτω at right: *Brit.Lib. inv.* 107, *P.Mich. inv.* 2 (ancorae precede each of two consecutive lines restored in top marg.), *P.Oxy.* 6.852.

In fact ἄνω or κάτω sufficed for some scribes, who write one or the other, but no siglum, in *Brit.Lib. inv.* 132 (both words), *Brit.Lib. inv.* 135, and *O.Berol.* 12319 (Pack<sup>2</sup> 1567); in *Brit.Lib. inv.* 132 (Table 2D) and *PSI inv. CNR* 66+67 (Table 3), ἄνω or κάτω indicate variant readings. Fragmentary texts where ἄνω or κάτω is preserved but no siglum: *Brit.Lib. inv.* 128 (Table 2D), *P.Berol. inv.* 6845 (Pack<sup>2</sup> 831), *P.Cairo* 45614 (*CE* 60 [1985] 17-29), *P.Heid. N.F.* 2.183 (Pack<sup>2</sup> 1434), *P.Hercul.* 243 (*Cron.Erc.* 14 [1984] 109-24, with a long restoration in the bottom marg.), *P.Oxy.* 3.545 (Pack<sup>2</sup> 731), *P.Oxy.* 4.700 (Pack<sup>2</sup> 276), *P.Oxy.* 11.1358 (Pack<sup>2</sup> 522), *P.Oxy.* 15.1793 (Pack<sup>2</sup> 234), *P.Oxy.* 17.2077 (Pack<sup>2</sup> 1478), *P.Oxy.* 17.2100 (Table 3), *P.Oxy.* 22.2313 (Pack<sup>2</sup> 128), *P.Oxy.* 23.2377 (Pack<sup>2</sup> 230), *P.Oxy.* 25.2427 (Tables 2B, 3), *P.Oxy.* 47.3320, *P.Tebt.* 1.4 (Tables 1, 2D).

<sup>23</sup> Ancorae "point" to each other in *P.Oxy.* 2.223; see also H.J.M. Milne and T.C. Skeat, *Scribes and Correctors of the Codex Sinaiticus*, London 1938) 40-50 (mid-4th cent.).

<sup>24</sup> ↗ is accompanied by ἄνω and ↘ by κάτω in *P.Amh.* 2.24, *P.Mich. inv.* 2 (¶ with ἄνω at an omission, matched with ↗ and ↘ plus κάτω before each of two restored lines in the top marg.), *P.Oxy.* 2.220 etc., *P.Oxy.* 6.852. Ancorae "point" to surviving restorations or notes in *P.Ant.* 3.160, *P.Oxy.* 1.28, *P.Princ.* 3.113, *P.Ryl.* 1.53 (probably also *P.Oxy.* 7.1011, *P.Oxy.* 13.1619).

<sup>25</sup> The C correctors of the Codex Sinaiticus followed the convention of having ↗ point to the top marg. and ↘ to the bottom, but matched the sign beside the text to that in the marg. Similarly the correctors of *MPER* 6.81-97 (¶ beside the text and in the bottom marg.) and presumably *P.Strassb.inv.* Gr. 2675 and *P.Berol.inv.* 9782 (only ↘, ↗ remain, in the bottom marg.). Occasionally the signs are matched but non-directional: *Brit.Lib. inv.* 107 (¶ beside the text and in the top marg.), *P.Med. inv.* 210 (↗ at both text and marg. addition).

The antisigma (O) and a handful of lunate signs possibly intended for antisigmas were the appropriate marks for introducing textual revisions, especially variants and textual comments.<sup>26</sup> Like the ancora they usually appear at the left of a revision, or in the left margin, sometimes with ἄνω or κάτω.<sup>27</sup> An antisigma beside the text may be matched by a similar sign beside the revision. Typically, then, the sign was a sort of localized reference mark, guiding the reader's eye elsewhere in the vicinity of the column. In one papyrus, however, a text of Alcman which has been corrected against two different authorities, the antisigma seems to be a symbol designating something external to the papyrus, namely one of the manuscripts that the reviser used for comparison.<sup>28</sup> As for the ancora, the work of the antisigma extended beyond the flagging of textual variants. It sometimes accompanies errors or corrections or even informational notes, and at least once (in *P.Oxy.* 1.12) it marks factual errors. As the Youties surmised, most antisigmas that we find with corrections or errors seem to be the work of the original scribe, while those accompanying variants or other notes are usually in a different hand, and were undoubtedly written by the book's owner.<sup>29</sup> The simple presence of an antisigma in a second hand, therefore, is a sign of a well tended manuscript. In about a quarter of all occurrences too little of the text survives for the function of an antisigma to be clear, and certainly the possibility is open that the sign had critical significance, as indeed it did for Aristophanes and Aristarchus. This is especially likely when it is used in conjunction with other apparently critical signs.<sup>30</sup>

Where it can be explained, the antisigma of papyri clearly has only a tenuous relation (namely shape and an association with textual problems) to the Aristarchan antisigma described in scholia and ancient testimonia, although the sources are in conflict about the meaning even of that sign. The sign is reported, with stigme, to have marked lines to be transposed and also, with or without stigme, to draw attention

<sup>26</sup> See Table 2B on the uses of antisigma. It is used in conjunction with textual comments in: *P.Haw.* 24-28 (O precedes variants attributed to ἡ κοινή, ἔν τισι, 'Αρίσταρχος), *P.Oxy.* 9.1174 etc. (O precedes a marginal variant, with the note οὔτος ἦν ἐν τῷ Θέωνος), *P.Oxy.* 21.2295 (O twice above relevant text, with readings of Apion in the marg.), *P.Oxy.* 25.2427 (O written below the line, with a variant and the note οὔτος καὶ ἄττικοι written in the marg.); in this and two other passages, however, Lobel, followed by Austin, took the sign to be a hypodiastole rather than an antisigma; O also appears as a critical siglum here [Table 3], written at the left of two consecutive lines), *P.Oxy.* 47.3326 (O οὔτος ἦν); perh. *P.Oxy.* 37.2803 (O written beside each line of a lacunose two-line marg. note; other notes cite Theon, Aristonicus? O also appears at the left of two consecutive lines of text: Table 3).

<sup>27</sup> Exceptions: in *P.Bodm.* inv. 28 C and O are written on either side of a marg. revision. In *P.Oxy.* 10.1247 antisigma is written at the right of one variant; √ is also written above κάτω at right of col., directing the reader to a variant below which is preceded by antisigma. In *PSI* 6.721 L (diple or antisigma?) is written beside the text, then √ at the left of an informational note and C at the right. In *MPER* 1.73-83, *P.Oxy.* 21.2295, *P.Oxy.* 25.2427 (but see above, n. 26), *PSI* 11.1191, antisigma is in the interlineation. The sign appears with ἄνω or κάτω in *Brit.Libr.* inv. 108+115 (with ἄνω and κάτω at omission and restoration), *P.Oxy.* 1.16 etc. (with ἄνω at omission), *P.Oxy.* 23.2359 (with > below the variant).

<sup>28</sup> A long note in the margin of *P.Oxy.* 24.2387 explains a difference in readings between Aristonicus and Ptolemy, and for this reason the second element of a recurring note, μόνος √, has been interpreted as Π(τολεμαῖος). The supposed pi now seems to me likelier to be a siglum: such extreme abbreviation as Π(τολεμαῖος) is unusual, and sigla certainly served elsewhere as reference marks. Emend K. McNamee, *Abbreviations in Greek Literary Papyri and Ostraca* (Chico, Calif. 1981) p. 87.

<sup>29</sup> H.C. and L.C. Youtie, *ZPE* 10 (1973) p. 176 n. 5.

<sup>30</sup> Table 3. In *P.Oxy.* 18.2174 antisigma is written with the diple beside 9 cons. lines: > ; the annotator of *P.Oxy.* 3.445 (Table 1) uses the combination O>.

to lines of comparable content.<sup>31</sup> Papyri of Homer that preserve it tend to support the first of these explanations, but the evidence is slight. Of the five Homeric texts with antisigmas, one or two use it in the context of line transposition (the one certain case is a text actually contemporary with Aristarchus). Yet not even this conforms exactly to his reported practice, since stigme is lacking.<sup>32</sup> Of the other three texts, even those which otherwise apply Aristarchan sigla "correctly" deviate in their use of the antisigma.<sup>33</sup> Clearly by the Roman period scribes had made it part of their repertoire and given it a meaning wholly different-- although still textual-- from that assigned it by Aristarchus.<sup>34</sup>

A collection of four sigla-- the diple in non-Homeric texts, a simple stroke (usually diagonal), a dotted obelus, and chi -- occur in papyri with noteworthy frequency, but seldom with obvious meaning. For the unexplained occurrences I offer here an explanation that is hardly new, but was proposed by Sir Eric Turner several years ago.<sup>35</sup> I hope, however, that it will acquire force from a gathering of the primary and secondary evidence. It is simply that these-- and undoubtedly other signs, for example the unexplained examples of antisigma-- were used in much the same way that Aristarchus used the diple, namely to indicate something worthy of comment in a line. Frequently this may have been all that the reader, pen in hand, intended-- especially when the siglum he added was the nondescript and apparently nameless diagonal stroke.<sup>36</sup> In practical terms, though, some of these sigla probably served as reference marks, and directed readers to discussions of interesting points in separate

<sup>31</sup> Antisigma used (a) in conjunction with stigme (\*) at lines to be interchanged: the scholia call for ⌈ at II. 2.192 and \* at 203-205. Cf. *Anecd. Romanum* (above, n. 3): τῷ δὲ ἀντίσιγμα καὶ τῇ στιγμῇ, ὅταν δύο διάνοια τὸ αὐτὸ σημαίνουσαι, τού ποιητοῦ γεγραφότος ἀμφοτέρας, ὅπως τὴν ἐτέραν ἔληται· τῷ δὲ χρόνῳ καὶ αἱ δύο εὐρέθησαν οὐκ ὁρθῶς ἔχουσαι); also *Anecd. Parisinum* (above, n. 3): *antisigma ponebatur ad eos versus quorum ordo permutandus erat*). At another passage in the *Anecd. Romanum* (above, n. 3) a similar use is prescribed for the antisigma alone (τὸ δὲ ἀντίσιγμα καθ' ἑαυτὸ πρὸς τὸν ἐνηλλαγμένους τόπους καὶ ἀδόντας), but no examples survive; (b) with or without the stigme, to mark lines expressing the same idea in different ways: in *Ven. A II.* 8.535-37 have ⌈, 538-40 have \* and the related scholium explains εἰς γὰρ τὴν αὐτὴν γεγραμμένοι εἰσὶ διάνοιαι; A also has ⌈ at 17.219, cf. 17.215. (Cf. *Anecd. Romanum* (above, n. 3): τὸ δὲ ἀντίσιγμα περιεστιγμένον [i.e. ⌈] παρατίθεται ὅταν ταντολογῇ καὶ τὴν αὐτὴν διάνοιαν δεύτερον λέγῃ; *Anecd. Parisinum* (above, n. 3): *antisigma cum puncto ponebatur, cum eiusdem sensus versus duplices essent et dubitaretur, qui potius legendi; cf. cod. Harl. 5693, saec. XVI, re-ed. G. Dindorf, *Scholia Graeca in Homeri Iliadem* 1 [Oxford 1875] p. xlvi: τὸ δὲ ἀντίσιγμα καὶ αἱ δύο στιγμαὶ ὅταν κατὰ τὸ ἔχης δις ἢ τὸ αὐτὸ νόμα κείμενον. καὶ ἐπὶ μὲν τῷ προτέρου τίθεται τὸ ἀντίσιγμα, ἐπὶ δὲ τῷ δεύτερον δι δύο στιγμαῖ]. Conceivably yet another function-- to mark an athetesis or a problematic passage discussed in a scholium-- is represented by the ⌈ in *Ven. A* at II. 24.558. The line is lacking in several mss., and there is a scholium in a later hand noting that the line was not found in "the old copy."*

<sup>32</sup> Antisigma used in the context of line transposition: *P.Tebt.* 1.4, dated to the first half of the 2nd cent. B.C. Probably also in *P.Oxy.* 15.1818, where it is written beside lines prematurely copied (the place for insertion is lost).

<sup>33</sup> There are two Homeric papyri, *P.Haw.* 24-28 and *P.Oxy.* 3.445 etc., in which Aristarchan sigla are generally "correctly" applied but the antisigmas follow a different system. In the former, however, the other sigla seem to be added by the original scribe, while the antisigmas accompany notes by a hand that was probably later. In *P.Lit.Pisa* 2 the meaning of the antisigma is not clear.

<sup>34</sup> Or for that matter by Aristophanes, evidently its inventor, who used it with sigma beside lines of comparable content; Pfeiffer (above, n. 3) 178.

<sup>35</sup> E.G. Turner, *Greek Papyri* (2nd ed. Oxford 1980) 115-18.

<sup>36</sup> In fact for several of the occurrences of this sign that are listed in Table 3 with unexplained sigla the reasons for their presence can be guessed from the context: they appear in the vicinity of errors or variants, or near the beginning of significant anecdotes. In a single papyrus, however, cryptic examples may also occur (so, e.g., in *Brit.Libr.inv.* 131v and *P.Oxy.* 2.223). Where there is significant doubt about the meaning of a sign, therefore, it has been included in Table 3.

hypomnemata, or in other authoritative texts. For the "noteworthy" characteristic of many a marked passage can be quite unclear to the uninitiated reader, even when the text is fairly intact. Unless explanatory commentaries existed, the meaning of many signs would presumably have become, in time, as much a mystery for ancient readers as they are for us, even if the readers themselves added the signs. Each of the four common sigla to be treated here, however, also had certain practical functions, and these need to be set out.

Hephaestion treats the use of the diple, first, as a punctuation mark in texts of poetry. It has two forms, called by him διπλῆ ἔξω νενευκυῖα (>) and διπλῆ ἔσω νενευκυῖα (or βλέπουσα, <).<sup>37</sup> Papyri provide only the scantiest evidence, however, for the system he sets out. Indeed, although the ἔξω νενευκυῖα form (>) is quite common in papyri, there are scarcely any examples of its opposite. Among poetic texts it appears only once in papyrus containing lyric (Alcaeus) and once in a text of tragedy, and only in the latter could it possibly conform to Hephaestion's system.<sup>38</sup> In its other rare appearances, its significance is unclear, and I suspect it is actually a carelessly written version of its more common counterpart, >.<sup>39</sup> Certainly this is the likeliest explanation for it in Brit.Lib. inv. 128, a text of Homer marked with Aristarchan sigla, including a diple of that conventional form.

Papyri may not illustrate Hephaestion's system for punctuating texts of poetry, but they do provide abundant evidence for the use of the diple as a punctuator marking new sections in texts of prose as well as poetry. Presumably the rightward point of the usual form made it a convenient divider.<sup>40</sup> It was also the standard symbol for marking quotations, and when so used it appears at the left of each line quoted.<sup>41</sup> Once or twice, like antisigma, it marks erroneous text. Occasionally it introduces or concludes a marginal note, and there it may reflect the punctuation of the source-commentary. In one

<sup>37</sup> Hephaestion (above, n. 19) 75-77: (1) in lyric texts, the διπλῆ ἔξω βλέπουσα (>) marked the change of meter at the halfway point in strophic poems of Alcman; (2) in texts of tragedy and comedy, the διπλῆ ἔσω νενευκυῖα (<) indicated the division between strophe and antistrophe in passages sung alternately by different performers. (Here the paragraphus that normally divided the strophes would not suffice, since it was also at changes of speaker). The διπλῆ ἔξω βλέπουσα was written, however, if there was no metrically equivalent antistrophe but only a change to a new strophe. (3) In a parabasis where an antepirrheme corresponded to an epirrheme, the διπλῆ ἔξω νενευκυῖα marked the former, the ἔσω νενευκυῖα the latter. (4) Where iambic dialogue intervened between corresponding lyric strophes, the διπλῆ ἔξω βλέπουσα was written at the beginning of the last line of the first set of strophes, the reverse sign at the end of that line; the διπλῆ ἔξω βλέπουσα was written at both the beginning and the end of the last line of the corresponding strophes.

<sup>38</sup> The διπλῆ ἔσω νενευκυῖα occurs in *P.Oxy.* 15.1788 etc. (Alcaeus; with > and < in successive lines) and in *P.Tebt.* 3.692 (Soph. *Inachos*; *GMAW*<sup>2</sup> n. 58)

<sup>39</sup> Other occurrences of the διπλῆ ἔσω νενευκυῖα: Brit.Libr.inv. 128 (Hom., Table 1: *L*, plus > and other Aristarchan signs), P.Athen.Univ. inv. 2780-1 (medical receipts, Table 3), *P.Oxy.* 24.2389 (comm. on Alcm., Table 3: *L*, perh. with <sup>¶</sup> above, i.e. οὐ(τος)? The text is lost at the right of the siglum, so there is no way to know whether it bears any relation to Hephaestion's system.), P.Strassb.inv. Gr. 2675 (Hom., Table 1).

<sup>40</sup> Diplai separating passages of text: see Table 2C. In this role diplai are likely to be written with a flourish of the pen. Scribe A of the Codex Sinaiticus frequently wrote a diple below section numbers. For the use of the diple as a dividing sign in Herculaneum texts see below, n. 93.

<sup>41</sup> Diplai marking quotations: see Table 2C and *GMAW*<sup>2</sup> n. 76. In *P.Ant.* 3.182 only one diple, written < and embracing two lines, is preserved. Single or double diplai mark quotations in theological texts too (*P.Oxy.* 3.405 = theolog. fr., 3rd cent.; Bib.Vat.Gr. 1209 = Heb. 1.1-2.2, 4th cent., B.Metzger, *Manuscripts of the Greek Bible* [Oxford 1981] no. 13; >> in *Pap.Texte Abh.* II, III (comm. of Didymus on Job, 6th cent.).

or two papyri finally, there is concrete evidence to support Turner's suggestion that it served as a reference mark to hypomnemata.<sup>42</sup> Here it marks either a passage for which a note is supplied, or both the text and its related note. The diple in such a context is certainly an acknowledgement that the text contains an interesting point: the annotator has, after all, gone to the trouble of excerpting relevant material from a commentary. Such a usage corresponds, interestingly, to the Aristarchan use of the sign in texts of Homer. His name and methods had perennial authority,<sup>43</sup> so it is perhaps not unreasonable to look for parallels in non-Homeric texts. Certainly diplai used in this way had no practical value as place-markers: the marginalia in these papyri and in ancient texts in general are so sparse that there was no need for signs to show where they applied. Certainly the vast majority of occurrences of the diple in papyri are opaque in meaning (Table 3) and the suggestion that they refer to hypomnemata, or that they at least direct attention interesting points, is especially attractive.

The next siglum in this set is a simple penstroke, usually written  $\diagup$ , although other versions occur.<sup>44</sup> It is the commonest of all signs encountered in literary papyri, occurring in more than a hundred texts. Its purpose is obvious about two-thirds of the time. Sometimes it serves as a simple check-mark, set in the left margin beside items in a list.<sup>45</sup> In an extension of this function it also marks text containing variants or (much more frequently) errors, omissions, or restorations.<sup>46</sup> In another role it commonly serves as a kind of divider, appearing like the paragraphus in the left margin at a break in sense, especially at the beginning or end of a speech. Most such examples are in Homeric papyri where, as Nancy Priest saw, scribes evidently sought to avoid confusion between the paragraphus and the obelus.<sup>47</sup> Similarly it may precede marginal notes or separate lemmata from comments, undoubtedly because the source-hypomnema had the same punctuation. In a large number of papyri, however, its function is obscure. Often in those texts it appears beside intact and apparently unflawed passages, and not at any natural break in the narrative.<sup>48</sup> In such cases it presumably indicates a passage to be

<sup>42</sup> *P.Oxy.* V 841, 34.2687. More commonly the siglum chi is used in this way to mark text supplied with notes (see Table 2F).

<sup>43</sup> Pfeiffer (above, n. 3) 232 (citing Cic. *ad Att.* 1.14.3, *in Pison.* 73, *fam.* 3.11.5, 9.10.1, Hor. *AP* 450) and 174.

<sup>44</sup> Variations:  $\diagup\diagup$  in *Brit.Libr. inv.* 126, *P.Flor.* 2.106, *P.Oxy.* 4.694 ("two dashes"), *P.Oxy.* 8.1089, *P.Oxy.* 18.2168 etc., *P.Turner* 9;  $\diagup$  in *P.Berol.inv.* 13044, *P.Bodm.* 26 + *P.Köln* 1.3, *P.Marm.* 1, *P.Med. inv.* C.N.R. 68.3, *P.Oxy.* 6.853, *P.Oxy.* 22.2322;  $\diagup\diagup$  in *Brit.Libr.inv.* 131v, *P.Berol. inv.* 10567, *P.Berol.inv.* 13284, *P.Oxy.* 2.223 (also  $\diagup$ ,  $\diagup\diagup$ ,  $\diagup\diagup\diagup$ ), *P.Oxy.* 35.2741;  $\diagup$  in *P.Mich. inv.* 2, *P.Oxy.* 2.223 (also  $\diagup\diagup$ ,  $\diagup$ ), *P.Oxy.* 44.3154;  $\diagup\diagup$  in *P.Oxy.* 7.1011;  $\diagup\diagup\diagup$  in *P.Paris* 2;  $\diagup$  (?) in *P.Marm.*;  $\diagup\diagup$  in *P.Cair.Masp.* 2.67172-74.

<sup>45</sup> In documents it can serve the same function; see, e.g., the agendas of Zenon discussed by Z. Aly, *Proc. XVIII Intern. Congress of Papyrology* (Athens 1988) 55-62 (with plates).

<sup>46</sup> Table 2D; note particularly *Brit.Libr. inv.* 733 (with various curved signs [Table 2G] to mark the lines between which omission occurred), *P.Flor.* 2.106 ( $\diagup\diagup$  at a line added between *ll.* 1.475 and 476), *P.Gen.* 1 ( $\diagup$  at two lines between which a line has dropped out, with *ancora*), *P.Morgan Libr.* (twice at omissions; 2 other omissions are marked by  $\times\circlearrowleft$ ), *P.Oxy.* 7.1011 ( $\diagup\diagup$  above text to be replaced at line 265 = *Pf. fr.* 194.65), *P.Oxy.* 7.1018 (interlinear, used with *b*' and *a*' to mark words to be transposed), *P.Oxy.* 17.2102 (interlinear, with revision and at point of insertion), *P.Strassb. inv.* Gr. 2462a+2489 (on right of line containing error), perh. also *P.Berol.inv.* 9782 (at right of error), and *P.Oxy.* 53.3710 (to mark error: perh.  $\diagup\diagup$ );

<sup>47</sup> N. Priest, *ZPE* 46 (1982) 59.

<sup>48</sup> Simple stroke beside intact text (Table 3): *P.Berol.inv.* 9764, *P.Berol.inv.* 9782, *P.Köln* 5.205, *P.Oxy.* 2.223 (see also Table 2), *P.Oxy.* 20.2259, *P.Oxy.* 31.2537.

looked into, but whether for accuracy or meaning or background is hardly apparent. This mark, even more defensibly than the diple and chi, was a "maid of all work."<sup>49</sup>

A much smaller group of papyri preserves examples of the dotted obelus, usually written  $\checkmark$ . Like the signs above, its meaning is unclear in the majority of cases, even when the text it accompanies is relatively intact.<sup>50</sup> Again as there, there are indications, not individually persuasive but suggestive in combination, that it too served as a reference mark linking commentaries and literary texts. The sign does seem to have a special association with hypomnemata: it is particularly common in commentaries, appearing without explanation in the margins of five. It also tends to accompany marginal notes, especially long ones which almost certainly came from commentaries.<sup>51</sup> Finally there are texts in which we can actually see it doing the work of a *signe de renvoie*, linking corrections or variants or notes to text.<sup>52</sup> That one of its regular functions was to link text and commentary as well as text and, say, variant, is entirely plausible.

Ghosts of the dotted obelus, incidentally, have been sighted in about twenty texts of poetry, but some at least can be banished. The papyri in question tend to be heavily encrusted with diacritical signs,<sup>53</sup> which naturally were subject to revision just like regular text. An individual scribe, therefore, might reasonably have added dots to draw attention to a diacritical mark he was adding<sup>54</sup> or to expunge an erroneous one,<sup>55</sup>

<sup>49</sup> Function of the simple stroke unclear: see Table 3, and note especially P.Berol. inv. 13044 (twice in consecutive lines), *P.Oxy.* 13.1611 (2 consecutive lines), *P.Oxy.* 15.1820 (9 times, including passages of 3 and 4 consecutive lines), *P.Oxy.* 21.2301 (on the right of the col.), *P.Oxy.* 21.2307 (left of coronis; cf. *P.Oxy.* 18.2165, with chi beside coronis), *P.Oxy.* 24.2389 ( $\checkmark$  4 times,  $\checkmark\checkmark$  once), *P.Oxy.* 37.2819 (at 2 consecutive lines).

<sup>50</sup> Dotted obelus beside relatively intact text (Table 3): *P.Oxy.* 1.16 etc., *P.Oxy.* 15.1797, *P.Oxy.* 21.2306 (a comm. by same hand as *P.Oxy.* 23.2368, where the same sign recurs). Other unexplained occurrences: Table 3, and n.b. *MPER* 1.73-83 (interl.), *MPER* N.S. 1.14 (interl.), *P.Flor.* 2.112 (comm.; 11 times, plus once with a marg. n.), *P.Ryl.* 3.475 (interl.), *PSI* 1.8 (once interl.: a corrected accent? see below, n.53; once written  $\overline{\cdot}$  beside the line: an expunged obelus? Aristarchan sigla are also used).

<sup>51</sup> Dotted obelus with marginal notes (Table 2E): *MPER* N.S. 3.37 (at end of long n.), *P.Bodm.* inv. 28 ( $\overline{\cdot}$  at left of a speaker n.), *P.Flor.* 2.112 (comm.; at left of m arg. note), *P.Oxy.* 11.1371 ( $\checkmark$  before the lemma of a long n.), *P.Oxy.* 15.1790 etc. (at right of the first line of a long n.), *P.Vindob.inv.* 200 ( $\overline{\cdot}$  ed., interl. at the point to which a n. refers).

<sup>52</sup> Table 2E; n.b. *P.Daris* inv. 12 (with restoration in top marg.), *PSI* 14.1399 (twice, in a draft of a speech, at a revision and its point of insertion); perh. *P.Köln* 2.76 ( $\checkmark$  above upsilon in the marg. variant  $\nu\pi\alpha$  [i.e.  $\dot{\nu}\pi\alpha$ : unless a corrected acc.??]). Examples of the use of the sign with corrections proliferate in the Codex Sinaiticus, particularly with shorter revisions, and sometimes in conjunction with the *ancora* (above, n. 23), and cf. its use as caret in *P.Bodm.* 2 (*GMAW*<sup>2</sup> no. 63, John 1-14; 3rd cent., Achmim?).

<sup>53</sup> Texts with frequent diacritical marks, including apparent dotted accents: *P.Oxy.* 5.841, *P.Oxy.* 9.1175 etc., *P.Oxy.* 10.1234 etc. (Pack<sup>2</sup> 59), *P.Oxy.* 15.1787 etc., *P.Oxy.* 21.2295, *P.Oxy.* 25.2427, *P.Oxy.* 25.2430 (*P.Turner* 3), *P.Oxy.* 26.2442, *P.Oxy.* 34.2697, *P.Oxy.* 35.2735, *P.Oxy.* 50.3545, *PSI* 1.8; *P.Oxy.* 32.2617 and *P.Oxy.* *Hels.* 6 are less heavily supplied with diacritics, but contain dotted accents.

<sup>54</sup> Dots mark the correct accent: *P.Oxy.* 5.841  $\dot{\alpha}\nu[\tau]\epsilon\rho\delta\omega\eta$  with  $\checkmark$  above alpha, for  $\dot{\alpha}\nu\tau\rho\epsilon\delta\omega\eta$  (edd.) or  $\dot{\alpha}\tau\rho\epsilon\delta\omega\eta$ ; the correct mark of quantity is marked by dots above the incorrect one in *P.Oxy.* 9.1175 etc., *P.Oxy.* 25.2427, *P.Oxy.* 25.2430 (*P.Turner* 3: twice; in 4 other cases too little survives for certainty), *P.Oxy.* 32.2617 (in the left marg.).

<sup>55</sup> Dots expunge incorrect accents: *P.Oxy.* 10.1234 etc. (Pack<sup>2</sup> 59  $\dot{\alpha}\mu\mu\epsilon$  with  $\checkmark$  above alpha, read  $\dot{\alpha}\mu\mu\epsilon$ ), *P.Oxy.* 10.1240 (Pack<sup>2</sup> 376  $\dot{\eta}$  with  $\checkmark$  below the circumflex, read  $\dot{\eta}$ ), *P.Oxy.* 15.1787 etc. ( $\dot{\iota}\iota\dot{\iota}\dot{\delta}\dot{\delta}\omega\iota\zeta$  with  $\checkmark$  above second iota: presumably  $\dot{\delta}\dot{\delta}\omega\iota\zeta$ ; first iota dotted; 2 other uncertain cases), *P.Oxy.* 25.2427 ( $\dot{\tau}\dot{\alpha}\dot{\chi}\dot{\alpha}\dot{\pi}\kappa'$  with  $\checkmark$  above second alpha, presumably for  $\dot{\tau}\dot{\alpha}\chi\alpha\pi\kappa'$ ; 4 other uncertain cases),

just as he did in revising the actual text.<sup>56</sup> If accents dotted in this way were acute or grave, they would inevitably resemble the dotted obelus, although the two kinds of mark had no relation. Many of the texts in question are very fragmentary, however, so it is unclear whether the dotted interlinear diacritics are errors or corrections.<sup>57</sup>

The last siglum, chi, is one of the commonest in literary papyri.<sup>58</sup> It appears now and then with variants or corrections, but in the majority of cases its meaning is no more apparent than that of many of the other signs treated above.<sup>59</sup> Its very obscurity leads us back to the same interpretation as above, that it indicates something noteworthy in a line and that by inference the annotator had access to a commentary where the interesting point was explained. It is worth noting in passing that chi never appears in Homeric papyri,<sup>60</sup> where of course the diple did this job. For chi, however, unlike the diple, there is considerable evidence in secondary sources to support the theory that the sign was a reference mark directing the reader to a commentary. We possess no single, general statement about its use for this purpose, since each of our sources treats the meaning of the siglum in the manuscripts of a single author. Still their accumulated information points to a common significance.

Diogenes Laertius, first, reports that in texts of Plato chi was used in much the same way as the Aristarchan diple, to mark passages containing any of a variety of

*P.Oxy.* 34.2697 (δυνῶν with ρ above epsilon: Μαριανδυνῶν Ap.Rhod. *Argon.* 2.140), *P.Oxy.* 35.2735 (Ιτράπετα with ρ above alpha: the grave appears secondary), *P.Oxy.* 45.3220 (τεσσαρακονταετής with ρ above second epsilon: τεσσαρακονταετής wanted, as codd. [Hes.W.&D. 441]), *P.Oxy.* 50.3545 (μαν with ρ above alpha, for μάν, i.e. μῆν, *Theocr.* 1.86), *P.Oxy.Hels.* 6 (ει [γάρ τι]ς [μ] α[λλη γε γνων]ικων with ρ between iota and sigma of the enclitic τις), *PSI* 1.8 (απονοσφιν with ρ above alpha), *PSI* 11.1214 (Pack<sup>2</sup> 1482, χῆρα with ρ above eta; *leg.* χῆρα; a variant in the text is also dotted); perh. *P.Köln* 2.76, II. 15.625 υπέκ( ) lost in lacuna, υπατ in the marg. with ρ above epsilon (for υπατ as in most codd.).

<sup>56</sup>Dots were commonly used to designate variants (copied presumably from independent exemplars). There are instances in about 70 texts, sometimes with the source named, e.g.: *P.Oxy.* 5.841 at Pind. *Paeon.* 2.61, γρ Ap( ) above the nu of ενκατεθηκαν; *P.Oxy.* 9.1175 etc. at Soph. *Eurypylos* fr. 84.2,

ἢ λειψε οδωι· beside οδωι). When corrections are dotted, they too presumably come from independent exemplars, for about half the time there are dotted variants in the same text: Brit.Lib. inv. 135, *P.Oxy.* 1.16 etc., *P.Oxy.* 5.841, *P.Oxy.* 8.1082 + *P.Lond.Lit.* 59 (Pack<sup>2</sup> 237), *P.Oxy.* 9.1175 etc., *P.Oxy.* 15.1787 etc., *P.Oxy.* 19.2220 (Pack<sup>2</sup> 373), *P.Oxy.* 22.2313 (Pack<sup>2</sup> 128), *P.Oxy.* 22.2327 (*P.Turner* 3), *P.Oxy.* 23.2372 (Pack<sup>2</sup> 1892), *P.Oxy.* 25.2427, *P.Oxy.* 25.2430 (*P.Turner* 3), *P.Oxy.* 26.2442, *P.Oxy.* 32.2620, *P.Oxy.* 35.2735.

<sup>57</sup>Questionable cases are found in: *P.Oxy.* 15.1787, *P.Oxy.* 21.2295, *P.Oxy.* 25.2427, *P.Oxy.* 25.2430 (*P.Turner* 3), *P.Oxy.* 26.2442 fr. 6.2, *P.Oxy.* 26.2443 (Pack<sup>2</sup> 1918, *ZPE* 26 [1977] 38-39, *Alcm.*), *P.Oxy.* 27.2452.

<sup>58</sup>Table 2F. In *P.Oxy.* 9.1174 etc. the name of the siglum was used rather than the sign itself: χ.

<sup>59</sup>Table 3. Note especially: *P.Oxy.* 10.1231 etc. (at 2 consecutive lines), *P.Oxy.* 18.2165 (written at left of coronis; cf. *P.Oxy.* 21.2307, where ρ appears beside a coronis), *P.Oxy.* 24.2394 (twice in consecutive lines), *P.Oxy.* 25.2427 (twice; also, separately, a marginal note refers to the use of the siglum: οὐκ ἦν τὸ ρ ἐν τῷ Θέωνος), *P.Oxy.* 33.2654 + *P.Köln* 1.4 (twice alone, once in a row or 4, to mark end of act, or, if this is a collection of excerpts, to indicate an omission?), *PSI* 7.846 (a marg. n. also refers to a siglum now lost: πρὸς τὸν πλεονασμόν τοῦ αν; chi twice in consecutive lines), *PSI* 10.1175 (twice in consecutive lines).

<sup>60</sup>With the irrelevant exception of P.Morgan Libr., where it is proofreader's mark (Table 2F), not a critical siglum. In the single case in which Eustathius uses χιάζω in a critical context (on *Od.* 2.144) he is actually discussing an Aristarchan atethesis, and clearly gives the verb the general meaning of "mark with a critical sign:" σημείωσαι δὲ καὶ ὅτι τὸ ἐφεξῆς Ἀρισταρχος ἀθετήσας ἔχιακεν, ἀδύνατον εἶναι εἰπὸν τοσαῦτα βαστάσαι ἀνθρωπον.

interesting features: χὶ πρὸς τὰς λέξεις καὶ τὰ σχήματα καὶ ὅλως τὴν Πλατωνικὴν συνήθειαν.<sup>61</sup> Whether these were then also discussed in a commentary he does not say, but a commentary seems required for the siglum to have had full effect.<sup>62</sup> The use of chi as a critical siglum is also attested in the scholia to Pindar, Sophocles, and Euripides. As for Plato, the siglum in those poetic texts evidently carried a wide variety of meanings. These were explained in commentaries of which these scholia are the remnants, but could hardly have been guessed without those commentaries.<sup>63</sup> A papyrus text of comedy (*PSI* 7.846) also provides information on the sign. It contains a marginal comment phrased like the explanations of Aristarchan sigla in scholia to Homer. It refers undoubtedly to chi, for chi appears elsewhere in these margins.<sup>64</sup> Like the diple, finally, chi is quite firmly linked to commentaries in some papyri, specifically when it accompanies marginal notes<sup>65</sup> or variants,<sup>66</sup> or marks the lines where they apply.

According to late sources,<sup>67</sup> chi could be used interchangeably with the monogram Χ, which also survives in several papyri,<sup>68</sup> to indicate noteworthy passages. While in the most elementary sense both signs evidently marked something interesting in a text, they were not in fact interchangeable. For while I am arguing that chi sometimes was a reference mark to commentaries, the monogram certainly was not: for a common habitat for it is commentaries and treatises. Moreover, in no fewer than five papyri

<sup>61</sup> See above, n. 17.

<sup>62</sup> Among papyri the sign appears in two Platonic texts, with unclear purpose. Perversely, it is the diple, occurring in 8 papyri, that predominates in surviving papyri of Plato.

<sup>63</sup> See Fowler (above, n. 13) 27 for references in the scholia to Pindar, Gudeman (above, n. 3) for scholia to Sophocles, and the references collected in G. Dindorf's edition of the scholia to Euripides (Oxford 1863) vol. 4 p. 310. Note, e.g.: sch. Pind. *Pyth.* 3.18a, σημειοῦνται οἱ ὑπομνηματισάμενοι τὰ δύο κῶλα τὸ χ' παρατιθέντες, ὅτι ἀσυνάρτητά εἰσι. πῶς γάρ φησιν εἰς Ἀΐδαο δόμον, καὶ πάλιν ἐν θαλάμῳ κατέβει; καὶ ἐγγούμενοι περιττεῖν λαμβάνονται τὸ ἐν θαλάμῳ; *ibid.* 4.135d τὸ δὲ σημεῖον χ', ὅτι σταθμὸν τὰς κατ' ἄγρους ἐπαύλεις ἔλεγον, καὶ ὅτι εὐδέειλον τὸ εὐδόλον προσονομάζεται....; *ibid.* 4.149b, 215b, 5.16b, *Nem.* 1.64b, *Isthm.* 6.47e; sch. Soph. *Phil.* 201, εὔστομ' ἔχε παῖς εἰώθασιν οὕτω λέγειν ἀντὶ τοῦ σώπα· τὸ δὲ τοιούτον κεχίσται ὅτι Ἐλλάνικος ποτε ἀναγινώσκων τὰ Ἡρόδοτου (2.71) ἔλεγεν "περὶ δὲ τῶνδε μοι εὔστομα κείσθω" ὃν διαιρῶν εἰς δύο λέξεις ἀλλ' ὡς ἀν τις εἴποι τεῦτα εὔστομα· τούτῳ δέ φησιν ὁ χορὸς κτύπον ἀκούσας ἐπερχομένου τοῦ Φιλοκτήτου καὶ στένοντος κατά τὴν πορείαν διὰ τὸ ἄλγος.

<sup>64</sup> The note in question, πρὸς τὸν πλεονασμὸν τοῦ αν, is written beside the broken text Ιούκ ἄν δοκῶ. The same πρὸς... locution recurs in *P.Oxy.* 8.1086 (comm. on *Il.*), where Aristarchan diplai are explained: lines 27-28) ἄμφω θη[λείας φόβον] "Αρης φορ[η]εούσας (*Il.* 2.767): τὸ σημεῖον πρὸς τὸν φόβον ὅτι..., lines 97-98) [πᾶσαι δ' ὀιγνυτο πύλαι, ἐκ δ' ἔσσυτο λαός (*Il.* 2.809): τὸ σημεῖον πρὸς τούτῳ ὅτι τὴν πύλην π[ληθυντικῶς εἱρηκεν.], et al.; cf. sch. A (Aristonicus) 1.218a ἔκλυον· πρὸς τὸ σχῆμα, ὅτι οὐ κλύνουσιν εἰπεν ή ἀκούσονται. In another carefully revised text of comedy, *P.Oxy.* 25.2427, the note οὐκ ἦν τὸ χ ἐν τῷ Θέωνος also clearly refers to the use of chi as a critical symbol.

<sup>65</sup> Table 2F. In *P.Paris* 71 chi is written 5 times beside text for which notes are provided. It does not accompany the notes, but that they were copied from a hypomnema is beyond doubt, for one includes a lemma, and four are introduced by ὅτι, a truncation of the phrase τὸ σημεῖον ὅτι... familiar from Aristonican/Aristarchan scholia. In *PSI* 11.1192, similarly, the note begins with a lemma. In *P.Oxy.* 5.841, where the diple is also so used, and in *P.Oxy.* 26.2450 chi appears beside text, not notes. In *P.Berol.inv.* 9780v chi is written twice, beside text and subject headings in the marg.

<sup>66</sup> Variants in a heavily annotated text like *P.Oxy.* 5.841, for example, are especially likely to have been taken from commentaries.

<sup>67</sup> *Anecd. Parisinum* (above, n. 3): Χ chi et rho. haec sola Χ voluntate uniuscuiusque ad aliquid notandum ponitur; *Isidore Etymologiae* 1.21.22 (above, n. 3): Χ C<h>risimon. Haec sola ex voluntate uniuscuiusque ad aliquid notandum ponitur.

<sup>68</sup> Table 3: it is usually written Χ, but has several variant forms Σ, Φ, Χ, Φ, Φ.

where the chi-rho appears the simple siglum chi is present too, and the two can hardly have been equivalent.

Whether chi and χ originally developed as symbols for the same word is unknown. Even the identity of such a word is open to question: χρῆσις, "passage," or χρηστόν, "useful" are the meanings usually suggested for the monogram. In the literary texts where it appears-- fragments of Aeschylus, Euripides, Sophocles, Menander, and Stesichorus<sup>69</sup>-- a case can be made for the former. Certainly the gnomic quality of the dramatic trimeters encouraged quotation and anthologization of appealing "passages."<sup>70</sup> Ancient sources also provide evidence for χρῆσις as a term for a quoted "passage" of text,<sup>71</sup> but the usual meaning of the term is different: in the scholia to Homer it conventionally refers to Homeric "usage." Most occurrences of the monogram in any case are in commentaries, treatises, and technical works, beside sections that a reader would hardly have chosen to quote or anthologize, although they might have struck him as useful. Certainly χρηστόν is the better choice here,<sup>72</sup> and in fact it is universally preferable. For a gnome or passage that a reader found memorable or good for excerpting from comedy or tragedy would clearly have been somehow "useful" to him. It is unlikely in any case that a monogram so distinctive in appearance and appearing so frequently in texts of roughly the same date and provenance bore more than one meaning.<sup>73</sup>

Comparable monograms were also occasionally used to draw the reader's attention to important passages. One is ϕ, standing for ὠραῖον, found exclusively in legal works written in Latin and annotated in Greek, or written in a mixture of Latin and Greek, and dated to the fourth to sixth centuries. In the margin of a text of Gaius and another of juridical fragments the scribe has made the monogram ornate by the addition of decorative flourishes, more or less in the manner of the coronis in many texts. In the juridical text it appears in the marginal note σημ(είωσαι) ϕ.<sup>74</sup> It is also imbedded (in less ornate versions) in the text of two other papyri, *P.Ryl.* 3.476 (Pack<sup>2</sup> 2282) and the so-called *Scholia Sinaitica*. (Pack<sup>2</sup> 2958). It is the latter occurrence that confirms its

<sup>69</sup> *P.Oxy.* 20.2255, *P.Oxy.* 27.2452, *P.Oxy.* 32.2617 (see above, n. 19), *P.Oxy.* 32.2637, *P.Oxy.* 44.3151, *P.Sorb.* inv. 2328; see also below, n. 72 for *P.Berol.inv.* 11866A-B, *P.Oxy.* 8.1086 etc., *P.Oxy.* 13.1611, subliterary texts where the monogram marks citations or quotations.

<sup>70</sup> See Pack<sup>2</sup> 1567ff for anthologies of tragedy and comedy on papyrus.

<sup>71</sup> *Dion.Hal. De Rhet.* 4.3, *Apoll.Dysc. De Synt.* 1.119, *Anecd.Oxon.* 2.452.19 (ϕ Ἀριστοφάνους [Av. 1180])

<sup>72</sup> χ at presumably "useful" passages: *P.Berol.inv.* 11866A-B (twice at opinions cited from one Ἀνατόλιος, in a legal catechism), *P.Oxy.* 6.885 (treatise), *P.Oxy.* 8.1086 etc. (hypomnema, three times: at a new lemma; at a quotation from Alc.; at a reference to a previous line of the poem), *P.Oxy.* 13.1611 (treatise; at the beginning of an anecdote Acusilaus, with / beside the two lines that follow the excerpt; a comparable anecdote at line 42 is not so marked), *P.Oxy.* 25.2429 (hypomnema: beside a comment, approx. at midpoint) *P.Oxy.* vol. 29 (treatise: the marked text is lacunose), *P.Oxy.* 35.2741 (hypomnema: beside νή Δία δέδοικ, prob. a quotation, at approx. the midpoint of a comment), *P.Oxy.* 53.3711 (hypomnema: nine times repeatedly beside comments, including three times within one passage: probably to mark passages for excerpting [M. Haslam *ad loc.*]), *PSI* 9.1095 (treatise on logic; at the conclusion of a demonstration), *PSI* 11.1182 (Gaius *Instit.*; at the heading of a new section).

<sup>73</sup> Emend McNamee, *Abbreviations* (above, n. 28) p. 109 and n. 81.

<sup>74</sup> *P.Ryl.* 3.475, *PSI* 11.1182 (at two other passages here the annotator has added what looks like the "tail" of a coronis: ϕ, ϕϕϕ -- apparently without the monogram; in neither case is there anything obviously noteworthy about the marked text).

meaning, for σημ(είωσαι) ὥραιον also occurs there, with ὥραιον written in full.<sup>75</sup> The other monogram in question combines the transverse rho with phi, perhaps to represent φράστις and to mark an interesting poetical feature. It occurs only once in papyri,<sup>76</sup> but its currency must have been wider than this suggests, for it is mentioned in the *Anecdotum Parisinum* and by Isidore, both Latin sources with Greek roots. They identify it as a sort of query mark, but neither sufficiently explains the abbreviation.<sup>77</sup>

If the diple, the simple stroke, the dotted obelus, and chi shared a common use, namely indicating something interesting in a passage, then why the variety? Not because of varying provenance or date, for the evidence is actually less haphazard than usual on those points. All four sigla, but most notably chi and the diple, were in common use in one particular city within one restricted period of time: of the nearly 150 papyri containing one or more of these four marks, nearly half come from Oxyrhynchus and are dated to the second or third century, while another twenty Oxyrhynchite texts are from the first Christian century or the end of the first century B.C. Nor did the contents of a text determine which sigla were appropriate. No mark is restricted to any single author or genre. Chi and the diple are used together in relatively heavy concentration in texts of lyric, especially Pindar. They are even commoner, though, in texts of Plato and can also be found alone or together in texts of the three major tragedians and also of other authors. A scribe's choice of one over another was evidently personal, limited only by the convention that influenced him to use one of these particular signs. Even this was a convention honored much in the breach, however. For a number of unique sigla, apparently with critical significance like these four, also survive in Egyptian papyri of the Roman period (Table 3).

Of course when two or more of the common sigla appear in a single text there must have been a reason for the differentiation. If they are the work of different hands (something usually very difficult to decide),<sup>78</sup> they might reflect the varied interests of two different readers of the same book. If a variety of sigla was added by the same hand,<sup>79</sup> however, which seems to be the norm, it must have been to keep references clear. Certainly in correcting text, scribes varied the sigla they used to forestall

<sup>75</sup> *Scholia Sinaitica* §27 *Ac sacer*: ὅταν εἰς τὸν πένθερον [ἡ προΐξ] κα(τέ)ρχεται, δύναται διὰ παψτν βλαβήναι, κ(αὶ) ὅτι ὁ πατήρ ἐπιδόντας προίκα δύναται πο[ι]ῆσαι αὐτὴν *adventician*. σημ(είωσαι) ὥραιον [καὶ] ὄντισμον (see also §12, σημ(είωσαι) ϕ?). ZSS 4 (1883) 1-32 (diplomatic transcript), B. Juebler, E. Seckel, *Jurisprudentia Antejustiniana Reliq.* 2.2 (6th ed. 1927) 461-84, Pack<sup>2</sup> 2958. The common nature and subject of this text and *P.Ryl.* 3.475 suggested to C.H. Roberts that they were from the same work.

<sup>76</sup> In *P.Oxy.* 52.3686 ϕ is written at the left of the marginal letters πο[ι] beside Soph. *Ant.* 120, a passage of lyric: φρ(άσις) ποι[ητική]? P.J. Parsons, cited by H. Cockle, but they note the possible omicron or sigma in the right part of the monogram.

<sup>77</sup> *Anecd.P arisinum* (above, n. 3): *phi et rho. haec apponuntur quotiens vel emendatio vel (sensus) eius versus sollicitius est inspiciendus; Isidore Etymologiae* 1.21.23 (above, n. 3): *phi et ro, id est φροντίς. Haec, ubi aliquid obscuritatis est, ob sollicititudinem ponitur.*

<sup>78</sup> Papyri in Table 3 with multiple sigla added by two or more hands: *P.Oxy.* 5.841, *P.Oxy.* 25.2427, *P.Oxy.* 26.2442, perh. *P.Oxy.* 35.2741.

<sup>79</sup> Papyri in which a variety of sigla have been added by a single hand (Table 3): *P.Ant.* 3.116, *P.Berol.inv.* 9780v, *P.Oxy.* 15.1809, *P.Oxy.* 17.2102, *P.Oxy.* 18.2174, *P.Oxy.* 20.2255, *P.Oxy.* 22.2322, *P.Oxy.* 22.2327 (*P.Turner 3*), *P.Oxy.* 23.2368, *P.Oxy.* 24.2389, *P.Oxy.* 26.2441, *P.Oxy.* 26.2445, *P.Oxy.* 26.2450, *P.Oxy.* 27.2452, *P.Oxy.* 32.2617, *P.Oxy.* 37.2812, *P.Oxy.* 44.3151, *P.Oxy.* 44.3152, *P.Oxy.* 45.3224, *P.Oxy.* 52.3656, *P.Oxy.* 52.3675, *P.Oxy.* 53.3710, *P.Ryl.* 3.475, *P.Ryl.* 3.539, *P.Tebt.* 3.692, *PSI* 11.1182,

confusion.<sup>80</sup> By analogy, it seems likely that when chi and the diple appear together (and this is the commonest combination) each bore a different meaning, and in practice probably referred to a different hypomnema. Is it realistic to imagine readers so energetic as to link their books to two or more commentaries? For texts containing these sigla, yes, for many were also very carefully revised, sometimes against two or more exemplars,<sup>81</sup> and some contain marginal commentary referring explicitly to more than one external source.<sup>82</sup> They are the books of scholars first brought to our attention by Eric Turner.<sup>83</sup> Outstanding among them are three which are hypomnemata themselves, notably one on Eupolis which has indeed been very carefully revised.<sup>84</sup>

Signs less uniform in shape or less common than those already discussed also survive.<sup>85</sup> A cross (†) is common at the top left of a column of writing, sometimes to delimit the area to receive writing, elsewhere perhaps with Christian significance.<sup>86</sup> A simple dot might occasionally indicate an error, or possibly a division in the text.<sup>87</sup> Several other signs, particularly curved and angled ones, indicate omissions or corrections or variants; others mark divisions in the text. Although some bear a resemblance to the antisigma or the diple, it is probably best not to force them into some such category, since their shapes vary considerably from each other. Each in any case is unambiguous in context. They are useful reminders that it was human hands and not machines that wrote these texts.

<sup>80</sup>Texts in which more than one siglum is used with corrections (Table 2): Brit.Lib. inv. 107, Brit.Lib. inv. 733, *P. Amh.* 2.24, *P. Marm.*, *P. Paris* 2 (all these employ different sigla within a single column); also *MPER* 1.73-83, *P. Ant.* 3.160, *P. Morgan Libr.*, *P. Oxy.* 9.1174 etc., *P. Strassb. inv. Gr.* 31+32; perh. *P. Oxy.* 25.2430 (*P. Turner* 3).

<sup>81</sup>There are 32 in Table 3, and just half contain two or more sigla (marked here with \*): *P. Heid.* 4.2 etc., \**P. Oxy.* 1.16 etc., \**P. Oxy.* 2.223, \**P. Oxy.* 5.841, *P. Oxy.* 6.852, *P. Oxy.* 9.1174 etc., *P. Oxy.* 9.1175 etc., *P. Oxy.* 11.1361 etc., \**P. Oxy.* 13.1620, *P. Oxy.* 15.1788 etc., *P. Oxy.* 15.1792 etc., *P. Oxy.* 15.1820, *P. Oxy.* 2064, *P. Oxy.* 17.2100, *P. Oxy.* 18.2165, *P. Oxy.* 21.2295, *P. Oxy.* 21.2297, \**P. Oxy.* 22.2327 (*P. Turner* 3), *P. Oxy.* 24.2387, *P. Oxy.* 24.2394, \**P. Oxy.* 25.2427, \**P. Oxy.* 26.2441, \**P. Oxy.* 26.2442, \**P. Oxy.* 26.2445, \**P. Oxy.* 26.2450, *P. Oxy.* 27.2468, \**P. Oxy.* 32.2617, \**P. Oxy.* 35.2741, \**P. Oxy.* 53.3710, \**P. Oxy.* 53.3711, \**P. Rein.* 1.2 etc., *PSI* 2.123, \**P. Tebt.* 3.692. See K. McNamee, "Papyri Revised by Two or More Hands," *Proc. of the XVI Intern. Congress of Papyrology* (Chico, California 1981) 79-91.

<sup>82</sup>Marginal notes referring to more than one external source: Brit.Lib. inv. 271 etc. (ἀμφότεροι or Ἀμμώνιος, ἐν ἀλλ- , Ερω( ), Apion), *P. Oxy.* 5.841 (Nicanor?, Aristonicus?, Theon, Chrysippus?), *P. Oxy.* 9.1174 etc. (Nicanor?, Aristonicus?; that a second exemplar was used is indicated by a reference to a source by the numeral α' [implying that there was a β']), *P. Oxy.* 11.1361 etc. (Ptolemy, Pindarion?), *P. Oxy.* 22.2327 (*P. Turner* 3; Apion, Nicanor?, ἀμφότεροι ), *P. Oxy.* 24.2387 (Aristonicus, Ptolemy), *P. Oxy.* 26.2442 (Didymus?, Nicanor?), *P. Oxy.* 32.2617 (ἀμφότεροι ), *P. Oxy.* 37.2803 (Theon, Aristonicus?). Perh. *P. Oxy.* 9.1175 etc. (ref. to Nicanor?, also the note ἐν ἐτέρῳ); perh. *P. Oxy.* 25.2427 (ref. to Theon, also the note οὐκ ἔν τὸ χρ.).

<sup>83</sup>E.G. Turner, "Scribes and Scholars of Oxyrhynchus," *MPER* N.S. V 141-46; and above, n. 35.

<sup>84</sup>Hypomnemata containing more than one obscure siglum: *P. Oxy.* 23.2368 (on Bacchyl.; sigla by a single hand), *P. Oxy.* 24.2389 (on Alcm.; sigla added by a single hand), *P. Oxy.* 35.2741 (on Eup.; sigla by perh. 2 hands, one the original scribe and the other the hand that has added text-critical notes).

<sup>85</sup>Table 2G.

<sup>86</sup>So Bartoletti in ed. of *PSI* 14.1399.

<sup>87</sup>Stichometric dots-- i.e., those that seem to have been added by scribes as they counted written lines for the purpose of determining fees-- have not been collected here.

There remain several miscellaneous sigla, none with clear significance, in about two dozen texts.<sup>88</sup> On one level, their dissimilarity from the sigla discussed above simply confirms that individual scribes worked in idiosyncratic ways. Certainly the array of forms assumed by standard signs like the ancora and antisigma and the fluctuating significance of most sigla make it clear enough that this happened. In fact, though, it is more helpful to look at the matter another way. More than half these papyri with unique signs come from towns other than Oxyrhynchus and from centuries other than the first to third. In other words, scribes in Oxyrhynchus in the high Roman period seldom used sigla other than those discussed above. This suggests that those signs were part of an approved canon in scriptoria in that time and place. While each of them individually may have meant roughly the same thing: "look this up!" the repertoire of symbols appropriate for making this point was fairly limited, and only rarely do we find Oxyrhynchite scribes borrowing (or inventing) other marks. The impression of regularity at Oxyrhynchus is further confirmed by a glance again at unconventional signs used to mark new sections of text: most of them too pre-date or post-date the Roman period, and derive from other towns.

Of course the regularity of Oxyrhynchite material does not mean that order and convention prevailed only in the scriptoria of that town.<sup>89</sup> The evidence from Oxyrhynchus is simply abundant and consistent enough to justify the general conclusions offered above about habits of scribes in that one city over a period of about three centuries. Relatively little evidence comes from other places, but it is important to note that the common marks are indeed represented outside Oxyrhynchus. I would not be surprised if they were actually conventional among scribes throughout in Roman Egypt. Certainly this is true of the coronis, itself a mark of a carefully written text, which survives in papyri from a variety of towns.<sup>90</sup>

Supporting this theory is the fact that across the sea, the language of signs changes only a little. Sigla familiar from Egyptian papyri-- chi and the diagonal stroke-- survive in a small number of Herculaneum texts,<sup>91</sup> the former apparently used as a critical siglum as in Egypt,<sup>92</sup> as well as, occasionally, the latter, which also had the familiar job of marking errors.<sup>93</sup> The paragraphus and coronis, for marking divisions in the text, are also familiar.<sup>94</sup> The practice of scribes in Herculaneum texts diverges, however, in their very common use of the diple where we are used to seeing

<sup>88</sup>Table 3, last col. I have seen photographs or plates of only about half of these, so conceivably some sigla are misrecognized examples of the common signs.

<sup>89</sup>In fact twenty-one of the Oxyrhynchus texts come from just seven pens, so naturally the sigla in those texts sometimes coincide: Scribe 1: *P.Oxy.* 22.2318, *P.Oxy.* 22.2327 (*P.Turner* 3), *P.Oxy.* 24.2389, *P.Oxy.* 25.2430 (*P.Turner* 3) (some scholarly notes may be by the same annotator as in *P.Oxy.* 22.2327 =*P.Turner* 3); Scribe 2: *P.Oxy.* 18.2163, *P.Oxy.* 18.2164, *P.Oxy.* 18.2178, *P.Oxy.* 20.2245, *P.Oxy.* 20.2250, *P.Oxy.* 20.2255, *PSI* 11.1210 etc.; scribe 3: *P.Oxy.* 15.1788 etc., *P.Oxy.* 26.2445, Scribe 4: *P.Oxy.* 21.2306, *P.Oxy.* 23.2368, Scribe 5: *P.Oxy.* 9.1174 etc., *P.Oxy.* 9.1175 etc.; Scribe 6: *P.Oxy.* 25.2427, *P.Oxy.* 44.3151, scribe 7: *P.Oxy.* 15.1787 etc., *P.Oxy.* 26.2442.

<sup>90</sup>Stephen (above, n. 1) 8.

<sup>91</sup>On scribal conventions in Herculaneum texts see G. Cavallo, *Libri scrittura scribi a ercolano = Cronache Ercolanesi* vol. 13 suppl. 1 (1983) 23-25.

<sup>92</sup>Chi as a critical symbol: *P.Herc.* 163, *P.Herc.* 460 + 1073 fr. 5 i.17-18, *P.Herc.* 1050 fr. 3.12, 19 vii.13 (Cavallo, *LSSE* pl. 28), *P.Herc.* 1065. The sign + which appears twice in *P.Herc.* 1148 is perh. another form of chi.

<sup>93</sup>Diagonal stroke (✓) as a critical symbol: *P.Herc.* 1148 xl (Cavallo, *LSSE* pl. 12). It marks errors or corrections e.g. in *P.Herc.* 182 (Cavallo, *LSSE* p.24).

<sup>94</sup>The coronis: *P.Herc.* 1427, *Ric.Pap.Erc.* 3, 1977, *P.Herc.* 994, *Ric.Pap.Erc.* 2, 1976, *P.Herc.* 163, *Cron.Erc.* 8, 1978, 52ff. The simple paragraphus occurs *passim*.

paragraphi,<sup>95</sup> in the presence of the double penstroke (//) to mark a citation,<sup>96</sup> as well as in the common use of chi, the asteriscus, and the dotted diple as space-fillers.<sup>97</sup> Each is familiar enough to us from Egyptian texts, but this routine and un-Egyptian use of them is a sign that the scribes who copied the Herculaneum texts were trained to a slightly different system-- a system, incidentally, which is probably closer to scribal

practice in the mainstream of Greek culture.<sup>98</sup> Similarly the "asterisk" sign (✳) marking changes of speaker in the Latin *Alcestis* has no direct parallel in Greek papyri from Egypt.<sup>99</sup>

To sum up: there is more regularity in the use of sigla in Graeco-Egyptian papyri than appears when one encounters them only sporadically. In Oxyrhynchite and other texts of the high Roman period the ancora and the antisigma were typically marks made by revisers of text-- the former usually marking omissions, the latter normally with variants and textual notes. To these should be added the simple diagonal slash, which commonly indicates something amiss in a line. Each of these found alternate uses in the hands of individual scribes, however. The simple stroke, the chi, the dotted obelus and the diple in non-Homeric texts seem to have been used predominantly to mark the presence of an interesting point in a line, or as a reference mark indicating the presence of a useful note in a separate hypomnema. But none of these sigla had a tightly restricted significance, and (outside Oxyrhynchus and the second and third centuries) the same jobs were also done by various other sigla. The most useful reminder, for editors, that the meaning of these signs did vary is inconsistent use by scribes of even the very specialized sigla of the system of Aristarchus-- and the toleration of those inconsistencies by readers.\*

<sup>95</sup> Cavallo (above, n. 91) remarks on the rather more common use of diple as a divider in Herculaneum papyri than in Egyptian; see also R. Marichal, "De l'usage de la 'diplo' dans les inscriptions et les manuscrits latins," *Paleographica Diplomatica et Archivistica: Studi in onore di Giulio Battelli* vol. 1 (Rome 1979) 63-39 with plates of two Herculaneum texts. Diplai mark pauses in the following Herculaneum papyri: P.Herc. 1081 (*Ric.Pap.Erc.* 2, 1976; *GMAW*<sup>2</sup> 78), P.Herc. 1074 (*Ric.Pap.Erc.* 3, 1983; *GMAW*<sup>2</sup> no. 78), P.Herc. 1672 (*Ric.Pap.Erc.* 3, 1977; also ↘ and ↙), P.Herc. 1427 (*Ric.Pap.Erc.* 3, 1977), P.Herc. 994 (*Ric.Pap.Erc.* 2, 1976), P.Herc. 411 + 1572 (*Ric.Pap.Erc.* 1,

1969, 66-67), P.Herc. 1012 + 1786 (*Cron.Erc.* 10, 1980, 25-53, written ↗), P.Herc. 26 (*Cron.Erc.* 3, 1973, 89-91), P.Herc. 1676 (*Cron.Erc.* 1, 1971, 90-111), P.Herc. 1013 (*Cron.Erc.* 9, 1979, 11-35), P.Herc. 188+1014 (*Cron.Erc.* 8, 1978, 104-23), P.Herc. 1414? (*Cron.Erc.* 7, 1977, 96-113), P.Herc. 1004? (*Cron.Erc.* 6, 1976, 69-76: usually the diple obelismene is used), P.Herc. 1050 (Oxf. P. 5, col. vi.19-20, vii.31-32, 37-38).

<sup>96</sup> // marks a citation in P.Herc. 163 (*Cr.Erc.* 8, 1978, 52ff; Cavallo [above, n. 91] p.24).

<sup>97</sup> Miscellaneous space fillers: P.Herc. 1081 (*Ric.Pap.Erc.* 3, 1983): <, <<; P.Herc. 411, 1572 (*Ric.Pap.Erc.* 1, 1969, 66-67): ✳, X; P.Herc. 463 (*Cron.Erc.* 12, 1982, 67-83): X; P.Herc. 163 (*Cron.Erc.* 8, 1978, 52ff): ✳, ↗, //, ↙; P.Herc. 1012 + 1786 (*Cron.Erc.* 10, 1980, 25-53): X, ↗, ✳. The apparent chi-rho monogram (☧) beginning the long n. in the bottom marg. of P.Herc. 152 is probably a misdrawn abbreviation of πρός (Ἄπεις), which recurs later in the note (ed. H. Diels, *Philodemus Über die Götter drittes Buch. Abh.Preuss.Akad.Wiss. philol.-hist.kl.* 1916 [Berlin 1917, repr. Amsterdam/Leipzig 1970] 24-27).

<sup>98</sup> Cavallo (above, n. 91) 49.

<sup>99</sup> The closest thing is ✳: written between the lines to note a change of speaker in a text of the "Acta Alexandrinorum" (P.Harris, *JRS* 39 [1939] 79-80). R. Roca-Puig, *Alcestis. Hèxametres Latins: Papyri Barcinonenses inv. no. 158-161* (Barcelona 1982).

\* I am grateful to Linos Jacovides, who wrote the program used to organize these data; to Gregg Schwendner, who read an early draft and kindly redirected me on more than one point; and to James Porter for helpful conversation.

Notes and Abbreviations to Tables 1-5:

Centuries are of the common era unless indicated.

Lower-case "p" precedes Pack<sup>2</sup> numbers.

† marks texts appearing in Table 1 or Table 3 as well as in Table 2 (Sigla with Utilitarian Functions).

§ marks texts appearing more than once in Table 2.

The List of Texts (Table 4) indicates whether plates (pl.) or photographs were available.



Abbreviations

<i>Anecd.Parisinum</i>	cod. Paris. 7530 (saec. 8), ed. G. Dindorf, <i>Scholia Graeca in Homeri Iliadem</i> 1 (Oxford 1875) pp. xlvi-l; Keil, <i>Grammatici Latini</i> vii 535
<i>Anecd.Romanum</i>	cod. Rom.Gr. 6 (Rome, Bibl.Naz.: saec. X), ed. F. Montanari, <i>Studi di filologia omerica antica</i> 1 (Pisa 1979) 43-75
Cavallo, <i>LSSE</i>	G. Cavallo, <i>Libri Scritture Scribi a Ercolano,</i> <i>Cronache Ercolanesi</i> 13 suppl. (1983)
-----, <i>Ric. maiuscola bibl.</i>	<i>Ricerche sulla maiuscola biblica</i> (Florence 1967)
Erbse, <i>Sch.Gr.Hom.II.</i> <i>GBByz.Per.</i>	<i>Scholia Graeca in Homeri Iliadem</i> (Berlin 1969- ) G. Cavallo and H. Machler, <i>Greek Bookhands of the Early Byzantine Period A.D. 300-800</i> (Bulletin of the Institute of Classical Studies Supplement 47: London 1987)
<i>GMAW2</i>	E. G. Turner, <i>Greek Manuscripts of the Ancient World</i> , 2nd ed. P.J. Parsons (Bulletin of the Institute of Classical Studies Supplement 46: London 1987)
McNamee, <i>Abbr.</i>	<i>Abbreviations in Greek Literary Papyri and Ostraca</i> (Bulletin of the American Society of Papyrologists Supplement 3: Chico, California 1981)
<i>New Pal.Soc.</i>	<i>The New Palaeographical Society: Facsimiles of Ancient Manuscripts etc.</i> , ed. E.M. Thompson, G.F. Warner, F.G. Kenyon, J. P. Gilson, Series 1 (London 1903-12), Series 2 (London 1913-30)

Pack <sup>2</sup>	R.A. Pack, <i>The Greek and Latin Literary Texts from Graeco-Roman Egypt</i> (2nd ed. Ann Arbor 1965)
Pal.Soc.	<i>The Palaeographical Society: Facsimiles of Manuscripts and Inscriptions</i> , ed. E.A. Bond, E.M. Thompson, G.F. Warner, Series 1 (London 1873-83), Series 2 (London 1884-94)
Roberts, <i>GLH</i>	C.H. Roberts, <i>Greek Literary Hands 350 B.C. - A.D. 400</i> (Oxford 1955)
Schubart, <i>Pap.Gr.Berol.</i>	W. Schubart, <i>Papyri Graecae Berolinenses</i> (Bonn 1911)
Seider, <i>PGP</i>	R. Seider, <i>Paläographie der griechischen Papyri</i> vol. 2: <i>Literarische Papyri</i> (Stuttgart 1970)
Turner, <i>Codex</i>	E.G. Turner, <i>The Typology of the Early Codex</i> (Philadelphia 1977)
Uebel	F. Uebel, <i>APF</i> 21 (1971) 167ff

Table 1  
ARISTARCHAN SIGLA IN HOMERIC PAPYRI

Publication	Provenance, Century	Contents	—	—	Aristarchan Signs	—	—	Miscellaneous
Brit.Libr.inv. 128, <i>P.Lond.Lit.</i> 27, p998	7, 1	<i>Il.</i> 23, 24.	—	—	—	—	—	—
Brit.Libr.inv. 136, <i>P.Lond.Lit.</i> 11, p697	7, 3	<i>Il.</i> 3, 4	—	—	—	—	—	—
Brit.Libr.inv. 271, <i>P.Lond.Lit.</i> 30, P.Vindob. 26746+26754-60, <i>Arch.Bibliographie</i> , Buch- und Bibliothekswesen 1 (1926) 92-93, p1039	Sochr.Nes.7, 1 <i>Od.</i> 3	<i>Od.</i> 3	—	—	—	—	—	—
† P.Berol.inv. 7807, <i>BKT</i> 5.1.4, p842	7, 3-4	<i>Il.</i> 9	—	—	—	—	—	—
P.Berol.inv. 8440, <i>BKT</i> 5.1.4, p735	7, 1	<i>Il.</i> 5	—	—	—	—	—	—
P.Berol.inv. 9774, <i>BKT</i> 5.1.18-20, p962	7, 1 BC	<i>Il.</i> 18	—	—	—	—	—	—
P.Berol.inv. 11761, <i>Rev.Phil.</i> sér. 3.29 (1955)199, no. 452, p1005	7, 2	<i>Il.</i> 23	—	—	—	—	—	—
P.Berol.inv. 16985, <i>Rev.Ph.</i> sér. 3.29 (1955) 199 no. 449, p980	7, 1 BC	<i>Il.</i> 21, 22, 23	—	—	—	—	—	—
<i>P.Cairo Goodspeed</i> 1, p1116	7, 2	<i>Od.</i> 15	—	—	—	—	—	—
P.Cairo inv. 60566, <i>MéMaspero</i> 1.148-51 (MIFAO 67.1, Cairo 1934), p1184	Oxy., 2	comm. <i>Il.</i> 6	—	—	—	—	—	—
<i>P.Gr.Mon.</i> 38	7, 1	<i>Il.</i> 12	—	—	—	—	—	—
<i>P.Hamb.</i> 3.195	7, 2	<i>Il.</i> 2	—	—	—	—	—	—
† <i>P.Haw.</i> 24-28, p616	Hawara, 27	<i>Il.</i> 1, 2	—	—	—	—	—	—
<i>P.Köln</i> 1.37	7, 1	<i>Il.</i> 24	—	—	—	—	—	—
P.Lips.inv. 338, <i>APF</i> 29 (1983) 15-17	7, 5-6	<i>Od.</i> 11	—	—	—	—	—	—
† <i>P.Lit.Pisa</i> 2 (P.Genève), p1030	7, 2-3	<i>Od.</i> 2	—	—	—	—	—	—
P.Lund, <i>Årsb.Lund</i> (1934-35) 53f, p781	7, 2-3	<i>Il.</i> 6	—	—	—	—	—	—
P.Mich.inv. 6653v, <i>ZPE</i> 14 (1974) 89-90	7, Roman	<i>Il.</i> 1	—	—	—	—	—	—
<i>P.Mil.Vogl.</i> 6.259	7, 1-2	<i>Od.</i> 11	—	—	—	—	—	—
<i>P.Oxy.</i> 3.445, Brit.Libr.inv. 1190, <i>P.Lond.Lit.</i> 14, p778	Oxy., 2-3	<i>Il.</i> 6	—	—	—	—	—	—



Table 2  
UTILITARIAN SIGLA

Provenance, Cent.	Author:	Used to Mark:	Variant Forms; Remarks:
A. ANCORA: $\mathcal{C}$ , $\mathcal{L}$ et sim. <sup>a</sup>			
§ Brit.Libr. inv. 107, <i>P.Lond.Lit.</i> 25, p953	7, 1-2	Hom.	omission
† Brit.Libr. inv. 1546A, <i>P.Lond.Lit.</i> 140, p2516	7, 2	oratory	?
† § <i>MPER</i> 1.73-83, <i>Stud.Pal.</i> 1 (1901) iii-x, p499	Fayum, 4	Hes.	$\mathcal{R}$ , > ed.
<i>MPER</i> 6.81-97, p1551	Hermup. Magna, 2	Xen.	with both text and revision
<i>MPER</i> N.S. 3/23, p1631	7, 4-5	Old corn.	variant?
§ <i>P.Amh.</i> 2.24, p263	7, 4	Dem.	at right of col.
† § <i>P.Ant.</i> 3.160 Uebel 1295	Aniopolis, 3-4	Hom.	/ written above ancora
† § <i>P.Berol.</i> inv. 9782, <i>BKT</i> 2, p1393	Hermup. Magna, 2	comm./Pl.	$\mathcal{P}$ ed.
<i>P.Berol.</i> inv. 10558-59, <i>BKT</i> 5.1.82-93, p1851	Hermup. Magna, 4	hexameter	
§ <i>P.Gen.</i> 1, p5	7, 2-3	Aschin.	
† <i>P.Lit.Pisa</i> 2 (P.Genève), p1030	7, 2-3	Hom.	with /
§ <i>P.Med.</i> inv. 210, <i>Aesypius</i> 58 (1978) 110-16	7, 3	comm./Hom.	/ $\mathcal{E}$ (i.e., slash plus ancora)
<i>P.Mich.</i> inv. 2, <i>TAPA</i> 53 (1922) 128-33, p958	7, 2-3	Hom.	
† § <i>P.Oxy.</i> 1.16, 4.696, p1524	Oxy., 1	Thuc.	$\mathcal{D}$ with the right curve lost;
			$\leq$ edd.
† <i>P.Oxy.</i> 1.28, p1554	Oxy., 2	Xen.	variant?
<i>P.Oxy.</i> 2.220, Brit.Libr. inv. 1184, <i>P.Lond.Lit.</i> 185, p2172	Oxy., 1-2	comm./metrics	restoration? variant?
† § <i>P.Oxy.</i> 2.223, p733	Oxy., 3	Hom.	at right of col.
† § <i>P.Oxy.</i> 6.852, p438	Oxy., 2-3	Eur.	
§ <i>P.Oxy.</i> 7.1011, p215	Oxy., 4	Callim.	/ marks the ensuing line
† § <i>P.Oxy.</i> 9.1174, 17.2081a, Brit.Libr. inv. 2068, <i>P.Lond.Lit.</i> 67, p1473	Oxy., 2	Soph.	the marked omission may be
			only the single word supplied later beside
			the ancora
† <i>P.Oxy.</i> 9.1175, 17.2081b, Brit. Libr. inv. 2069, <i>P.Lond.Lit.</i> 66, p1472	Oxy., 2	Soph.	error?
§ <i>P.Oxy.</i> 10.1247, p1532	Oxy., 2	Thuc.	error or variant
§ <i>P.Oxy.</i> 13.1617, p152	Oxy., 5	Ar.	omission
<i>P.Oxy.</i> 13.1619?, p474	Oxy., 1-2	Hdt.	variant or marg. n.

<sup>a</sup> Papyri in which lacunas render the function of an ancora doubtful are included here rather than in Table 3, since the sign was used almost exclusively in revision of text.



<sup>b</sup> The diptile seems to be used as a divider more often in Herculaneum papyri than Egyptian. Examples are not included in this table, but are listed in the text above, n. 95.

↗ at last line of subscription

Isoc.

Gourrou, 2

division in text

§ Brit.Libr. inv. 115, *P.Lond.Lit.* 132, *P.Lond.*

5.80, p1233

Brit.Libr. inv. 733, etc.: see miscellaneous sigla

Brit.Libr. inv. 2040, *P.Lond.Lit.* 174, *P.Oxy.*

3.412, p53

P.Antinoe, A.S. Hunt & J.Johnson, *Two of Theocr.*

*Papyri* (London 1930) 20ff., p1487

† *P.Ant.* 3.116, Uebel 1353

Brit.Libr. inv. 3.182, Uebel 1487

*P.Ant.* 3.183, Uebel 1442

P.Berol. inv. 8, *BKT* 2.52-53, p1404

§ P.Berol. inv. 5865, *BKT* 5.1.54, *APF* 27

(1980) 19-32, p119

† § P.Berol. inv. 9782, *BKT* 2, p1393

§ P.Berol. inv. 10567, *BKT* 5.1.94-106,

p1329

† P.Berol. inv. 11866A-B, *Aegyptius* 13

(1933) 621-43, p2277

§ P.Bodm. inv. 28, *Mus.Helv.* 33 (1976) 1-23

*P.Harr.* 1, p1325

† *P.Harr.* 38, p405

† § *P.Köln* 6.242

† § *P.Oxy.* 5.841, *Brit.Libr.* inv. 1842<sup>n</sup>, *P.Lond.*

*Lit.* 45, p1361

§ *P.Oxy.* 7.1011, p215

*P.Oxy.* 10.1233, 17.2081d, 18.2166b, 21

pp. 127-30, p56

*P.Oxy.* 15.1803, p2126

† *P.Oxy.* 15.1809, p1391

† *P.Oxy.* 15.1820, p1133

† § *P.Oxy.* 17.21022, p1402

§ *P.Oxy.* 18.2168, *P.Berol.* inv. 11629A-B +

13417 A-B *Sitz.Berl.Akad.* (1914) 222-

44, (1912) 524-44, p201

† § *P.Oxy.* 23.2359, p1485

at left of text and a marg. note,

both lacunose

a single < written large beside 2

lines containing a quotation

↙ above a note describing con-

tents of adjacent text

beside each line

↖ delimits the space to be used

for notes; see also

miscellaneous sigla (part 1)

beside each line

at first line of a speech;

ensuing lines lost

beside each line

below speaker notes

beside each line

↗ surrounding the

title of a poem?

↗: ↗ odd

twice at last line of Alcaic

stanzas; Hephaest. p.shm.

75 prescribes paragraphi

at each line

below the note

"flourished sign ↗"

"double commas" beside

each line

below a variant introduced by ↗

variant

D. SLASH: / et sim.		/ ; note refers to a variant	
		Oxy., 3	Aristox.
		Oxy., 5	Ap.Rhod.
		Oxy., 2	philosophy
		Oxy., 2	comm./Anacr.
		Oxy., 3	Philo
		Fayum., 5	Aeschin.
			quotation beside each line
		7, 1-2	restoration
		Ma'abdeh, 3	division in text
		Meir, 1	division in text
		7, 1-2	variant test?
		7, 2-1 B.C.	marked text was corrected
		7, 2-3	beside lines that have been corrected
		Fayum?, 1	
		7, 1 B.C.-1	
		Antiochopolis, 3-4	/ once, once with ancora
		Antiochopolis, 4	
		7, 1-2	
		7, 3-4	division in text
		Hom.	variant text
		Nonnus	
		7, 4	Men.
			correction;
			marginal note
			division in text

§	<i>P.Cair.Masp.</i> 2.67172-74, p658 P.Colom. inv. 3328, <i>Die Phoinikika des Lollianus</i> , Uebel 1513	Aphrodiopolis?, 6 ?, 2	Horn. Lollianus	omission division in text
	<i>P.Flor.</i> 2.106, p604	?, 3	Horn. Aeschin.	$\cancel{\cancel{}}$ at a plus-verse with ancora
§	<i>P.Gen.</i> 1, p5	?, 2-3	Thuc.	—, $\cancel{\cancel{}}$ with interlinear revision
	<i>P.Harr.</i> 41, p1508	?, 2-3	Horn. hexamer Hibeh, 3 B.C. Hibeh, 3 B.C. Hercul., 1 B.C.	variant? error? correction error
†	<i>P.Heid.</i> 4.2, <i>P.Hib.</i> 1.122, <i>P.Grenf.</i> 2.4, p979 <i>P.Heid.</i> N.F. 2, 188, p1962	?	Philodemus Favorinus	$\cancel{\cancel{}}$ (i.e., slash with ancora)
	<i>P.Hercul.</i> 182 (see Cavallo <i>LSSE</i> p. 24)	?		
§	<i>P.Marm.</i> , p455	?		
§	<i>P.Med.</i> inv. 210, <i>Ae2yptus</i> 58 (1978) 110-16 <i>P.Michael.</i> 2, p997	?, 3	comm./Horn. Horn. Horn.	omission error
	<i>P.Mich.</i> inv. 2, <i>TAPA</i> 53 (1922) 128-33, p958 <i>P.Mich.</i> inv. 2810, <i>ZPE</i> 46 (1982) 58-69, p599 <i>P.Mich.</i> inv. 3390, <i>ZPE</i> 76 (1989) 237-38	?, 2-3 Karanis, 2 ?, 2 ?, 4	Horn. Horn. Horn. Horn.	division in text division in text division in text omission
§	<i>P.Morgan Libr.-Sitzb.Berl.Lakad.</i> (1912) 1198-1219, p870	?		
	<i>P.Oxy.</i> 2.221, Brit.Libr. inv. 1184, <i>P.Lond.Lit.</i> 178, p1205	Oxy., 2	comm./Horn.	quotation?
†	§ <i>P.Oxy.</i> 2.223, p733	Oxy., 3	Horn.	error;
				to mark variant in quotation?
†	§ <i>P.Oxy.</i> 5.841, Brit.Libr. inv. 1842y, <i>P.Lond.Lit.</i> Lit. 45, p1361	Oxy., 2	Pind.	variant text omission (variant?)
†	§ <i>P.Oxy.</i> 6.852, p438	Oxy., 2-3	Eur.	division in marg. notes
§	<i>P.Oxy.</i> 7.1011, p215	Oxy., 4	Callim.	omission variant text;
				division in text variant text
	<i>P.Oxy.</i> 7.1018, p1548	Oxy., 3	Xen.	$\cancel{\cancel{}}$ above words to transpose
†	§ <i>P.Oxy.</i> 9.1174, 17.2081a, Brit.Libr. inv. 2068, <i>P.Lond.Lit.</i> 67, p1473	Oxy., 2	Soph.	omission
	<i>P.Oxy.</i> 10.1232, p1447	Oxy., 3	Sappho	variant text?
§	<i>P.Oxy.</i> 10.1247, p1532	Oxy., 2	Thuc.	marginal note
§	<i>P.Oxy.</i> 11.1371, p145	Oxy., 5	Ar.	division in text
	<i>P.Oxy.</i> 13.1611, p2290	Oxy., 3		treatise on literary crit.
†	<i>P.Oxy.</i> 2064, A.S. Hunt & J. Johnson, <i>Two Theocr. Pap.</i> (London 1930) 3-19, p1489	Oxy., 2	Theocr.	omission

			used as caret mark for insertion of variant, and on left and right of variant
			/ separates lemmata, comments
			— introduces one note;
			// and — conclude marg. nn. (dipole obelismene is also used)
			separates lemmata, comments
			beside several entries
			written below an ancore perh. $\mathcal{A}$ , correction added
			beside several entries
			$\mathcal{O}$ , $\mathcal{L}$ , $\mathcal{C}$ , $\mathcal{S}$ at breaks in sense & at a quotation
			/ ed.
			interlinear (2 words omitted)
			— ; written one line too soon
			written at right
			// beside most entries
Oxy., 2	Pl.	variant text	
§ P.Oxy. 17.2102, p1402			
§ P.Oxy. 18.2168, P.Berol. inv. 11629A-B + 13417 A-B, Sitz.Berl.Akad. (1914) 222-44, (1912) 524-44, p201	Oxy., 3	Callim.	division in marg. notes
P.Oxy. 20.2258, p186	Oxy., 6-7	Callim.	division in marg. notes
P.Oxy. 31.2537, Uebel 1507	Oxy., 2-3	oratory	error
§ P.Oxy. 49.3452	Oxy., 2	glossary	used as check mark
P.Oxy. 50.3538	Oxy., 1-2	melic	omission?
P.Oxy. 53.3710	Oxy., 2	comm./Hom.	error
P.Oxy. 54.3724	Oxy., 1	epigram incipits	used as check mark
§ P.Paris 2, p246	Memphis, 2 B.C.	Chrysippus	division in text
P.Ross.Georg. 1.4, p941	?, 3	Horn.	restoration, omission; division in text
P.Ryl. 1.29a, p2416	?, 2		medical recipes
P.Ryl. 1.53, p1106	?, 3	Horn.	division in text
PSI 1.10, <i>Max.Phil.Lond.</i> 2 (1977) 1-17, p833	Hermopolis Ma- gna, 4	Horn.	omission
PSI 2.130-131, p531	Oxy., 2-3	Hes.	omission
PSI 2.140, p1000	Oxy., 3	Hom.	omission
PSI 10.1180, p2421	Tebunis, 2	medical recipes	used as check mark
PSI 12.1289, p2054	Oxy., 2	manual of astro.	text treated in note
§ P.Strasb. inv. Gr. 31+32, <i>BIFAO</i> 54 (1954) 45-62, p591	?, 2	Hom.	omission
P.Strasb. inv. Gr. 2462a+2489, <i>BIFAO</i> 61 (1962) 172, p1035	Tebunis?, 2 B.C.	Hom.	error
P.Tebi. 1.4, p632	Tebunis, 2	Hom.	division in text
P.Tebi. 2.432, <i>Calif.St. Class.Ant.</i> 4 (1971) 201-202, p1156	Ashmunein, 4	catalogue: prose works Libanios	division in text
P.Turner 9			error
P.Vindob. inv. 29311, <i>Hommages Préaux</i> 548-54 (re-ed. of MPEP NS 3, 60) 22761			

E. DOTTED OBELEUS:  $\checkmark$ ,  $\dot{+}$  et sim.

$\dagger$	§ Brit.Libr. inv. 131v, <i>P.Lond.Lit.</i> 108, p163	Meir, 1	Arist.	error	— above words to transpose
	<i>MPER</i> N.S. 3,37, p2866	Fayum, 6	prose	marginal note	at right of last line of note
§	P.Bodm. inv. 28, <i>Mus.Helv.</i> 33 (1976) 1-23	? , 2	satyr play	marginal note	at left of speaker note;
P.Danis inv. 12, <i>Stud.Pap.</i> 7 (1968) 7-22,		?, 4?	Horn.		dipole below
P788 add., Uebel 1289a					
$\dagger$	<i>P.Flor.</i> 2,112, p157	?, 2-3	comm.,Ar.	at left of note	
<i>P.Kōln</i> 2,76	?, 1 B.C.	Horn.		$\checkmark$ above variant in margin	
				(unless the sign is a	
				corrected accent)	
$\dagger$	§ <i>P.Kōln</i> 6,242	?, 2 B.C.	poetic anthology	—	
	P.Mich. inv. 4270, <i>ZPE</i> 29 (1978) 5-13	?, 4-5		— interlinear	
§	<i>P.Oxy.</i> 11,1371, p145	Oxy., 5		introduces lemma	
	<i>P.Oxy.</i> 15,1790, 17,2081ff, p1237	Oxy., 1 B.C.		at right of long note	
	<i>P.Oxy.</i> 33,2656, Uebel 1184	Oxy., 4		interlinear at right of corr.	
	<i>PSY</i> 14,1399, p2518	?, 5-6		at left of revision and at right	
$\dagger$	P.Vindob. inv. 200, <i>WS</i> 7 (1885) 116-22,	Arsinoe, 5-6	Thuc.	of place for insertion	
	p1534			interlinear	
<hr/>					
F. CHI: $\times$					
$\dagger$	P.Athen.Univ.inv. 2780-1, <i>SB</i> 9860a-f.	Arsinoe, 3	medical recipes	division in text	at a new prescription
	Uebel 1456	Hermopolis Mag- na, 2-3	Hierocles Stoic.	marginal note & related text;	note identifies topic of text
$\dagger$	P.Berol. inv. 9780v, <i>BKT</i> 4, p536				$\times, \times \checkmark$ at lines to interchange
					at beginning and end of a passage to be revised
					$\times, \times \checkmark$
<i>P.Cair.Masp.</i> 1,67055 etc., p348					
§	<i>P.Marm.</i> , p455				
§	P.Morgan Libr., <i>Sitz.Ber.LAkad.</i> (1912) 1198-1219, p870	?, 4	Horn.	omission;	
	<i>P.Oxy.</i> 3,471, p2225	Oxy., 2		variant & related text	
†	§ <i>P.Oxy.</i> 5,841, Brit.Libr. inv. 1842v, <i>P.Lond.</i> <i>Lit.</i> 45, p1361	Oxy., 2		variants;	
†	<i>P.Oxy.</i> 26,2450, p1369	Oxy., 1-2	Pind.	text treated in note	

G. MISCELLANEOUS SIGNS

## 3. OTHER

Brit. Libr. inv. 733, *P.Lond.Lit.* 46, *PSI*  
12.1278, p175

Meir, 1-2

Bacchyl.

omission/restoration

✓ and / precede successive  
lines between which there is  
an omission; paired with:

7 with the restoration.

≈ and / precede successive  
lines between which there is  
an omission; paired with:

7 with the restoration.

✓ at an omission (used with  
the next two signs);

7 at left of the restoration,  
plus:

L at the right of the  
restoration.

⚡ at left of col. beside a  
paragraph;  
≥ at right, with a paragraphus  
to its immediate left

✗ at the start of a new recipe.

✓/ beside an omission.

≥ at left of paragraphus

✗ between the lines, at change  
of speaker

Antinopolis, 4

Dem.

division in text

Antinopolis, 4

medical recipes

division in text

Antinopolis, 3-4

Hom.

omission

Aphroditopolis?, 6

Hom.

division in text

7, 3?

Acta Alexandr.

division in text

*P.Ant.* 2.80, p321

*P.Ant.* 3.134, Uebel 1454

† § *P.Ant.* 3.160, Uebel 1295

§ *P.Cair.Masp.* 2.67172-74, p658

P.Harris, *JRS* 39 (1949) 79-80, p2224

? 2-1 B.C.

anthology  
(sch.ex.)

division in text

2

§ P.Marm., p45

Marmarica,  
Libya, 3

correction

άνω Χ at right of first line  
of passage to be moved (used  
with the next five signs);

correction

άνω Ζ (?) at left of last line to be  
moved (the left part of the  
sign is in lacuna; σ<sup>ρ</sup> ed.)

correction

Χ on right of the last line to be  
moved;

correction

Χ on left at the place for  
insertion;

correction

κάτω Τ on right of place for  
insertion;  
Υ on left where sound text  
resumes.

P.Mich. inv. 1575, ZPE 46 (1982) 88-91

? 1-2

Horn.

error

P.Monac., APF 1 (1901) 473-75, p1566

? 2

Xen.

error

§ P.Oxy. 1.12, p2205

Oxy., 3

omission

ζ at the left of an interlinear  
restoration of omitted text.



division in text



division in text

There are also traces of a coronis  
at line 78 = Pf. 75.77-76.1.  
It is reported as in the  
ed.pr., but the traces are  
unclear.

*P.Oxy.* 13.1608, Brit.Libr. inv. 2469,  
*P.Lond.Lit.* 14, p19

Aeschin. Socr.

error

?

at left, with a row of 2

separating two poems.

Oxy., 5-6

Pind.

division in text

?

Memphis, 1

Alcm.

marginal note

?

? 3-2 B.C.

medical recipes

division in text

?

Fayum?, 1

Horn.

division in text

?

Horn.

?

?

*P.Ryl.* 3.541, p652

error

?

*P.Ryl.* 3.540, Brit.Libr. inv. 1873, *P.Lond.Lit.* 6, p643

?

† *PSJ* 13.1298, *ZPE* 36 (1979) 61-62, p904

Antinoopolis, 5-6

division in text

}

division in text

ʃ

ʃ ed., ʃ in P. Antinoe  
to ʃ in P. Antinoe  
≈ ? beside a choral passage.

division in text

ʃ

division in text

ʃ

Eur.

? 1-2

ʃ

Perg. Berol. 13217, *BKT* 5.2.73-79, p437

Table 3  
SIGLA OF UNCERTAIN FUNCTION

P.Hercul. 1050, ed. T. Kuiper, <i>Philodemus Over den Dood</i> (Amsterdam 1925) 159-62	Here, 1 BC	Philod.	X
P.Hercul. 1065, ed. P. & E. De Lacy, <i>Philodemus On Methods of Inference</i> (Naples 1978) 80-82	Here, 1 BC	Philod.	X
P.Hercul. 1148 xl, Cr-Erc. 14 (1984) 17-107	Here, 2-1 BC	Epicurus	/
P.Hib. 1.3, p1480	Hibeh, 3 BC	Soph.	/
P.Ist.Pap.Vit.2013, <i>Studia Flor. A. Ronconi Sextagenario Oblata</i> (Rome 1970) 207	? , 1	jud.orat.	3.7*
P.KÖln 2.59, u1369	2, 1	Alc.	X
P.KÖln 5.205	2, 3 BC	dialogue	/
† P.KÖln 6.242	2, 2 BC	poetic anthol.	/
P.KÖln 6.247	2, 2-1 BC	history	/
P.Lille 73+76+111c, ZPE 26 (1977) 1-6, 7-36	Magdala, 3BC	Stesich.	/
P.Med.inv. CNR 68.3.Aeg. 47(1967)191,	7, 3-4	Horn.	/
Uebel 1311	7, 4, 5	Hes.	+
P.Michinv. 4270, ZPE 29 (1978) 5-13	7, 2	Arist.	X
P.Mich.inv. 6643, WS 79(1966)186-89, Uebel 1474	7, 2	geogr?from?	X
P.Michael. 4, ZPE 10 (1973) 75-77, p2271	8, 2	Pl.	?
P.Mil.Vogl. 1.9, p1406	Oxy., 2-3	Oxy., 3	>
P.Oxy. 1.15, p1618	Oxy., 3	anth: epigr.	C
† P.Oxy. 1.16, 4.696, p1524	Oxy., 1	Thuc.	/
† P.Oxy. 1.28, p1554	Oxy., 2	Xen.	/
P.Oxy. 2.212, Brit.Libr.inv. 1180, P.Lond.	Oxy., 1-2	Ar.	/
Lit. 85, p156	Oxy., 3	Hom.	/
† P.Oxy. 2.223, p733	Oxy., 2	Pl.	/
P.Oxy. 2.229, p1392	Oxy., ?	oratory	X
P.Oxy. 3.442, p2543	Oxy., 2	Hom.	/
P.Oxy. 3.550, p880	Oxy., 1 BC	Pind.	/
P.Oxy. 4.659, Brit.Libr.inv. 1533, P.Lond.	Oxy., 3	tragedy	//
Lit. 44, p1371	Oxy., 3	Theocr.	▷
P.Oxy. 4.676, p1722	Oxy., 2	Hom.	/
P.Oxy. 4.694, p1492	Oxy., 2	Pind.	/
P.Oxy. 4.770, p909	Oxy., 2	Isoc.	:
† P.Oxy. 5.841; Brit.Libr.inv. 1842N,	Oxy., 2	Eur.	:
P.Lond.Lit. 45, p1361	Oxy., 2-3		
† P.Oxy. 5.844, p1263			
† P.Oxy. 6.852, p438			

\*Tachygraphical signs in the margin, standing for  $\pi\phi\dot{\gamma}\tau\omega\tau\omega\dot{\gamma}$  and  $\omega\omega\dot{\gamma}$  respectively, but of uncertain function: G. Mencì, "Il commentario tachigrafico," XIX Intern. Congr. of Papyrology, Cairo (1989).

<i>P.Oxy.</i> 6.853, p1536	Oxy., 2	comm./Thuc.
<i>P.Oxy.</i> 6.885, p2105	Oxy., 2-3	on divin.
<i>P.Oxy.</i> 8.1086, Brit.Libr.inv. 2055, <i>P.Lond.Lit.</i> 176, p1173	Oxy., 1 BC	comm./Hom.
<i>P.Oxy.</i> 8.1089, p2217	Oxy., 3	Acta Alex.
† <i>P.Oxy.</i> 9.1174, 17.2081a, Brit.Libr.inv. 2068, <i>P.Lond.Lit.</i> 67, p1473	Oxy., 2	Soph.
† <i>P.Oxy.</i> 9.1175, 17.2081b, Brit.Libr.inv. 2069, <i>P.Lond.Lit.</i> 66, p1472	Oxy., 2	Soph.
<i>P.Oxy.</i> 9.1182, p295	Oxy., 2	Dem.
<i>P.Oxy.</i> 10.1231, 17.2081c, 18.2166a, 21 pp. 122-26, p1445	Oxy., 2	Sappho
<i>P.Oxy.</i> 10.1233, 17.2081d, 18.2166b, 21 pp. 127-30, p56	Oxy., 2	Aic.
<i>P.Oxy.</i> 10.1241, p2069	Oxy., 2	biography
<i>P.Oxy.</i> 10.1248, p1397	Oxy., 2	Pl.
<i>P.Oxy.</i> 11.1361, 17.2081e, Brit.Libr.inv. 2443, <i>P.Lond.Lit.</i> 48, p179	Oxy., 1	Bechyl.
<i>P.Oxy.</i> 13.1611, p2290	Oxy., 3	lit.crit.?
† <i>P.Oxy.</i> 13.1620, p1506	Oxy., 2-3	Thuc.
<i>P.Oxy.</i> 15.1787, 18.2166a, 21 pp. 134-39, <i>P.Hal.</i> 3 inv. 18, p1449	Oxy., 3	Sappho
<i>P.Oxy.</i> 15.1788, 21 pp. 139-45, 23 pp. 105-106, p61	Oxy., 2	Aic.
<i>P.Oxy.</i> 15.1792, vols. 26 pp.13-25, 37 p.104; <i>P.</i> Berol. inv. 21114, <i>ZPE</i> 3 (1968) 97, p1363	Oxy., 2	Pind.
<i>P.Oxy.</i> 15.1797, p93	Oxy., 3	Antiph.Soph.
<i>P.Oxy.</i> 15.1806, p1495	Oxy., 1	Theocr.
† <i>P.Oxy.</i> 15.1809, p1391	Oxy., 2	Pl.
† <i>P.Oxy.</i> 15.1820, p1133	Oxy., 6-7	Hom.
† <i>P.Oxy.</i> 2064, A. S. Hunt & J. Johnson, <i>Two</i> <i>Theocr. Fag.</i> (London 1930) 3-19, p1489	Oxy., 2	Theocr.
<i>P.Oxy.</i> 17.2075, <i>PSJ</i> 14.1384, p516	Oxy., 2-3	Hes.
<i>P.Oxy.</i> 17.2078, p254	Oxy., 2	Eur.?
<i>P.Oxy.</i> 17.2094 (see 49.3445 p. xviii), p1285	Oxy., 2	Lycoph.
<i>P.Oxy.</i> 17.2100, p1523	Oxy., 2	Thuc.
<i>P.Oxy.</i> 17.2101, p1545	Oxy., 3	Xen.
† <i>P.Oxy.</i> 17.2102, p1402	Oxy., 2	Pl.
† <i>P.Oxy.</i> 18.2163, p33	Oxy., 2	Aesch.
<i>P.Oxy.</i> 18.2164, p44	Oxy., 2	Aesch.





<i>P.Ryl.</i> 1.55, p472	7, 2	Hdt.	—	—> pap.
<i>P.Ryl.</i> 3.475, p2280	Thebaid? 5-6	juridical frt.	✓	✓
<i>P.Ryl.</i> 3.539, p575	2, 2 BC	Horn.	✓	✓
<i>P.Schub.</i> 11, p1978	Hemup., 3	verse	✓	✓
<i>P.Schub.</i> 38, p2396	7, 1-2	philosophy	✓	✓
<i>P.Sorb.</i> inv. 2328, <i>Rech.Pap.</i> 4 (1967) 11-67, Uebel 1211	Fayum, 3BC	Eur.	✗ or ✗	✗
<i>PSI</i> 1.8, p1059	Oxy., 1	Horn.	✓	✓
† <i>PSI</i> 1.10, <i>Mus.Phil.Lond.</i> 2 (1977) 1-17, p833	Hermup.-M., 4	Horn.	✗	✗
<i>PSI</i> 2.113, p608	7, 5	Horn.	✗	✗
<i>PSI</i> 2.123, p1444	Oxy., 2-3	Sappho	✗	✗
<i>PSI</i> 3.158, p2053	Oxy., 3	on planets	✗	✗
<i>PSI</i> 7.846, p1628	7, 2-3	Ar.?	✗	✗
<i>PSI</i> 9.1095, p2567	Oxy., 3	logic	✗	✗
<i>PSI</i> 7.850, p2462	7, 2-3?	myth	✗	✗
<i>PSI</i> 10.1175, p1640	?, 1	middle com.	✗	✗
† <i>PSI</i> 11.1182, p2953	Antinoe? 4-5	Gaius	✓	✓
<i>PSI</i> 11.1185, p795	Oxy., 2-3	Horn.	✓	✓
<i>PSI</i> 11.1210, <i>P.Oxy.</i> 18.2160, p28	Oxy., 2	Aesch.	✓	✓
† <i>PSI</i> 13.1298, <i>ZPE</i> 36 (1979) 61-62, p904	Antin., 5-6	Horn.	✓	✓
<i>PSI</i> inv. CNR 66-67, <i>Papiro dell'Odissea</i> 5	7, 1-2	Horn.	✓	✓
<i>P.Tebb.</i> 3.692, p1475	Tebunis, 2 BC	Soph.	✓	✓
P.Vindob. inv. 200, <i>WS</i> 7 (1885) 116-22, p1534	comm./Thuc.	Arsinoe, 5-6	✓	✓

Table 4  
LIST OF TEXTS

BN Paris, P.Gr. 1120, Suppl. grec 2, *MIFAO* 9.2 (1893), p1345, pl. (partial); Turner, *Codex* p. xii (Table 2)

BKT: see P.Berol.

Brit.Libr. inv. 107, *P.Lond.Lit.* 25, p953, pl. (partial); *Pal.Soc.* ser. 2.1.64 (Table 2)

Brit.Libr. inv. 108+115, *P.Lond.Lit.* 132, *P.land.* 5.80, p1233, pl.: *Pal.Soc.* ser.1.2.126, Roberts, *GLH* 13b, (Table 2)

Brit.Libr. inv. 126, *P.Lond.Lit.* 5, p634, pl. (partial), *GMAW* 214 (Table 2)

Brit.Libr. inv. 128, *P.Lond.Lit.* 27, p998, pl. (partial); Erbse, *Sch.Gr.Hom.II.* vol. 5 (Tables 1, 2)

Brit.Libr. inv. 131v, *P.Lond.Lit.* 108, p163, pl.: *Aristotle on the Constitution of the Athenians: Facsimile of Papyrus CXXXI in the British Museum* (London 1891) (Tables 2, 3)

Brit.Libr. inv. 132, *P.Lond.Lit.* 131, p1272 (Table 2)

Brit.Libr. inv. 134, *P.Lond.Lit.* 134, p1234, pl. (partial) (Table 2)

Brit.Libr. inv. 135, *P.Lond.Lit.* 96, p485, pl.: *Herondas: Facsimile of Papyrus inv. no.135 in the British Museum* (Table 2)

Brit.Libr. inv. 136, *P.Lond.Lit.* 11, p697, pl. (partial) (Table 1)

Brit.Libr. inv. 271, *P.Lond.Lit.* 30, P.Vindob. 6746+26754-60, *Archiv für Bibliographie-, Buch-, und Bibliothekswesen* 1 (1926) 92-93, p1039, pl. (partial); *Pal.Soc.* 2.2.182; Seider, *PGP* 19 photo (Table 1)

Brit.Libr. inv. 733, *P.Lond.Lit.* 46, *PSI* 12.1278, p175, pl.: *The Poems of Bacchylides: Facsimile of Papyrus DCCXXXIII in the British Museum* (London 1897); Seider, *PGP* 37 (partial) (Table 2)

Brit.Libr. inv. 1184: see *P.Oxy.* 2.220, 221

Brit.Libr. inv. 1190: see *P.Oxy.* 3.445

Brit.Libr. inv. 1533: see *P.Oxy.* 4.659

Brit.Libr. inv. 1535: see *P.Oxy.* 4.687

Brit.Libr. inv. 1546A, *P.Lond.Lit.* 140, p2516, pl. (Tables 2, 3)

Brit.Libr. inv. 1842v: see *P.Oxy.* 5.841

Brit.Libr. inv. 1873: see *P.Ryl.* 3.540

Brit.Libr. inv. 2040, *P.Lond.Lit.* 174, *P.Oxy.* 3.412, p53, pl. (partial); *P.Oxy., New Pal.Soc.* ser.1.1.104, Roberts, *GLH* 23a (Table 2)

Brit.Libr. inv. 2443: see *P.Oxy.* 11.1361

Brit.Libr. inv. 2055: see *P.Oxy.* 8.1086

Brit.Libr. inv. 2068: see *P.Oxy.* 9.1174

Brit.Libr. inv. 2069: see *P.Oxy.* 9.1175

Brit.Libr. inv. 2469: see *P.Oxy.* 13.1608

MPER 1.73-83, *Stud.Pal.* 1 (1901) iii-x, p499, photo (Tables 2, 3)

MPER 2.74-76, p1270 (Table 2)

MPER N.S. 3.60: see P.Vindob. inv. 29311

MPER 6.81-97, *Pap.Lugd.Bat.* 18.13, *WS* 14 (1980) 29-37, p1551, pl. (partial); *WS*; photo (Table 2)

MPER 6.97-113, p1552 (Table 3)

MPER N.S. 1.14, p2531 (Table 3)

MPER N.S. 3.23, p1631, photo (Table 2)

MPER N.S. 3.37, p2866, photo (Table 2)

P.Aberd. 134: see P.Berol. inv. 6869+7492-95

P.Amh. 2.13, p1626, pl. (Table 2)

P.Amh. 2.24, p263, pl. (partial), *GBByz.Per.* 13c (partial); photo (Table 2)

P.Amst. inv. 1, *Mnemosyne* 4.24 (1971) 162-68, pl. (Table 2)

P.Antinoe, A.S. Hunt & J. Johnson, *Two Theocritus Papyri* (London 1930) 20ff, p1487, pl. (partial), photo (Table 2)

*P.Ant.* 2.80, p321, pl. (partial) (Table 2)

*P.Ant.* 3.116, Uebel 1353, photo (Tables 2, 3)

*P.Ant.* 3.134, Uebel 1454 (Table 2)

*P.Ant.* 3.160, Uebel 1295, photo (Tables 2, 3)

*P.Ant.* 3.164, Uebel 1312, photo (Table 2)

*P.Ant.* 3.182, Uebel 1487 (Table 2)

*P.Ant.* 3.183, Uebel 1442, photo (Table 2)

P.Athen.Univ. inv. 2780-1, SB 9860a-f, Uebel 1456 (Tables 2, 3)

P.Berol. inv. 8, *BKT* 2.52-53, pl. p1404 (Table 2)

P.Berol. inv. 5865, *BKT* 5.1.54 *APF* 27 (1980) 19-32, p119, photo (Table 2)

P.Berol. inv. 6869+7492-95, *BKT* 5.1.3, *P.Aberd.* 134, *APF* 24/25 (1976) 6-12, p572 (Table 2)

P.Berol. inv. 7807, *BKT* 5.1.4, p842 (Tables 1, 2, 3)

P.Berol. inv. 8440, *BKT* 5.1.4, p735 (Table 1)

P.Berol. inv. 9764, *BKT* 3.22-26, p2354, pl. (Tables 1, 2, 3)

P.Berol. inv. 9770: see *P.Rein.* 1.2

P.Berol. inv. 9780, *BKT* 1, L. Pearson & S. Stephens (Stuttgart 1983), p339, pl. (partial) (Tables 2, 3)

P.Berol. inv. 9780v, *BKT* 4, p536, pl. (partial) (Tables 2, 3)

P.Berol. inv. 9781, *BKT* 7.4-13, p2511, pl. (partial) (Table 2)

P.Berol. inv. 9782, *BKT* 2, p1393, pl. (partial), also *New Pal.Soc.* ser.1.1.103, Schubart, *Pap.Gr.Berol.* 31; Seider, *PGP* 40 (Tables 2, 3)

P.Berol. inv. 9908, *BKT* 5.2.64-72, p449, pl., also Schubart, *Pap.Gr.Berol.* 30b (partial) (Table 3)

P.Berol. inv. 10558-59, *BKT* 5.1.82-93, p1851, pl. (partial): Schubart, *Pap.Gr.Berol.* 43a (Table 2)

P.Berol. inv. 10567, *BKT* 5.1.94-106, p1329 (Table 2)

P.Berol. inv. 10575, *Festschr.z.150-jährigen Bestehen d.Berliner Ägyptischen Mus.* (Berlin 1974), pl. (Table 2)

P.Berol. inv. 11629A-B + 13417 A-B: see *P.Oxy.* 18.2168

P.Berol. inv. 11761, *Rev.Phil.* sér. 3.29 (1955) 199, no. 452, p1005 (Table 1)

P.Berol. inv. 11866A-B, *Aegyptus* 13 (1933) 621-43, p2277, pl. (partial) (Tables 2, 3)

P.Berol. inv. 13044, *BKT* 5.1.7-18, p1774 (Table 3)

P.Berol. inv. 13284, *BKT* 5.2.19-55, p251, pl. (partial) (Table 3)

P.Berol. inv. 13405, *BKT* 7.31-34, p2512, pl. (partial) (Table 3)

P.Berol. inv. 16985, *Rev.Ph.* sér. 3.29 (1955) 199 no. 449, p980 (Table 1)

P.Berol. inv. 21114: see *P.Oxy.* 15.1792

P.Berol. inv. 21186, *ZPE* 4 (1969) 109-12, Uebel 1214, pl. (Table 3)

*P.Bodm.* 26 with pl. +*P.Köln* 1.3, Uebel 1177 (Tables 2, 3)

*P.Bodm.* inv. 28, *Mus.Helv.* 33 (1976) 1-23, pl. (Table 2)

P.Cairo inv. 60566, *Mélanges Maspero* 1.148-51 (*MIFAO* 67.1, Cairo 1934), p1184, pl. (partial): Erbse, *Sch.Gr.Hom.II.* vol. 2 (Table 1)

*P.Cairo Goodspeed* 1, p1116 (Table 1)

*P.Cair.Masp.* 1.67055 etc., p348, pl. (partial) (Table 2)

*P.Cair.Masp.* 2.67172-74, p658, pl. (partial) (Table 2)

P.Colon. inv. 3328, A. Henrichs, *Die Phoinikika des Lollianos* (Bonn 1972), Uebel 1513, pl. (Table 2)

*P.Col.* 8.202 (inv. 517a), p410, pl.: *CP* 33 (1938) 411-13 (Table 3)

P.Daris inv. 12, *Stud.Pap.* 7 (1968) 7-22, p788 add., Uebel 1289a (Table 2)

*P.Flor.* 2.106, p604, pl. (partial) (Table 2)

*P.Flor.* 2.112, p157, pl., also *ZPE* 25 (1977) 54-57 (Tables 2, 3)

P.Genève: see *P.Lit.Pisa* 2

*P.Gen.* 1, p5 (Table 2)  
*P.Gr.Mon.* 38, pl.: *Atheneum* 52 (1974) 25ff (Table 1)  
*P.Grenf.* 2.4: see *P.Heid.* 4.2  
*P.Hal.* 3 inv. 18: see *P.Oxy.* 15.1787  
*P.Hamb.* 2.129, p2115, pl. (Table 3)  
*P.Hamb.* 3.195, pl. (Table 1)  
*P.Harris*, *JRS* 39 (1949) 79-80, p2224 (Table 2)  
*P.Harr.* 1, p1325, pl. (partial) (Table 2)  
*P.Harr.* 38, p405, pl. (partial), photo (Tables 2, 3)  
*P.Harr.* 41, p1508 (Table 2)  
*P.Haun.* 1.8: see *PSI* 11.1207  
*P.Haun.* inv. 301, *P.Univ.Statale di Milano, Riv.Fil.* 69 (1941) 161-68, p1452, pl. (Table 3)  
*P.Hawara*, *APF* 5 (1913) 378, p1550 (Table 3)  
*P.Haw.* 24-28 = Bodleian Libr., Gr. class. a.1 (P), p616, pl.: *Erbse, Sch.Gr.Hom.II.* vol. 1; *GMAW*<sup>2</sup> 13; *vidi* (Tables 1, 2)  
*P.Heid.* 4.2, *P.Hib.* 1.22, *P.Grenf.* 2.4, p979, pl. (*P.Heid.*, *P.Grenf.*, partial) (Tables 2, 3)  
*P.Heid.* N.F. 2.188, p1962, pl. (Table 2)  
*P.Hercul.* 163, *Cr.Erc.* 8 (1978) 52ff. (Table 3)  
*P.Hercul.* 182, ed. C. Wilke, *Philodemus de ira liber* (Leipzig 1914) 53-58, pl. Cavallo, *LSSE* pl. 18 (Table 2)  
*P.Hercul.* 460 + 1073, *Ric.Pap.Erc.* 2 (1976), (Table 3)  
*P.Hercul.* 1050, ed. T. Kuiper, *Philodemus Over den Dood* (Amsterdam 1925) 159-62, pl. Cavallo, *LSSE* 28 (Table 3)  
*P.Hercul.* 1065, ed. P. & E. De Lacy, *Philodemus On Methods of Inference* (Naples 1978) 80-82, pl. Cavallo, *LSSE* pl. 29 (Table 3)  
*P.Hercul.* 1148 xl, *Cr.Erc.* 14 (1984) 17-107, pl. Cavallo, *LSSE* pl. 12 (Table 3)  
*P.Hib.* 1.3, p1480, pl. (partial) (Table 3)  
*P.Hib.* 1.22: see *P.Heid.* 4.2  
*P.Iand.* 5.80: see *Brit.Lib.* inv. 108+115  
*PIFAO* inv. 75, *BIFAO* 46 (1947) 66-67, p1127, photo (Table 1)  
*P.Ist.Pap.G.* Vitelli 2013, *Studia Flor.A. Ronconi Sexagenario Oblata* (Rome 1970) 207, pl. (Table 3)  
*P.Köln* 1.3: see *P.Bodm.* 26  
*P.Köln* 1.4: see *P.Oxy.* 33.2654  
*P.Köln* 1.37 (Table 1)  
*P.Köln* 2.59, Uebel 1369, pl. (Table 3)  
*P.Köln* 2.76, pl. (Table 2)  
*P.Köln* 3.125, pl. (Table 2)  
*P.Köln* 5.205, pl. (Table 3)  
*P.Köln* 6.242, pl. (Tables 2, 3)  
*P.Köln* 6.247, pl. (Table 3)  
*P.Lille* 73+76+111c, *ZPE* 26 (1977) 1-6, 7-36, pl: *CRIPEL* 4 (1976) 287-329, *GMAW*<sup>2</sup> 74 (partial) (Table 3)  
*P.Lips.* inv. 338, *APF* 29 (1983) 15-17 (Table 1)  
*P.Lit.Pisa* 2 (P.Genève), p1030, pl., photo (Tables 1, 2)  
*P.Lond.Lit.* 5: see *Brit.Lib.* inv. 126  
*P.Lond.Lit.* 6: see *P.Ryl.* 3.540  
*P.Lond.Lit.* 9: see *P.Oxy.* 4.687  
*P.Lond.Lit.* 11: see *Brit.Lib.* inv. 136  
*P.Lond.Lit.* 14: see *P.Oxy.* 3.445  
*P.Lond.Lit.* 25: see *Brit.Lib.* inv. 107

*P.Lond.Lit.* 27: see Brit.Libr. inv. 128  
*P.Lond.Lit.* 30: see Brit.Libr. inv. 271  
*P.Lond.Lit.* 44: see *P.Oxy.* 4.659  
*P.Lond.Lit.* 45: see *P.Oxy.* 5.841  
*P.Lond.Lit.* 46: see Brit.Libr. inv. 733  
*P.Lond.Lit.* 48: see *P.Oxy.* 11.1361  
*P.Lond.Lit.* 66 : see *P.Oxy.* 9.1175  
*P.Lond.Lit.* 67: see *P.Oxy.* 9.1174  
*P.Lond.Lit.* 96: see Brit.Libr. inv. 135  
*P.Lond.Lit.* 108: see Brit.Libr. inv. 131v  
*P.Lond.Lit.* 131: see Brit.Libr. inv. 132  
*P.Lond.Lit.* 132: see Brit.Libr. inv. 108+115  
*P.Lond.Lit.* 134: see Brit.Libr. inv. 134  
*P.Lond.Lit.* 140: see Brit.Libr. inv. 1546A  
*P.Lond.Lit.* 148: see *P.Oxy.* 13.1608  
*P.Lond.Lit.* 174: see Brit.Libr. inv. 2040  
*P.Lond.Lit.* 176: see *P.Oxy.* 8.1086  
*P.Lond.Lit.* 178: see *P.Oxy.* 2.221  
*P.Lond.Lit.* 185: see *P.Oxy.* 2.220  
*P.Lund, Årsb.Lund* (1934-35) 53f, p781 (Table 1)  
*P.Marm.*, p455, pl. (Table 2)  
*P.Med.* inv. 210, *Aegyptus* 58 (1978) 110-16, pl. (Table 2)  
*P.Med.* inv. CNR 68.3, *Aegyptus* 47 (1967) 191, Uebel 1311, pl. (Table 3)  
*P.Michael.* 2, p997 (Table 2)  
*P.Michael.* 4, *ZPE* 10 (1973) 75-77, p2271, pl. (Table 3)  
*P.Mich.* inv. 2, *TAPA* 53 (1922) 128-33, p958, *vidi* (Table 2)  
*P.Mich.* inv. 1575, *ZPE* 46 (1982) 88-91, pl. (Table 2)  
*P.Mich.* inv. 2810, *ZPE* 46 (1982) 58-69, p599, *vidi* (Table 2)  
*P.Mich.* inv. 2906, *ZPE* 10 (1973) 175-85, pl. (Table 2)  
*P.Mich.* inv. 3390, *ZPE* 76 (1989) 237-38, *vidi* (Table 2)  
*P.Mich.* inv. 4270, *ZPE* 29 (1978) 5-13, *vidi* (Tables 2, 3)  
*P.Mich.* inv. 6643, *WS* 79 (1966) 186-89, Uebel 1474, pl. (Tables 2, 3)  
*P.Mich.* inv. 6653v, *ZPE* 14 (1974) 89-90, pl. (Table 1)  
*P.Mil.Vogl.* 1.9, p1406 (Table 3)  
*P.Mil.Vogl.* 6.259 (Table 1)  
*P.Monac.*, *APF* 1 (1901) 473-75, p1566 (Table 2)  
*P.Morgan* Libr., *Sitzb.Berl.Akad.* (1912) 1198-1219, p870, pl. (partial) (Table 2)  
*P.Oxy.* 1.9 : see *P.Oxy.* 34.2687  
*P.Oxy.* 1.12 (Cambridge Univ. Libr., add. 4029), p2205 (Table 2)  
*P.Oxy.* 1.15 (Glasgow Univ. Libr.), p1618 (Table 3)  
*P.Oxy.* 1.16, 4.696 (Univ. of Pennsylvania Museum), p1524: pl. (partial) (Tables 2, 3)  
*P.Oxy.* 1.28 (St Andrews Univ. Libr.), p1554, photo (Tables 2, 3)  
*P.Oxy.* 2.212, Brit.Libr. inv. 1180, *P.Lond.Lit.* 85, p156 (Table 3)  
*P.Oxy.* 2.220, Brit.Libr. inv. 1184, *P.Lond.Lit.* 185, p2172, pl. (partial) (Table 2)  
*P.Oxy.* 2.221, Brit.Libr. inv. 1184, *P.Lond.Lit.* 178, p1205, pl.: Erbse, *Sch.Gr.Hom.II.* vol. 5, *P.Oxy.* (partial) (Table 2)  
*P.Oxy.* 2.223 = Bodleian Libr., Gr. class. a.8 (P), p733, pl. (partial) (Tables 2, 3)  
*P.Oxy.* 2.229, p1392, photo (Table 3)  
*P.Oxy.* 3.412: see Brit.Libr. inv. 2040  
*P.Oxy.* 3.442 (Trinity College Library, Dublin, Pap. E.8), p2543 (Table 3)  
*P.Oxy.* 3.445, Brit.Libr. inv. 1190, *P.Lond.Lit.* 14, p778, pl.: Erbse, *Sch.Gr.Hom.II.* vol. 2, *P.Oxy.* (partial), photo (Table 1)  
*P.Oxy.* 3.471 = Bodleian Libr., Gr. class. a.10 (P), p2225, photo (Table 2)

*P.Oxy.* 4.659 (P.Princeton AM 9054), Brit.Libr. inv. 1533, *P.Lond.Lit.* 44, p1371, pl. (Table 3)

*P.Oxy.* 4.676 (Wellesley College), p1722 (Table 3)

*P.Oxy.* 4.687, Brit. Libr. inv. 1535, *P.Lond. Lit.* 9, p691, pl. (Table 1)

*P.Oxy.* 4.694 (P.Princeton), p1492 (Table 3)

*P.Oxy.* 4.696: see *P.Oxy.* 1.16

*P.Oxy.* 4.770 (Chadwick Museum, Bolton, Lancashire), p909, photo (Table 3)

*P.Oxy.* 5.841, Brit.Libr. inv. 1842v, *P.Lond.Lit.* 45, p1361, pl. (*P.Oxy.*, partial), Roberts, *GLH* 14, photo (Tables 2, 3)

*P.Oxy.* 5.844 (Houghton Libr., Harvard Univ.), p1263, pl. (partial); photo (Tables 2, 3)

*P.Oxy.* 6.852 (Bodleian Libr.), p438, partial pl.: *P.Oxy.*, full pl.: W.E.H. Cockle, *Euripides Hypsipyle* (Rome 1987), *GMAW* 2 31 (Tables 2, 3)

*P.Oxy.* 6.853 (P.Cairo), p1536, pl. (partial) (Table 3)

*P.Oxy.* 6.875: see *P.Oxy.* 52.3686

*P.Oxy.* 6.885 (Musées Royaux, Brussels, inv. E5973), p2105, pl.: M. Wittek, *Album de Paléographie Grecque* (Gand 1967) 6 (Table 3)

*P.Oxy.* 7.1011 = Bodleian Libr., Gr. class. c.72 (P), p215, pl. (partial); photo (Table 2)

*P.Oxy.* 7.1018 (P.Ryl. inv. 450), p1548 (Table 2)

*P.Oxy.* 8.1086, Brit.Libr. inv. 2055, *P.Lond.Lit.* 176, p1173, pl.: Erbse, *Sch.Gr.Hom.II.* vol. 1, *GMAW* 2 58 (Table 3)

*P.Oxy.* 8.1089 = Bodleian Libr., Gr. class. d.101 (P), p2217 (Table 3)

*P.Oxy.* 8.1093 (P.Cairo), p328 (Table 2)

*P.Oxy.* 9.1173: see *PSI* 11.1207

*P.Oxy.* 9.1174, 17.2081a, Brit.Libr. inv. 2068, *P.Lond.Lit.* 67, p1473, pl. (*P.Oxy.*, partial), *GMAW* 2 34 (Tables 2, 3)

*P.Oxy.* 9.1175, 17.2081b, Brit. Libr. inv. 2069, *P.Lond.Lit.* 66, p1472, pl. (*P.Oxy.*, partial) (Tables 2, 3)

*P.Oxy.* 9.1182, p295, pl. (partial): *GMAW* 2 67 (Table 3)

*P.Oxy.* 10.1231, 17.2081c, 18.2166a, 21 pp. 122-26 = Bodleian Libr., Gr. class. c.76 (P), p1445, pl. (partial), photo (Table 3)

*P.Oxy.* 10.1232 = Bodleian Libr., Gr. class. c.75 (P), p1447, pl. (Table 2)

*P.Oxy.* 10.1233, 17.2081d, 18.2166b, 21 pp. 127-30 = Bodleian Libr., Gr. class. b.18 (P) p56, pl. (*P.Oxy.* 10, partial), *GMAW* 2 72 (Tables 2, 3)

*P.Oxy.* 10.1241 (Trinity College Dublin), p2069 (Table 3)

*P.Oxy.* 10.1247 (Toledo Museum of Art), p1532, photo (Table 2)

*P.Oxy.* 10.1248 (St Andrews Univ. Libr.), p1397, photo (Table 3)

*P.Oxy.* 11.1356: see *PSI* 11.1207

*P.Oxy.* 11.1361, 17.2081e, Brit.Libr. inv. 2443, *P.Lond.Lit.* 48, p179, pl. (*P.Oxy.*, partial); photo (Table 3)

*P.Oxy.* 11.1364 (Cambridge Univ. Libr. add. 6355), p92, pl. (partial); photo (Table 2)

*P.Oxy.* 11.1371, p145, pl. (partial); photo (Table 2)

*P.Oxy.* 11.1398 (St Paul's School, London), p1147, pl.: Cavallo, *Ric. maiuscola bibl.* 26a (Table 1)

*P.Oxy.* 13.1608, Brit.Libr. inv. 2469, *P.Lond.Lit.* 148, p19, pl. (*P.Oxy.*, partial) (Table 2)

*P.Oxy.* 13.1611 = Bodleian Libr., Gr. class. b.17 (P), p2290 (Tables 2, 3)

*P.Oxy.* 13.1614, p1352, pl. *GMAW* 2 23 (Table 2)

*P.Oxy.* 13.1617 (Bibl. de l'Université de Louvain D.371.2), p152 (Table 2)

*P.Oxy.* 13.1619, p474, pl. (partial); photo (Table 2)

*P.Oxy.* 13.1620 (Libr. of the Univ. of Melbourne), p1506, pl. (Tables 2, 3)

*P.Oxy.* 15.1787, 18.2166d, 21 pp. 134-39, *P.Hal.* 3 inv. 18, p1449, pl. (*P.Oxy.*, partial) (Table 3)

*P.Oxy.* 15.1788, 21 pp. 139-45, 23 pp. 105-106, p61, pl. (partial) (Table 3)

*P.Oxy.* 15.1790, 17.2081f, p1237, pl. (partial), *GMAW*<sup>2</sup> 20 (Table 2)  
*P.Oxy.* 15.1792, vols. 26 pp.13-25, 37 p.104; P.Berol. inv. 21114, *ZPE* 3 (1968) 97, p1363 (Table 3)  
*P.Oxy.* 15.1797, p93 (Table 3)  
*P.Oxy.* 15.1803, p2126 (Table 2)  
*P.Oxy.* 15.1806, p1495, pl. (Table 3)  
*P.Oxy.* 15.1809, p1391, pl.: *GMAW*<sup>2</sup> 19 (Tables 2, 3)  
*P.Oxy.* 15.1818 (Musées Royaux, Brussels, inv. E.6002 A, B, C), p988, pl.: Lameere, *Aperçus de paléographie homérique...* (Paris and Brussels 1960) 148-74 (Table 1)  
*P.Oxy.* 15.1820 (P.Cairo), p1133, pl. (partial) *GBByz.Per.* 22b (Tables 2, 3)  
*P.Oxy.* 2064, A.S. Hunt & J.Johnson, *Two Theocritus Papyri* (London 1930) 3-19, p1489, pl. (partial), photo (Tables 2, 3)  
*P.Oxy.* 17.2075, *PSI* 14.1384, p516, pl.: *GMAW*<sup>2</sup> 11 (Table 3)  
*P.Oxy.* 17.2078, p254, pl., *GMAW*<sup>2</sup> 33 (Table 3)  
*P.Oxy.* 17.2081a: see *P.Oxy.* 9.1174 (Table 2)  
*P.Oxy.* 17.2081b: see *P.Oxy.* 9.1175  
*P.Oxy.* 17.2081c: see *P.Oxy.* 10.1231  
*P.Oxy.* 17.2081d: see *P.Oxy.* 10.1233  
*P.Oxy.* 17.2081e: see *P.Oxy.* 11.1361  
*P.Oxy.* 17.2081f: see *P.Oxy.* 15.1790  
*P.Oxy.* 17.2093, p1461, photo (Table 2)  
*P.Oxy.* 17.2094 (ap. 49.3445 p. xviii), p1285 (Table 3)  
*P.Oxy.* 17.2100, p1523 (Table 3)  
*P.Oxy.* 17.2101, p1545, pl.: Cavallo, *Ric. maiuscola bibl.* 42 (Table 3)  
*P.Oxy.* 17.2102, p1402 (Tables 2, 3)  
*P.Oxy.* 18.2158: see *PSI* 11.1207  
*P.Oxy.* 18.2160: see *PSI* 11.1210  
*P.Oxy.* 18.2163, p33, pl. (Table 3)  
*P.Oxy.* 18.2164, p44, pl. (Table 3)  
*P.Oxy.* 18.2165, p62, pl. (Table 3)  
*P.Oxy.* 18.2166a: see *P.Oxy.* 10.1231  
*P.Oxy.* 18.2166b: see *P.Oxy.* 10.1233  
*P.Oxy.* 18.2166d: see *P.Oxy.* 15.1787  
*P.Oxy.* 18.2168, P.Berol. inv. 11629A-B + 13417 A-B *Sitz.Berl.Akad.* (1914) 222-44, (1912) 524-44, p201, pl. (partial: *P.Oxy.*, *SBA* 1912, 1914); full pl. of P.Berol. 11629: *GBByz.Per.* 10b (Table 2)  
*P.Oxy.* 18.2170: see *PSI* 11.1218  
*P.Oxy.* 18.2174, p547, pl. (Table 3)  
*P.Oxy.* 18.2176 and pp. 184-85, p551, pl. (Table 2)  
*P.Oxy.* 18.2178, p20, pl. (Table 3)  
*P.Oxy.* 19.2224: see *P.Oxy.* 44.3152  
*P.Oxy.* 20.2245, p37, pl. (Table 3)  
*P.Oxy.* 20.2250, p43, pl. (Table 3)  
*P.Oxy.* 20.2255, p45, pl. (Table 3)  
*P.Oxy.* 20.2258, p186, pl.; *GMAW*<sup>2</sup> 47 (partial); photo (Table 2)  
*P.Oxy.* 20.2259, p2160, pl. (Table 3)  
*P.Oxy.* 21.2290, p1450, pl. (Table 3)  
*P.Oxy.* 21.2291, p1901, pl. (Table 3)  
*P.Oxy.* 21.2295, p63, pl. (Tables 2, 3)  
*P.Oxy.* 21.2297, p65, pl. (Table 3)  
*P.Oxy.* 21.2301, p69, pl. (Table 3)  
*P.Oxy.* 21.2306, p74, pl. (Table 3)  
*P.Oxy.* 21.2307, p75, pl. (Table 3)

*P.Oxy.* 21 pp. 122-26: see *P.Oxy.* 10.1231  
*P.Oxy.* 21 pp. 127-30: see *P.Oxy.* 10.1233  
*P.Oxy.* 21 pp. 134-39: see *P.Oxy.* 15.1787  
*P.Oxy.* 21 pp. 139-45: see *P.Oxy.* 15.1788  
*P.Oxy.* 22.2310, p125, pl. (Table 3)  
*P.Oxy.* 22.2311, p126, pl. (Table 3)  
*P.Oxy.* 22.2312, p123, pl. (Table 3)  
*P.Oxy.* 22.2318, p127, pl. (Table 3)  
*P.Oxy.* 22.2322, p87, pl. (Table 3)  
*P.Oxy.* 22.2327 (*P.Turner* 3), p1750, pl. (Table 3)  
*P.Oxy.* 22.2335, p381, pl. (partial): B. Donovan, *Euripides Papyri* 13 (Table 3)  
*P.Oxy.* 23.2354, p508, pl. (Table 3)  
*P.Oxy.* 23.2359, p1485, pl. (Tables 2, 3)  
*P.Oxy.* 23.2362, p180, pl. (Table 3)  
*P.Oxy.* 23.2368, p183, pl. (Table 3)  
*P.Oxy.* 23.2369, p1474, pl. (Table 3)  
*P.Oxy.* 23 pp. 105-106: see *P.Oxy.* 15.1788  
*P.Oxy.* 24.2387, p79, pl., *GMAW*<sup>2</sup> 15 (Table 3)  
*P.Oxy.* 24.2389, p81, pl. (Table 3)  
*P.Oxy.* 24.2390, p82, pl. (Table 3)  
*P.Oxy.* 24.2394, p1890, pl. (Table 3)  
*P.Oxy.* 24.2399, p2194, pl., *GMAW*<sup>2</sup> 55 (Table 3)  
*P.Oxy.* 25.2427, p360, pl. (Tables 2, 3)  
*P.Oxy.* 25.2429, p362, pl. (Table 3)  
*P.Oxy.* 25.2430 (*P.Turner* 3), p1910, pl. (Table 2)  
*P.Oxy.* 25.2434, p1951, pl. (Table 3)  
*P.Oxy.* 26.2441, p1370, pl., *GMAW*<sup>2</sup> 22 (Table 3)  
*P.Oxy.* 26.2442, p1360, pl. (Table 3)  
*P.Oxy.* 26.2445, p1368, pl. (Table 3)  
*P.Oxy.* 26.2450, p1369, pl. (Tables 2, 3)  
*P.Oxy.* vol. 26 pp. 13-25: see *P.Oxy.* 15.1792  
*P.Oxy.* 27.2452, p1479, pl. (partial); *GMAW*<sup>2</sup> 27 (Table 3)  
*P.Oxy.* 27.2454, p1711, pl. (Table 3)  
*P.Oxy.* 27.2468, p1396, photo (Table 3)  
*P.Oxy.* 28.2487, p528b, pl. (Table 3)  
*P.Oxy.* vol. 29, p1950, pl. (Table 3)  
*P.Oxy.* 31.2537, Uebel 1507, pl. (Tables 2, 3)  
*P.Oxy.* 32.2617, Uebel 1386, pl. (Table 3)  
*P.Oxy.* 32.2637, Uebel 1393, pl. (Table 3)  
*P.Oxy.* 33.2654+*P.Köln* 1.4, Uebel 1182, pl., *GMAW*<sup>2</sup> 41, (Tables 2, 3)  
*P.Oxy.* 33.2656, Uebel 1184, pl. (Table 2)  
*P.Oxy.* 34.2687 (*P.Oxy.* 1.9 add.), p166 add., Uebel 1429, pl. (*P.Oxy.* 34) (Tables 2, 3)  
*P.Oxy.* 34.2694, p103, pl.: *BICS* 7 (1960) 45-56 (Table 2)  
*P.Oxy.* 34.2702, Uebel 1237, photo (Table 2)  
*P.Oxy.* 35.2741, Uebel 1175, pl. (Table 3)  
*P.Oxy.* 37.2751, pl. (Table 3)  
*P.Oxy.* 37.2803, pl. (Tables 2, 3)  
*P.Oxy.* 37.2812, pl. (Table 3)  
*P.Oxy.* 37.2819, pl. (Table 3)  
*P.Oxy.* vol. 37 p. 104: see *P.Oxy.* 15.1792  
*P.Oxy.* 38.2825, Uebel 1186, pl. (Table 3)  
*P.Oxy.* 42.3002 (Table 2)  
*P.Oxy.* 42.3003 (Table 3)

*P.Oxy.* 44.3151, pl. (Table 3)  
*P.Oxy.* 44.3152 (19.2224 add.), p395 add., pl. (partial): *P.Oxy.* 44 (Table 3)  
*P.Oxy.* 44.3154 (Table 3)  
*P.Oxy.* 45.3224 (Table 3)  
*P.Oxy.* 47.3326 (Tables 2, 3)  
*P.Oxy.* 49.3437 (Table 3)  
*P.Oxy.* 49.3445 p. xviii: see *P.Oxy.* 17.2094  
*P.Oxy.* 49.3452, pl. (Table 2)  
*P.Oxy.* 50.3538, pl. (Table 2)  
*P.Oxy.* 52.3656, pl. (Table 3)  
*P.Oxy.* 52.3662 (Table 3)  
*P.Oxy.* 52.3663 (Table 3)  
*P.Oxy.* 52.3675 (Table 3)  
*P.Oxy.* 52.3686 (*P.Oxy.* 6.875 add.), p1463 add. (Table 3)  
*P.Oxy.* 53.3695, pl. (Table 3)  
*P.Oxy.* 53.3699, pl. (Table 2)  
*P.Oxy.* 53.3710, pl. (Tables 2, 3)  
*P.Oxy.* 53.3711, pl. (Table 3)  
*P.Oxy.* 54.3722, pl. (Tables 2, 3)  
*P.Oxy.* 54.3724, pl. (Table 2)  
*P.Paris* 2, p246, pl. (partial) Roberts, *GLH* 6a, Seider *PGP* 13 (Table 2)  
*P.Paris* 71, p78, pl.; *GMAW* 2 16; photo (Table 2)  
*P.Princ.* 3.113, p1280, photo (Table 2)  
*P.Rein.* 1.2, *P.Ryl.* 1.21, P.Berol. inv. 9770 (*BKT* 3.10-19), p2346, pl. (Table 3)  
*P.Rein.* 2.69, p873, photo (Table 3)  
*P.Ross.Georg.* 1.4, p941 (Table 2)  
*P.Ross.Georg.* 1.17, p2083 (Table 3)  
*P.Ryl.* 1.16, p1688, pl., Roberts, *GLH* 22b, (Table 2)  
*P.Ryl.* 1.21: see *P.Rein.* 1.2  
*P.Ryl.* 1.29a, p2416 (Table 2)  
*P.Ryl.* 1.34, p1941 (Table 3)  
*P.Ryl.* 1.51, p1016, pl. (partial) (Table 1)  
*P.Ryl.* 1.53, p1106, pl. (partial): *New Pal.Soc.* ser. 2.1.54; photo (Table 2)  
*P.Ryl.* 1.55, p472, pl. (partial) (Table 3)  
*P.Ryl.* 3.475, p2280, photo (Table 3)  
*P.Ryl.* 3.531, p2418 (Table 2)  
*P.Ryl.* 3.539, p575, pl.: *Two Biblical Papyri in the John Rylands Library* (Manchester 1936) 11 (Table 3)  
*P.Ryl.* 3.540, Brit.Libr. inv. 1873, *P.Lond.Lit.* 6, p643, pl.: *New Pal.Soc.* ser. 2.1.53, Seider pl. 11 no. 21 (Table 2)  
*P.Ryl.* 3.541, p652, photo (Table 2)  
*P.Schub.* 11, p1978 (Table 3)  
*P.Schub.* 38, p2596 (Table 3)  
*PSI* inv. CNR 66+67, *Papiri dell'Odissea* 5, pl. (Table 3)  
*PSI* 1.10, *Mus.Phil.Lond.* 2 (1977) 1-17 with pl., p833 (Tables 2, 3)  
*PSI* 1.8, p1059, pl. (partial) (Tables 1, 3)  
*PSI* 2.113, p608, photo (Tables 1, 3)  
*PSI* 2.123, p1444, pl., *Pap.Flor.* 12 suppl. pl. 70 (Table 3)  
*PSI* 2.130-131, p531, pl.: *Pap.Flor.* 12 suppl. pl. 69, *APF* 16 (1956) 26-81 pl. 6 (Table 2)  
*PSI* 2.140, p1000, photo (Table 2)  
*PSI* 3.158, p2053, pl.: *Pap.Flor.* 12 suppl. 74 (Table 3)  
*PSI* 6.721, p332, photo (Table 2)

*PSI* 7.846, p1628, photo (Table 3)  
*PSI* 7.850, p2462 (Table 3)  
*PSI* 9.1095, p2567, pl: *Pap. Flor.* 12 suppl. 75 (Table 3)  
*PSI* 10.1175, p1640 (Table 3)  
*PSI* 10.1180, p2421, photo (Table 2)  
*PSI* 11.1182, p2953, pl. (partial) (Tables 2, 3)  
*PSI* 11.1185, p795, pl: *Pap. Flor.* 12 suppl. 76 (Table 3)  
*PSI* 11.1191, p497, photo (Table 2)  
*PSI* 11.1192, p1467, photo (Table 2)  
*PSI* 11.1207, *P. Oxy.* 9.1173, 11.1356, 18.2158, *P. Haun.* 1.8, p1344, pl. (*PSI*, partial) (Table 2)  
*PSI* 11.1210, *P. Oxy.* 18.2160, p28, pl. (*P. Oxy.*, partial) (Table 3)  
*PSI* 11.1218, *P. Oxy.* 18.2170, p213, pl. (*PSI*, partial) (Table 2)  
*PSI* 12.1278: see *Brit. Libr. inv.* 733  
*PSI* 12.1289, p2054, photo (Table 2)  
*PSI* 13.1298, *ZPE* 36 (1979) 61-62, p904 (Tables 2, 3)  
*PSI* 14.1384: see *P. Oxy.* 17.2075  
*PSI* 14.1399, p2518, photo (Table 2)  
*PSI* 15.1456 (Table 1)  
*PSI* 15.1458, p955, pl. (Table 1)  
*P. Soc. Pap. Alex. inv.* 212, *BIFAO* 46 (1947) 57-60, p810 (Table 1)  
*P. Sorb. inv.* 2328, *Rech. Pap.* 4 (1967) 11-67, *Uebel* 1211 (Table 3)  
*P. Strassb. inv. Gr.* 31+32, *BIFAO* 54 (1954) 45-62, p591, pl. (partial), photo (Table 2)  
*P. Strassb. inv. Gr.* 2462a+2489, *BIFAO* 61 (1962) 172, p1035 (Table 2)  
*P. Strassb. inv. Gr.* 2675, *BIFAO* 61 (1962) 151-68, p789, photo (Tables 1, 2)  
*P. Tebt.* 1.4, p632, pl. (partial), *GMAW* 2 12, photo (Tables 1, 2)  
*P. Tebt.* 2.432, *Calif. St. Class. Ant.* 4 (1971) 201-202 (with partial pl.), p1156: (Table 2)  
*P. Tebt.* 3.692, p1475, pl. (partial), photo (Table 3)  
*P. Turner* 1 pl. (Table 2)  
*P. Turner* 3: see *P. Oxy.* 22.2327, *P. Oxy.* 25.2430  
*P. Turner* 9, pl. (Table 2)  
*P. Vindob. inv.* G2314, *Feierl. Sitz. d. Kaiserl. Akad. d. Wiss.* (Vienna 1886) 57-60; *Vortrag ü. d. gr. Pap. Erzh. Rain.* (Vienna 1886) 44-49, p17, pl. (partial): *ZPE* 46 (1982) 1-31 (Table 2)  
*P. Vindob. inv.* 200, *WS* 7 (1885) 116-22, p1534, pl. (Tables 2, 3)  
*P. Vindob. inv.* 26746+26754-60: see *Brit. Libr. inv.* 271 (Table 3)  
*P. Vindob. inv.* 29311, *Hommages Préaux* 548-54 (re-ed. of *MPER* N.S. 3.60), p2261 (Table 2)  
*Perg. Berol.* 13217, *BKT* 5.2.73-79, p437 (Table 2)

Table 5  
CONCORDANCE OF PACK<sup>2</sup> AND UEBEL NUMBERS

Pack <sup>2</sup>	Publication
5	<i>P.Gen.</i> 1 (Table 2)
17	<i>P.Vindob.</i> inv. G2314, <i>Feierl.Sitz.d. Kaiserl.Akad.d.Wiss.</i> (Vienna 1886) 57 <i>Vortrag ü.d.gr.Pap.Erzh.Rain.</i> (Vienna 1886) 44-49 (Table 2)
19	<i>P.Oxy.</i> 13.1608, <i>Brit.Libr.</i> inv. 2469, <i>P.Lond.Lit.</i> 14 (Table 2)
20	<i>P.Oxy.</i> 18.2178 (Table 3)
28	<i>PSI</i> 11.1210, <i>P.Oxy.</i> 18.2160 (Table 3)
33	<i>P.Oxy.</i> 18.2163 (Table 3)
37	<i>P.Oxy.</i> 20.2245 (Table 3)
43	<i>P.Oxy.</i> 20.2250 (Table 3)
44	<i>P.Oxy.</i> 18.2164 (Table 3)
45	<i>P.Oxy.</i> 20.2255 (Table 3)
53	<i>Brit.Libr.</i> inv. 2040, <i>P.Lond.Lit.</i> 174, <i>P.Oxy.</i> 3.412 (Table 2)
56	<i>P.Oxy.</i> 10.1233, 17.2081d, 18.2166b, 21 pp. 127-30 (Tables 2, 3)
61	<i>P.Oxy.</i> 15.1788, 21 pp. 139-45, 23 pp. 105-106 (Table 3)
62	<i>P.Oxy.</i> 18.2165 (Table 3)
63	<i>P.Oxy.</i> 21.2295 (Tables 2, 3)
65	<i>P.Oxy.</i> 21.2297 (Table 3)
69	<i>P.Oxy.</i> 21.2301 (Table 3)
74	<i>P.Oxy.</i> 21.2306 (Table 3)
75	<i>P.Oxy.</i> 21.2307 (Table 3)
78	<i>P.Paris</i> 71 (Table 2)
79	<i>P.Oxy.</i> 24.2387 (Table 3)
81	<i>P.Oxy.</i> 24.2389 (Table 3)
82	<i>P.Oxy.</i> 24.2390 (Table 3)
87	<i>P.Oxy.</i> 22.2322 (Table 3)
92	<i>P.Oxy.</i> 11.1364 (Table 2)
93	<i>P.Oxy.</i> 15.1797 (Table 3)
103	<i>P.Oxy.</i> 34.2694 (Table 2)
119	<i>P.Berol.</i> inv. 5865, <i>BKT</i> 5.1.54 <i>APF</i> 27 (1980) 19-32 (Table 2)
123	<i>P.Oxy.</i> 22.2312 (Table 3)
125	<i>P.Oxy.</i> 22.2310 (Table 3)
126	<i>P.Oxy.</i> 22.2311 (Table 3)
127	<i>P.Oxy.</i> 22.2318 (Table 3)
145	<i>P.Oxy.</i> 11.1371 (Table 2)
152	<i>P.Oxy.</i> 13.1617 (Table 2)
156	<i>P.Oxy.</i> 2.212, <i>Brit.Libr.</i> inv. 1180, <i>P.Lond.Lit.</i> 85 (Table 3)
157	<i>P.Flor.</i> 2.112 (Tables 2, 3)
163	<i>Brit.Libr.</i> inv. 131v, <i>P.Lond.Lit.</i> 108 (Tables 2, 3)
166 add.	<i>P.Oxy.</i> 34.2687 ( <i>P.Oxy.</i> 1.9 add.) (Tables 2, 3)
175	<i>Brit.Libr.</i> inv. 733, <i>P.Lond.Lit.</i> 46, <i>PSI</i> 12.1278 (Table 2)
179	<i>P.Oxy.</i> 11.1361, 17.2081e, <i>Brit.Libr.</i> inv. 2443, <i>P.Lond.Lit.</i> 48 (Table 3)
180	<i>P.Oxy.</i> 23.2362 (Table 3)
183	<i>P.Oxy.</i> 23.2368 (Table 3)
186	<i>P.Oxy.</i> 20.2258 (Table 2)
201	<i>P.Oxy.</i> 18.2168, <i>P.Berol.</i> inv. 11629A-B + 13417 A-B <i>Sitz.Berl.</i> <i>Akad.</i> (1914) 222-44, (1912) 524-44 (Table 2)
213	<i>PSI</i> 11.1218, <i>P.Oxy.</i> 18.2170 (Table 2)
215	<i>P.Oxy.</i> 7.1011 (Table 2)

246 *P.Paris* 2 (Table 2)  
 251 *P.Berol.inv.* 13284, *BKT* 5.2.19-55 (Table 3)  
 254 *P.Oxy.* 17.2078 (Table 3)  
 263 *P.Amh.* 2.24 (Table 2)  
 295 *P.Oxy.* 9.1182 (Table 3)  
 321 *P.Ant.* 2.80 (Table 2)  
 328 *P.Oxy.* 8.1093 (Table 2)  
 332 *PSI* 6.721 (Table 2)  
 339 *P.Berol.inv.* 9780, *BKT* 1, re-ed. L.Pearson & S.Stephens (Stuttgart 1983) (Tables 2, 3)  
 348 *P.Cair.Masp.* 1.67055 etc. (Table 2)  
 360 *P.Oxy.* 25.2427 (Tables 2, 3)  
 362 *P.Oxy.* 25.2429 (Table 3)  
 381 *P.Oxy.* 22.2335 (Table 3)  
 395 add. *P.Oxy.* 44.3152 (19.2224 add.) (Table 3)  
 405 *P.Harr.* 38 (Tables 2, 3)  
 410 *P.Col.* 8.202 (*P.Columbia Univ.Libr.inv.* 517a) (Table 3)  
 437 *Perg. Berol.* 13217, *BKT* 5.2.73-79 (Table 2)  
 438 *P.Oxy.* 6.852 (Tables 2, 3)  
 449 *P.Berol.inv.* 9908, *BKT* 5.2.64-72 (Table 3)  
 455 *P.Marm.* (Table 2)  
 472 *P.Ryl.* 1.55 (Table 3)  
 474 *P.Oxy.* 13.1619 (Table 2)  
 485 *Brit.Libr. inv.* 135, *P.Lond.Lit.* 96 (Table 2)  
 497 *PSI* 11.1191 (Table 2)  
 499 *MPER* 1.73-83, *Stud.Pal.* 1 (1901) iii-x (Tables 2, 3)  
 508 *P.Oxy.* 23.2354 (Table 3)  
 516 *P.Oxy.* 17.2075, *PSI* 14.1384 (Table 3)  
 528b *P.Oxy.* 28.2487 (Table 3)  
 531 *PSI* 2.130-131 (Table 2)  
 536 *P.Berol.inv.* 9780v, *BKT* 4 (Tables 2, 3)  
 547 *P.Oxy.* 18.2174 (Table 3)  
 551 *P.Oxy.* 18.2176 and pp. 184-85 (Table 2)  
 572 *P.Berol. inv.* 6869+7492-95, *BKT* 5.1.3, *P.Aberd.* 134, *APP* 24/25 (1976) 6-12 (Table 2)  
 575 *P.Ryl.* 3.539 (Table 3)  
 591 *P.Strassb. inv.* Gr. 31+32, *BIFAO* 54 (1954) 45-62 (Table 2)  
 599 *P.Mich. inv.* 2810, *ZPE* 46 (1982) 58-69 (Table 2)  
 604 *P.Flor.* 2.106 (Table 2)  
 608 *PSI* 2.113 (Tables 1, 3)  
 616 *P.Haw.* 24-28 (Tables 1, 2)  
 632 *P.Tebt.* 1.4 (Tables 1, 2)  
 634 *Brit.Libr. inv.* 126, *P.Lond.Lit.* 5 (Table 2)  
 643 *P.Ryl.* 3.540, *Brit.Libr. inv.* 1873, *P.Lond.Lit.* 6 (Table 2)  
 652 *P.Ryl.* 3.541 (Table 2)  
 658 *P.Cair.Masp.* 2.67172-74 (Table 2)  
 691 *P.Oxy.* 4.687, *Brit. Libr.inv.* 1535, *P.Lond. Lit.* 9 (Table 1)  
 697 *Brit.Libr.inv.* 136, *P.Lond.Lit.* 11 (Table 1)  
 733 *P.Oxy.* 2.223 (Tables 2, 3)  
 735 *P.Berol.inv.* 8440, *BKT* 5.1.4 (Table 1)  
 778 *P.Oxy.* 3.445, *Brit.Libr.inv.* 1190, *P.Lond.Lit.* 14 (Table 1)  
 781 *P.Lund, Årsb.Lund* (1934-35) 53f (Table 1)  
 788 add. *P.Daris inv.* 12, *Stud.Pap.* 7 (1968) 7-22 (Table 2)  
 789 *P.Strassb.inv.* Gr. 2675, *BIFAO* 61 (1962) 151-68 (Tables 1, 2)

795 *PSI* 11.1185 (Table 3)  
 810 P.Soc.Pap.Alex.inv. 212, *BIFAO* 46 (1947) 57-60 (Table 1)  
 833 *PSI* 1.10, *Mus.Phil.Lond.* 2 (1977) 1-17 (Tables 2, 3)  
 842 P.Berol.inv. 7807, *BKT* 5.1.4 (Tables 1, 2, 3)  
 870 P.Morgan Libr., *Sitzs.Berl.Akad.* (1912) 1198-1219 (Table 2)  
 873 *P.Rein.* 2.69 (Table 3)  
 904 *PSI* 13.1298, *ZPE* 36 (1979) 61-62 (Tables 2, 3)  
 909 *P.Oxy.* 4.770 (Table 3)  
 941 *P.Ross.Georg.* 1.4 (Table 2)  
 953 Brit.Libr. inv. 107, *P.Lond.Lit.* 25 (Table 2)  
 955 *PSI* inv.?, *Ann.Sc.Pisa* 2.26 (1957) 179-80 (Table 1)  
 958 P.Mich. inv. 2, *TAPA* 53 (1922) 128-33 (Table 2)  
 962 P.Berol.inv. 9774, *BKT* 5.1.18-20 (Tables 1, 2)  
 979 *P.Heid.* 4.2, *P.Hib.* 1.22, *P.Grenf.* 2.4 (Tables 2, 3)  
 980 P.Berol.inv. 16985, *Rev.Ph.* sér. 3.29 (1955) 199 no. 449 (Table 1)  
 988 *P.Oxy.* 15.1818 (Table 1)  
 997 *P.Michael.* 2 (Table 2)  
 998 Brit.Libr.inv. 128, *P.Lond.Lit.* 27 (Table 1, 2)  
 1000 *PSI* 2.140 (Table 2)  
 1005 P.Berol.inv. 11761, *Rev.Phil.* sér. 3.29 (1955) 199, no. 452 (Table 1)  
 1016 *P.Ryl.* 1.51 (Table 1)  
 1030 *P.Lit.Pisa* 2 (P.Genève) (Tables 1, 2)  
 1035 P.Strassb. inv. Gr. 2462a+2489, *BIFAO* 61 (1962) 172 (Table 2)  
 1039 Brit.Libr. inv. 271, *P.Lond.Lit.* 30, P.Vindob. 6746+2675460, *Archiv  
für Bibliographie, Buch-, und Bibliothekswesen* 1 (1926) 92-93  
     (Table 1)  
 1059 *PSI* 1.8 (Tables 1, 3)  
 1106 *P.Ryl.* 1.53 (Table 2)  
 1116 *P.Cairo Goodspeed* 1 (Table 1)  
 1127 PIFAOinv. 75, *BIFAO* 46 (1947) 66-67 (Table 1)  
 1133 *P.Oxy.* 15.1820 (Tables 2, 3)  
 1147 *P.Oxy.* 11.1398 (Table 1)  
 1156 *P.Tebt.* 2.432, *Calif.St. Class.Ant.* 4 (1971) 201-202 (Table 2)  
 1173 *P.Oxy.* 8.1086, Brit.Libr.inv. 2055, *P.Lond.Lit.* 176 (Table 3)  
 1184 P.Cairo inv. 60566, *Mél.Maspero* 1.148-51 (MIFAO 67.1, Cairo  
     1934) (Table 1)  
 1205 *P.Oxy.* 2.221, Brit.Libr. inv. 1184, *P.Lond.Lit.* 178 (Table 2)  
 1233 Brit.Libr. inv. 108+115, *P.Lond.Lit.* 132, *P.Jand.* 5.80 (Table 2)  
 1234 Brit.Libr. inv. 134, *P.Lond.Lit.* 134 (Table 2)  
 1237 *P.Oxy.* 15.1790, 17.2081f (Table 2)  
 1263 *P.Oxy.* 5.844 (Tables 2, 3)  
 1270 *MPER* 2.74-76 (Table 2)  
 1272 Brit.Libr. inv. 132, *P.Lond.Lit.* 131 (Table 2)  
 1280 *P.Princ.* 3.113 (Table 2)  
 1285 *P.Oxy.* 17.2094 (ap. 49.3445 p. xviii) (Table 3)  
 1325 *P.Harr.* 1 (Table 2)  
 1329 P.Berol. inv. 10567, *BKT* 5.1.94-106 (Table 2)  
 1344 *PSI* 11.1207, *P.Oxy.* 9.1173, 11.1356, 18.2158, *P.Haun.* 1.8 (Table 2)  
 1345 BN Paris, P.Gr. 1120, Suppl. grec 2, *MIFAO* 9.2 (1893) (Table 2)  
 1352 *P.Oxy.* 13.1614 (Table 2)  
 1360 *P.Oxy.* 26.2442 (Table 3)  
 1361 *P.Oxy.* 5.841, Brit.Libr. inv. 1842v, *P.Lond.Lit.* 45 (Tables 2, 3)  
 1363 *P.Oxy.* 15.1792, vols. 26 pp.13-25, 37 p.104; P.Berol.inv. 21114,  
     *ZPE* 3 (1968) 97 (Table 3)

1368 *P.Oxy.* 26.2445 (Table 3)  
 1369 *P.Oxy.* 26.2450 (Tables 2, 3)  
 1370 *P.Oxy.* 26.2441 (Table 3)  
 1371 *P.Oxy.* 4.659, Brit.Libr.inv. 1533, *P.Lond.Lit.* 44 (Table 3)  
 1391 *P.Oxy.* 15.1809 (Tables 2, 3)  
 1392 *P.Oxy.* 2.229 (Table 3)  
 1393 *P.Berol.inv.* 9782, *BKT* 2 (Tables 2, 3)  
 1396 *P.Oxy.* 27.2468 (Table 3)  
 1397 *P.Oxy.* 10.1248 (Table 3)  
 1402 *P.Oxy.* 17.2102 (Tables 2, 3)  
 1404 *P.Berol. inv.* 8, *BKT* 2.52-53 (Table 2)  
 1406 *P.Mil.Vogl.* 1.9 (Table 3)  
 1444 *PSI* 2.123 (Table 3)  
 1445 *P.Oxy.* 10.1231, 17.2081c, 18.2166a, 21 pp. 122-26 (Table 3)  
 1447 *P.Oxy.* 10.1232 (Table 2)  
 1449 *P.Oxy.* 15.1787, 18.2166d, 21 pp. 134-39, *P.Hal.* 3inv. 18 (Table 3)  
 1450 *P.Oxy.* 21.2290 (Table 3)  
 1452 *P.Haun.inv.* 301, *P.Univ.Statale di Milano, Riv.Fil.* 69 (1941)  
     61-68 (Table 3)  
 1461 *P.Oxy.* 17.2093 (Table 2)  
 1463 add. *P.Oxy.* 52.3686 (*P.Oxy.* 6.875 add.) (Table 3)  
 1467 *PSI* 11.1192 (Table 2)  
 1472 *P.Oxy.* 9.1175, 17.2081b, Brit. Libr. inv. 2069, *P.Lond.Lit.* 66 (Tables 2, 3)  
 1473 *P.Oxy.* 9.1174, 17.2081a, Brit.Libr.inv. 2068, *P.Lond.Lit.* 67 (Tables 2, 3)  
 1474 *P.Oxy.* 23.2369 (Table 3)  
 1475 *P.Tebt.* 3.692 (Table 3)  
 1479 *P.Oxy.* 27.2452 (Table 3)  
 1480 *P.Hib.* 1.3 (Table 3)  
 1485 *P.Oxy.* 23.2359 (Tables 2, 3)  
 1487 *P.Antinoe*, A.S. Hunt & J.Johnson, *Two Theocr.Pap.* (London 1930) 20ff  
     (Table 2)  
 1489 *P.Oxy.* 2064, A.S. Hunt & J.Johnson, *Two Theocr.Pap.* (London 1930) 3-19  
     (Tables 2, 3)  
 1492 *P.Oxy.* 4.694 (Table 3)  
 1495 *P.Oxy.* 15.1806 (Table 3)  
 1506 *P.Oxy.* 13.1620 (Tables 2, 3)  
 1508 *P.Harr.* 41 (Table 2)  
 1523 *P.Oxy.* 17.2100 (Table 3)  
 1524 *P.Oxy.* 1.16, 4.696 (Tables 2, 3)  
 1532 *P.Oxy.* 10.1247 (Table 2)  
 1534 *P.Vindob.inv.* 200, *WS* 7 (1885) 116-22 (Tables 2, 3)  
 1536 *P.Oxy.* 6.853 (Table 3)  
 1545 *P.Oxy.* 17.2101 (Table 3)  
 1548 *P.Oxy.* 7.1018 (Table 2)  
 1550 *P.Haw., APF* 5 (1913) 378 (Table 3)  
 1551 *MPER* 6.81-97 (Table 2)  
 1552 *MPER* 6.97-113 (Table 3)  
 1554 *P.Oxy.* 1.28 (Tables 2, 3)  
 1566 *P.Monac., APF* 1 (1901) 473-75 (Table 2)  
 1618 *P.Oxy.* 1.15 (Table 3)  
 1626 *P.Amh.* 2.13 (Table 2)  
 1628 *PSI* 7.846 (Table 3)  
 1631 *MPER* N.S. 3.23 (Table 2)  
 1640 *PSI* 10.1175 (Table 3)

1688 *P.Ryl.* 1.16 (Table 2)  
 1711 *P.Oxy.* 27.2454 (Table 3)  
 1722 *P.Oxy.* 4.676 (Table 3)  
 1750 *P.Oxy.* 22.2327 (*P.Turner* 3) (Table 3)  
 1774 *P.Berol.inv.* 13044, *BKT* 5.1.7-18 (Table 3)  
 1851 *P.Berol. inv.* 10558-59, *BKT* 5.1.82-93 (Table 2)  
 1890 *P.Oxy.* 24.2394 (Table 3)  
 1901 *P.Oxy.* 21.2291 (Table 3)  
 1910 *P.Oxy.* 25.2430 (*P.Turner* 3) (Table 2)  
 1941 *P.Ryl.* 1.34 (Table 3)  
 1950 *P.Oxy.* vol. 29 (Table 3)  
 1951 *P.Oxy.* 25.2434 (Table 3)  
 1962 *P.Heid.* N.F. 2.188 (Table 2)  
 1978 *P.Schub.* 11 (Table 3)  
 2053 *PSI* 3.158 (Table 3)  
 2054 *PSI* 12.1289 (Table 2)  
 2069 *P.Oxy.* 10.1241 (Table 3)  
 2083 *P.Ross.Georg.* 1.17 (Table 3)  
 2105 *P.Oxy.* 6.885 (Table 3)  
 2115 *P.Hamb.* 2.129 (Table 3)  
 2126 *P.Oxy.* 15.1803 (Table 2)  
 2160 *P.Oxy.* 20.2259 (Table 3)  
 2172 *P.Oxy.* 2.220, *Brit.Libr. inv.* 1184, *P.Lond.Lit.* 185 (Table 2)  
 2194 *P.Oxy.* 24.2399 (Table 3)  
 2205 *P.Oxy.* 1.12 (Table 2)  
 2217 *P.Oxy.* 8.1089 (Table 3)  
 2224 *P.Harris, JRS* 39 (1949) 79-80 (Table 2)  
 2225 *P.Oxy.* 3.471 (Table 2)  
 2261 *P.Vindob. inv.* 29311, *Hommages Préaux* 548-54 (re-ed. of  
     *MPER* N.S. 3.60) (Table 2)  
 2271 *P.Michael.* 4, *ZPE* 10 (1973) 75-77 (Table 3)  
 2277 *P.Berol.inv.* 11866A-B, *Aeg.* 13 (1933) 621-43 (Tables 2, 3)  
 2280 *P.Ryl.* 3.475 (Table 3)  
 2290 *P.Oxy.* 13.1611 (Tables 2, 3)  
 2346 *P.Rein.* 1.2, *P.Ryl.* 1.21, *P.Berol. inv.* 9770 (*BKT* 3.10-19) (Table 3)  
 2354 *P.Berol.inv.* 9764, *BKT* 3.22-26 (Table 3)  
 2416 *P.Ryl.* 1.29a (Table 2)  
 2418 *P.Ryl.* 3.531 (Table 2)  
 2421 *PSI* 10.1180 (Table 2)  
 2462 *PSI* 7.850 (Table 3)  
 2511 *P.Berol. inv.* 9781, *BKT* 7.4-13 (Table 2)  
 2512 *P.Berol.inv.* 13405, *BKT* 7.31-34 (Table 3)  
 2516 *Brit.Libr.inv.* 1546A, *P.Lond.Lit.* 140 (Tables 2, 3)  
 2518 *PSI* 14.1399 (Table 2)  
 2531 *MPER* N.S. 1.14 (Table 3)  
 2543 *P.Oxy.* 3.442 (Table 3)  
 2567 *PSI* 9.1095 (Table 3)  
 2596 *P.Schub.* 38 (Table 3)  
 2866 *MPER* N.S. 3.37 (Table 2)  
 2953 *PSI* 11.1182 (Tables 2, 3)

Uebel	Publication
1175	<i>P.Oxy.</i> 35.2741 (Table 3)
1177	<i>P.Bodm.</i> 26+ <i>P.Köln</i> 1.3 (Tables 2, 3)
1182	<i>P.Oxy.</i> 33.2654+ <i>P.Köln</i> 1.4 (Tables 2, 3)
1184	<i>P.Oxy.</i> 33.2656 (Table 2)
1186	<i>P.Oxy.</i> 38.2825 (Table 3)
1211	<i>P.Sorb.inv.</i> 2328, <i>Rech.Pap.</i> 4 (1967) 11-67 (Table 3)
1214	<i>P.Berol.inv.</i> 21186, <i>ZPE</i> 4 (1969) 109-12 (Table 3)
1237	<i>P.Oxy.</i> 34.2702 (Table 2)
1289a	<i>P.Daris inv.</i> 12, <i>Stud.Pap.</i> 7 (1968) 7-22 (Table 2)
1295	<i>P.Ant.</i> 3.160 (Tables 2, 3)
1311	<i>P.Med.inv.</i> CNR 68.3, <i>Aeg.</i> 47 (1967) 191 (Table 3)
1312	<i>P.Ant.</i> 3.164 (Table 2)
1353	<i>P.Ant.</i> 3.116 (Tables 2, 3)
1369	<i>P.Köln</i> 2.59 (Table 3)
1386	<i>P.Oxy.</i> 32.2617 (Table 3)
1393	<i>P.Oxy.</i> 32.2637 (Table 3)
1429	<i>P.Oxy.</i> 34.2687 (Table 2)
1442	<i>P.Ant.</i> 3.183 (Table 2)
1454	<i>P.Ant.</i> 3.134 (Table 2)
1456	<i>P.Athen.Univ.inv.</i> 2780-1, <i>SB</i> 9860a-f (Tables 2, 3)
1474	<i>P.Mich.inv.</i> 6643, <i>WS</i> 79 (1966) 186-89 (Tables 2, 3)
1487	<i>P.Ant.</i> 3.182 (Table 2)
1507	<i>P.Oxy.</i> 31.2537 (Tables 2, 3)
1513	<i>P.Colon. inv.</i> 3328, A. Henrichs, <i>Die Phoinikika des Lollianus</i> (Bonn 1972)



## The Inflection of Marginal Notes in Literary Papyri

Marginal notes in literary papyri commonly gloss a single word or short phrase, which may or may not be repeated as a lemma. In either case the explanation, whether a word or two in length or longer, normally keeps to the inflection of the source. A fair number of notes, however, spread across 22 papyri, have lemmata or explanations inflected differently from the original text. Usually they appear as nominatives (in at least 41 of 53 occurrences), but there are some accusatives; only nouns, pronouns, and adjectives are involved.<sup>1</sup> The number of occurrences is too large and the variations too regular to dismiss the forms as freaks of chance. Why then the anomaly?

Naturally the explanation is linked to the source of papyrus notes. Precisely how, though, is not straightforward. For an assortment of reasons, marginalia are usually assumed to have been copied from separate commentaries. Frequently they correspond in wording and content to mediaeval scholia, whose roots are generally thought to be in hypomnemata. The phrasing of longer notes is indistinguishable from that of ancient commentaries: exegetic expressions like *toutéστιν*, *tò ἔξῆς*, *ἀντὶ τοῦ*, *λέγεται*, *εἴπε* (*εἴρηκε*, *λέγει*, *ἔφη*, *φησιν*) are at home in each. Notes are often set off by sigla that would be hard to explain unless they had been copied from something like a commentary, where such marks were conventional. Paragraphi, for example, typically separate the sections of a hypomnema; but since annotations rarely abut each other in rolls or even codices, any accompanying *paragraphus* is usually superfluous.<sup>2</sup>

The lemmata of ancient commentaries, however, are typically inflected "correctly": they had to be in order for a reader to locate them easily. No full-scale hypomnemata survive in which they are systematically converted to the nominative (not to mention any other grammatical case) and they are not likely to be found. Superficially, then, it is unlikely that the anomalous marginalia were copied from works like those: why would annotators trouble to change the form of key words? We must at least consider, then, whether the notes came from something other than commentaries, something in which regularity of form was the rule and where it worked as an aid, not a hindrance, to readers.

Lexica? Alphabetic lexica on papyrus do survive whose declinable lemmata are largely nominative. This is true especially for miscellaneous collections of hard words

<sup>1</sup> Appendix 1, Texts with Anomalous Marginalia. Appendix 2, Marginal Notes Inflected Anomalously. Accusatives: nos. 2, 15, 18, 34, 35; possibly accusative: nos. 10, 11, 12, 24, 40, 45, 50.

<sup>2</sup> It serves no purpose, e.g., in *P.Par. 71 = P.Mel.Gr. 1* (Alcm., p78); *Brit.Libr. 271 = J.Phil. 22* (1894) 238-46 (*Hom. Od. 3*; p1039); *MPER N.S. I 23* (Pind. *P. 1*; p1356). When notes are written close together, on the other hand — even if annotation is not especially dense — paragraphi sometimes keep the comments distinct. See, e.g., *P.Oxy. V 841* (p1361) col. i, iv, xv etc. (*Pind. Paean 2.3, 45, 96*); *P.Berol. inv. 5865 = APF 27* (1980) 19-32 (p119) 1 fr A ↓ etc. (notes on *Arat. Phaen. 146-148*); *P.Oxy. XVIII 2166c = Poet.Lyr.Fr. 77* (*Alcaeus*; p59).

or foreign words.<sup>3</sup> Lists like these had no close tie to any particular literary text, but drew from many. A single such work served readers of several different books. For our purposes the significant thing is that the lemmata in these lexica, by virtue of being included in a sort of encyclopaedic word list, were distanced from their sources, and in many cases had given up their original inflections for the uniformity of a single case, the nominative. We can only speculate about when or why such conversions were made, but two things appear certain: the practice of treating the nominative as the basic lexical form is quite ancient, and this inflection was entirely acceptable in general lexica that had only remote connections to literary texts. If their lemmata differed from original sources, this evidently detracted in no way from the usefulness of the lexicon to the person consulting it. The same principle applies for lexica put together as tools for writers as opposed to readers, for example the Atticist manuals of rhetoricians and students. A person could consult these for the meaning of a term or for information about its dialectal affiliation. That it existed in the work of an Attic author and was sanctioned was more important than its original inflection. "Normalization" in the nominative in texts like these is rarely complete, for accusatives can also appear, but it is conspicuous.<sup>4</sup>

There are two problems with tracing the anomalous marginalia of papyri to lexica, however. First, the anomalies are intermittent, never extending to all the notes in a papyrus but typically mixed in with other, «correctly» inflected glosses and comments. Secondly, general and rhetorical lexica are hardly the only sort of word lists that circulated in antiquity; and they are not necessarily the ones that the annotator of a literary work would consult. Glossaries that followed the order of the text and text-specific, alphabetized lexica also proliferated. Typically, these lists were short and their contents restricted to the literary text at hand.<sup>5</sup> The *Scholia Minora* to Homer most copiously illustrate this type of glossary, but similar lists circulated for other authors.<sup>6</sup> Surely if word-lists were the usual source of papyrus notes a specific,

<sup>3</sup> E.g. *P.Oxy.* XV 1802 (ii/iii; foreign words), *P.Mon.* II 22 (early iii; difficult words), *P.Oxy.* XLV 3239 (late ii; an alphabetical "glossary" offering quirky equivalencies, e.g. παραχύτης = σαπτὰ τύχη, ὑδροφόρος = διψῶ). Alphabetization in word lists is as early as Zenodotus: *RE* s.v. *Lexicographie* (1925) 2436 (Tolkhien).

<sup>4</sup> *P.Oxy.* XVII 2087 (ii; Atticist lexicon), *P.Ryl.* III 532 (ii/iii; Harpocration), *P.Oxy.* XV 1804 (iii; rhetorical lexicon). Compare *P.Oxy.* XV 1803 (vi; Attic glosses): declinable words are all listed as accusatives, but only about half the lemmata match the inflection of the sources.

<sup>5</sup> M. Naoumides, "The Fragments of Greek Lexicography in the Papyri," *Classical Studies Presented to Ben Edwin Perry* (Urbana 1968) 181-202, esp. 190ff.

<sup>6</sup> On *Scholia Minora* in general see A. Calderini, *Aegyptus* 2 (1921) 303-26 and A. Henrichs, *ZPE* 7 (1971) 97-116; certain exceptional lemmata and glosses (Calderini p. 315, Henrichs p. 121) will be discussed below. Non-Homeric glossaries that retain order and inflection of the original: *P.Oxy.* XLVII 3328 on Callim. *H.* 3 (ii), probably *P.Oxy.* XXIV 2393 on Alcman (ii, p85). Lexicon alphabetical, but retaining the inflection of the original: Bodl. MS. Gr. class. e. 44, *CR* 11 (1897) 390-93 (Ap. Soph.; i, p1217); P. Cairo 50208, *Mél. Maspero* I 152-54 (Homeric lexicon; the lemma ἐντυπάς in line 13 was actually written originally as a nominative singular and later corrected; iii, p1218); P. Rainer inv. 7, *Stud. Pal.* 4 (1905) 111-13 (lexicon to Dem. 21, with most lemmata matching the text; iv-v, p308); *BKT* I 78-82 (lexicon to Dem. 23, with most lemmata matching the text; iv-v, p317). Some lemmata match the original text: *P.Oxy.* XXX 2517 (Homeric lexicon; ii).

« reader's » manual like this is a likelier place to look than a general « writer's » one. This brings us back to a familiar difficulty, however. For the lemmata in such glossaries, like those of hypomnemata, ordinarily retained the inflection of the source text and undoubtedly for the same reason: ease of reference.

To complicate matters, cross-fertilization was extensive in antiquity between glossaries and commentaries. The letter to Eulogius that introduces Hesychius' general lexicon, to cite a prominent example, traces its material even to Aristarchus, an author of commentaries but not of lexica. In fact Hesychius' chief immediate sources were other lexica, but on the strength of his testimony we may be fairly confident that they went back at least in part to the Homeric commentary of Aristarchus.<sup>7</sup> (His most important direct source, the encyclopaedic second-century lexicon of Diogenianus, also derived from commentaries on Xenophon, Hesiod, Callimachus, and others.)<sup>8</sup> On the other hand, word-explanations moved in the other direction as well: some material in ancient commentaries unquestionably derives from glossaries and, perhaps, lexica. Even learned tracts like *P.Oxy.* VIII 1086 (hypomnema on *Iliad* 2) and the Aristarchan scholia to the *Iliad* are infiltrated by glosses and paraphrases of the Scholia Minora type. Contamination between the two genres probably goes back to the earliest phase of their co-existence.<sup>9</sup>

A further problem is that the distinction between glossary and commentary is sometimes just a modern convenience. A "commentary" on papyrus may amount to little more than a vocabulary list with meanings, written continuously in the manner of a hypomnema.<sup>10</sup> On the other hand, texts identified as lexica or glossaries are sometimes set out in the format conventional for hypomnemata, with lemmata and explanations written continuously instead of in separate columns.<sup>11</sup> The entries of an alphabetical "lexicon," finally, might offer so much non-lexical detail that in content at least it more resembles a commentary.<sup>12</sup> Under these conditions it may be pointless to enquire whether an annotator found his notes in a "hypomnema" or a "glossary."

Where does this leave us? First, the *prima facie* likelihood that the odd marginalia were copied from commentaries faded when we recalled that a commentary would typically adhere to the inflection of the original text. Next, a direct connection with lexica (i.e. alphabetical lists of words and meanings) was found to be unlikely, since annotators would be likelier to consult glossaries specific to a text, and these usually retained the inflection of the original. Finally we had the reminder that our notes undoubtedly are tied in some way to both commentaries and lexica, since the text tradition of those subliterary works is so intermixed. Is it futile, then, to look for the

<sup>7</sup> *Hesychii Alexandrini Lexicon*, ed. K. Latte (Copenhagen 1953) pp. 1-2 and viii-xi; *RE* (1925) 2441.

<sup>8</sup> Latte (above, n. 7) p. xlvi.

<sup>9</sup> Henrichs (above, n. 6) provides a schema of the complicated interrelations among materials connected to the Scholia Minora (p. 114). On variability in the tradition of subliterary works the comment of M. Haslam *ap. P.Oxy.* XLVII 3329 (Diogenianus) is salutary.

<sup>10</sup> *P.Ant.* I 20, on Callim. *H.* 2 and 3 (iv-v, p187).

<sup>11</sup> *P.Oxy.* XLVII 3329 (Diogenianus: iii/iv); *P.Oxy.* XLIV 3158 (Scholia Minora on *Il.* 5; ii-iii).

<sup>12</sup> P. Rainer 7, *Stud. Pal.* 4 (1905) 111-13 (lexicon to Dem. 21; iv-v, p308); *BKT* I 78-82 (lexicon to Dem. 23; iv-v, p317).

source of the marginalia at all? As to the ultimate source, probably, for there is no telling how frequently the information in them wandered back and forth from texts of one format to texts of another, or how it was altered before it arrived in the margins of papyri. About the proximate source of the marginalia, though, the papyri themselves yield an answer.

If we look beyond the lemmata or key words in the longer and better preserved, the reason for their inflection becomes plain. They are cast in the nominative (or accusative) case because they are the grammatical subjects (or objects) of discursive explanations. They were copied, then, from commentaries:

ἀλιζώνοι κάθησαι / στείνεος: ἀλιζώνον εἰπ(ε) τὴν Κόρινθον διὰ τὸ δυσὶ θαλάσσαις διεζῶσθαι, τῇ τε πρὸς τῷ Λεχαίῳ καὶ τῇ ἐν ταῖς Κεγχρεαῖς στείνος δὲ [εἰπ(ε) τὸν Ἰσθμόν· οἱ μὲν οὖν λβ' [σ]ταδίων φ(ασι) τὸ μεταξὺ δυεῖν.

App. 2, no. 15.

Στυ[γὶ] σύνδετον: [σ]ύνδετ[ο]ις λ[έγεται] [δ]οτὶ ἔσχε συνάφειαν τῷ Τιταρησίῳ, | δς ἀπόρροιαν ἀπὸ Στυγὸς ἔχει ως κ[α]ὶ "Ομηρος | λέγει.

App. 2, no. 31.

Δρακάνωφ: Δράκανος ὄρος τῆς <Ι>καρίας | δπου ἐγεννήθ(η) ὁ Διόνυσος. | Δ]ιόγυδος λέγ(εται) ἐπ(ει)δ(η) ἐν τῇ | Νύσσῃ τὸ πρὶν ἀνετράφη | ή Σειμέλη ἔκει αὐτὸ(ν) ἐγέννησ(ε). | ?Δονουσί]α νῆσος ἦν τῆς Νάξου.

App. 2, no. 53.

In ancient hypomnemata, in fact, even though the key words of explanations ordinarily match the lemmata, the same sort of inflectional adaptation can sometimes be found:

P.Ant. I 20, on Callim.:

[Κυνθιάδων]: | Κύνθος γ[ά]ρ ὄρος Δήλου (H. 2.61)

[Λιπάρη ἔνι: Λιπάρη γάρ] νῆσος Σικελίας ἦτις πρότερον Μελιγουνίς ] (H. 3.47)

Οσσαίοις: τῆς "Οσση[ς]. "Οσσα δὲ | Θεσσαλίας ] (H. 3.52)

[Μαναλίης: Μαι]γαλον γάρ ὄρος Πελοποννήσου) (H. 3.89)

P.Oxy. VI 853, on Thuc.:

ἐν Φρυγίοις: τόπος δῆμου Ἀθημονέων (2.22.2).

P.Oxy. VIII 1086 on Hom. II. 2:

σταφύλη ἐπὶ νάτον | [ε]είσας] ... σταφύλη δὲ ἐστιν διαβήτης διαβήτης δὲ ἔχει ἐπ' αὐτοῦ σπάρτον κ(α)ι ἐπ' ἄκρου τοῦ σπάρτου μολύβιον ἔξηπτημένον φυτροῦσι] τὴν ισότητα. σταφύλην δὲ ώνόμασεν ἐπεὶ τὸ | μολύβιόν (ἐστι) σταφίδι τρω]κτῇ δμοιον (2.765).

πάρ Διός αἰγύόχοιο ἀγγελίῃ ἀλεγεινῇ: ἀλεγεινὴ <ν> (αλεγεινηι pap.) τὴν ἄλγος ἐπιφέρουσαν ] (2.787).

In the last example, interestingly, the scribe began the comment in the conventional way with the lemma and its explanation both inflected as in the text, in the dative. The ensuing τὴν, however, shows that his exemplar must have contained an explanation restated in the accusative, on the model some of the examples offered above. Lexica with strong debts to commentaries may similarly diverge from the inflection of the original. A case in point is a fragment identified as Apion's *Glossae Homericæ*,<sup>13</sup>

<sup>13</sup> P.Ryl. I 26 (i, p1216).

which were based on Aristarchus. Two entries (of three surviving) are listed as nominatives but have lengthy explanations in the accusative.

The comments in the examples above resemble the oddly inflected marginalia not just in their adjustments for the sake of syntax but also in the mode of exegesis adopted. The explanations appear to have come most recently from the schoolroom, however scholarly may be any antecedents detectable behind them. Their phrasing reflects the question-and-answer method of the *grammatikos* which, as a matter of course, transforms lemmata into the subjects or objects of explanatory sentences. We can hear him at work in the recurring, garrulous γάρ, the formulaic ὄνομασται/ὄνομασσεν, the rote pattern of question and answer. Why are the goats that Artemis hunts called Κυνθάδων? Because Kynthos was a mountain on Delos. What does Ὁσσαίοις mean? Belonging to Ossa. What is Ossa? Ossa is a mountain of Thessaly. What does σταφύλη mean? Α σταφύλη is a stonemason's rule. They call it σταφύλην because.... And, among marginalia: Why does Callimachus call Corinth ἀλιζώνοι? He called it ἀλιζώνον because it is girded by two seas.<sup>14</sup> An annotator, encountering a word in his source-commentary whose inflection had been altered in this way for the sake of syntax, would not be likely to rephrase his source so that the term again matched the original text. What he saw was what he copied.

Comparable variations from the norm have been noted for at least one papyrus version of *Scholia Minora*, even though the lemmata and explanations in those glossaries ordinarily match the inflection of the text.<sup>15</sup> Some of the exceptions are undoubtedly pure blunders,<sup>16</sup> but others follow patterns like those we have observed above. For two verbs, for example, second-person singular forms are provided where the text has infinitives.<sup>17</sup> It happens that each infinitive is couched, in Homer, in speeches addressed to an individual; the second-person forms make sense, then, if understood as remnants of paraphrases. Seven other substantive entries follow the pattern discussed above, their lemmata or explanations being cast as nominatives or accusatives although the passages they explain are inflected otherwise.<sup>18</sup> It seems unlikely, especially for the altered verb forms, that these variations are all simply errors, and we may at least consider the possibility that they, like the anomalous forms in marginalia, are vestiges of simple exegesis or paraphrase.<sup>19</sup>

<sup>14</sup> In a similar vein G. Zuntz treated the expression οὐκ ἀργός which is common in the scholia to Aristophanes, appears occasionally in papyrus marginalia, and reliably indicates the schoolroom as the source of a note: *Die Aristophanes-Scholien der Papyri* (2nd ed. Berlin 1975) 15-21.

<sup>15</sup> P.Strassb. inv. 33, on *Il.* 1 (iii, p1163); see Henrichs (above, n. 6) pp. 102, 119-48 (esp. p. 121) and A. Calderini (above, n. 6) 315.

<sup>16</sup> P.Strassb. iii.21 on 1.186, vi.12 on 1.251, vii.23 on 1.284, vii.26 on 1.287, ix.2a on 1.321.

<sup>17</sup> P.Strassb. iii.9 on 1.171, v.20 on 1.230.

<sup>18</sup> P.Strassb. v.15 on 1.225, vi.4 on 1.237, vi.13 on 1.252, vii.13 on 1.272, ix.2a and ix.6 on 1.321, ix.21b on 1.358.

<sup>19</sup> A uniquely anomalous entry appears in one other Homeric glossary, *P.Oxy.* XLIV 3160, where ἦπιος (*Od.* 2.230) has been converted to the genitive and glossed as such (ἦπιον: πράειον, col. iii.28). This exceptional abnormality probably crept in under the influence of θέοιο in line 229 and was not a feature of the unrecoverable (and unaccountable) syntax of some source-paraphrase.

In the cases we have looked at so far, the marginalia themselves are long enough to demonstrate how key words could gravitate to different forms in the course of exegesis. For shorter notes, comparable support sometimes comes from scholia; and since the major source of scholia was hypomnemata, these parallels reinforce the possibility that the anomalous notes were copied from hypomnemata:

εὐμάρισιν: εἰδος ὑποδήματος.

Cf. sch. Eur. *Or.* 1370: ἐν εὐμάρισιν εὐμαρις εἰδος ὑποδήματος σανδαλώδους....

App. 2 no. 24.

Δηρηνόν: τόπος ἐν Ἀ[βδήροις οὗτο καλούμενος [δ]που[.

Cf. Sch. Lycophr. *Alex.* 440 Δηραινοῦ κύνες: Δηραινός τόπος οὗτο καλούμενος ἐν Ἀβδήροις, ἔνθα Δηραινοῦ Ἀπόλλωνος ιερόν ἐστιν, οὗ μνημονεύει Πίνδαρος ἐν Παιᾶσι.

App. 2 no. 29.

Οθρυος: ὅρος Θεσσαλίας.

Cf. sch. Ap. Rhod. *Argon.* 2.515 (p. 170 Wendel) Οθρυς ὅρος Θεσσαλίας ὑψηλόν....

App. 2 no. 40.

There remain several very terse marginalia which have no persuasive parallels in scholia or ancient commentaries. There is no way to demonstrate infallibly that they were copied from running commentaries, but of course it is all the likelier if the annotator also entered other comments on the background of the text or other substantive matters. Only one of the texts under consideration, a wooden tablet containing *Iliad* 11 with glosses of the Scholia Minora type, has no such discursive notes.<sup>20</sup> Its one or two "wrongly" inflected glosses can perhaps be understood now in light of the other anomalous marginalia and the Strassburg Scholia Minora. The value of the present analysis is that it helps to account for anomalous notes in texts devoid, like this one, of other clues.

In eccentrically inflected notes, then, we can look over the shoulder of readers and watch them as they copy, verbatim, useful portions of hypomnemata into their texts. When the syntax of those sources forces a term into a case different from that of the original text, they are likely to copy the modified phrasing. Not surprisingly, then, the authors best represented in Appendix 2 — Callimachus, Pindar, and Theocritus, and to a lesser extent Aristophanes and Plato — are authors for whom significant proportions of the surviving papyri contain marginal annotation, often heavy.<sup>21</sup> The frequency with which anomalously inflected notes appear in an author may have some relation, then, to the number of texts and commentaries on his work that were in circulation. We may abolish any notion that such notes owe their form to the arbitrarily regular lemmata of some general lexicon. The information they provide may have found its way into lexica too, but the immediate source of the notes on papyri was commentaries, not lexica.

<sup>20</sup> Mus. gr.-rom. d'Alexandrie, *CE* 43 (1968) 114-25 (iv-v, Uebel 1300).

<sup>21</sup> Callimachus: 28%, Pindar: 26%, Theocritus: 60%, Aristophanes: 46%, Plato: 21%. Calculations are rough, based on data I have collected about annotated papyri and on W.H. Willis' tallies of texts in Pack<sup>2</sup> (*GRBS* 9 [1968] 212). The Pack<sup>2</sup> figures need updating, but are useful for general purposes since the tendencies they reveal have not significantly changed.

If material constantly travelled back and forth between ancient commentaries and lexica, are the syntactic shifts of hypomnemata partly responsible for the high proportion of nominatives in ancient and mediaeval lexica and etymologica? <sup>22</sup> The possibility cannot be ruled out, but direct connections will be virtually impossible to establish because of the complicated and amorphous text tradition of the later works. Certainly the number of possible correspondences will vary with the nature of the dictionary.

To look at cases: among Hesychius' declinable entries in *αμ-*, well over half (55%) are nominative. Of this group, only a small fraction (10 to 15%) were unquestionably nominative in their literary sources. A few demonstrably were not. Among the corresponding *αμ-* entries of the *Etymologicum Genuinum*, 70 to 80% have nominative lemmata. <sup>23</sup> Of these roughly the same proportion as for Hesychius, 10%, were certainly nominative in their literary sources; but at least 25% were demonstrably not. As with anomalous marginalia, explanations for the "normalized" forms are better sought in the lexicographers' immediate sources than in their ultimate ones. Hesychius informs us himself that his immediate sources were other lexica, themselves largely derivative. That of Diogenianus takes precedence, who also found his material in some unquestionably general works: Pamphilus' 95-book *Onomasticon*, Homeric glossaries by Apion and Apollonius, comic and tragic lexica by Theon, Didymus and others, and miscellaneous glosses from other sources (*πάσας τὰς σποραδὴν παρὰ πᾶσι κειμένας λέξεις*). <sup>24</sup> In addition even a quick survey of Hesychius turns up a large number of definitions that seem to have come from word lists on specific topics — geography, festivals, dialectal forms — miscellaneous word lists of the very sort, that is, that appear from time to time in papyri with a heavy preponderance of nominative lemmata. <sup>25</sup> The resulting composite dictionary was intended to be a useful reference tool for general readers in need of word meanings, as was Diogenianus' before it. <sup>26</sup> Lexica of this type, as we have seen, typically had large proportions of nominative lemmata. <sup>27</sup> So, while hypomnemata of Theon, Didymus, Aristarchus, and others

<sup>22</sup> Latte noted that Hesychius' lemmata include a high proportion of nominatives, (above, n. 7) xvii. The ensuing comments leave to one side the post-Hesychian interpolations which Latte was able to identify.

<sup>23</sup> R. Reitzenstein, *Geschichte der griechische Etymologika* (Leipzig 1898) 11-44.

<sup>24</sup> Latte (above, n. 7) p. 1 line 7.

<sup>25</sup> See, for example Hesych. s.v. *ἀμβροτίξας*, *ἀμείνασις*, *Ἀμελοῦς γνοία*, *ἀμένητα*, *ἀμερτόν*, *ἀμπιξ*, *ἀμίλλυκα*, *Ἀμαλῆα*, *Ἀμμών*, *ἀμοιος*, *ἀμουσχρά*, *ἀμπόχοι*, *Ἀμυτρον*, *ἀμυρτόν*, *ἀμυσσος*, *Ἄφαρμένη*, *ἀμφασμα*, *ἀμφην*, *ἀμφιδεκάτη*, *ἀμφιστερή*, *Ἄμωσας*.

<sup>26</sup> Hesychius, introductory epistle to Eulogius, Latte p. 1 lines 17ff: *ἡγεῖτο γάρ (sc. ὁ Διογενιανός)*, *οἷμα*, *μὴ μόνοις πλουσίοις*, *ἀλλὰ καὶ τοῖς πένησι τῶν ἀνθρώπων χρησιμεύσειν τε καὶ ἀντὶ διδασκάλων ἀρκέσειν αὐτά*, *εἰ μόνον περιεργασάμενοι πανταχόθεν ἀνευρεῖν ταῦτα δυνηθεῖεν καὶ ἐγκρατεῖς αὐτῶν γενέσθαι*, and p. xlvi.

<sup>27</sup> Were Diogenianus' lemmata nominative? The two surviving papyri are inconclusive on this point. In *P.Oxy. XLVII* 3329 (3rd/4th cent.) as many as seven of the eight surviving lemmata may be nominative (three certainly are; one is accusative; four could be either nominative or accusative). In *PSI VIII* 892 (4th cent.) seven of nine may be nominative (two certainly are; one is accusative; five could be either). The legible lemmata and explanations of both texts, however, are very close to Hesychius, so chances are good that the tendency overall in Hesychius' version of Diogenianus was toward nominative lemmata.

may have been the ultimate source of a tremendous number of the entries Hesychius, most of those glosses had probably already been "normalized" as nominatives by the time they reached Diogenianus, as a result of their sojourn in miscellaneous word lists that had only tenuous connections with literary sources. The nominatives in our Hesychius, therefore, are not very likely to reflect syntactic flukes like those noted for marginalia.<sup>28</sup>

The key sources of the *Et.Gen.* include even later lexicographers (primarily Methodius and Orion), and its heavy representation of nominative forms may be traced to the same cause. This is a different kind of work from Hesychius', however — more expansive and, as Reitzenstein's source analysis showed, more directly dependent on "scholia" (*scil. hypomnemata*). It is to scholia, in fact, that the majority of the non-nominative (or, rather, unaltered) lemmata can be traced. If the inflection of some entry in this work differs from its literary source, there is a greater chance that the variation goes back to the syntactic structure of a source commentary. A few plausible instances can be located among the glosses in *αμ-*.<sup>29</sup> The phenomenon is rare, as it is in papyri, but it looks real.

Anomalous nominative forms, then, which are accidents of the syntax of their immediate sources (i.e. commentaries) occur as early as the Roman period in the marginalia of papyri and possibly also in late etymologica that depend relatively closely on hypomnemata. For the widely circulating general lexica, however, a far more important factor determining the inflection of the lemmata was the reliance of their compilators on miscellaneous or all-purpose word lists. These, because of their ever more tenuous connections with literary sources, tended toward more regularity of form, and this more than any other reason accounts for the preponderance of nominative forms in our present versions of Hesychius and the non-scholiastic portions of the *Etymologicum Genuinum*.

<sup>28</sup> Except, of course, to the extent that such flukes had been adopted by Hesychius' sources. But this is unmeasurable.

<sup>29</sup> *Et.Gen.* s.v. 15 ἀμάρυγμα καὶ ἀμαρυγάς: σημαίνει τὰς τῶν ὀφθαλμῶν ἐκλάμψεις. Ἡσιόδος Γυναικῶν καταλόγῳ (fr. 43.4 MW) "Χαρίτων ἀμαρύγματ' ἔχουσα." ...; 28 ἀμαδρύαδες: Ἀπολλώνιος δὲ τὰ Ἀργοναυτικά, οἷον "...Αμαδρύάδος (*Argon.* 2.477)..."; Ἀμαδρύάδες νύμφαι λέγονται.... 32 ἀματροχιάς (*Il.* 23.422): ἀματροχιά δέ ἐστι τὸ ἄμα τρέχειν... 128 ἀμφασίαν: τὴν ἀφωνίαν καὶ ἔκπληξιν. "...ἀμφασίη..." (*Od.* 4.704, *Ap.Rhod. Argon.* 3.284); 162 Ἀμφιτρίτη [:] σημαίνει δὲ τὴν θάλασσαν... "...Αμφιτρίτης..." (*Dionys.Perieget.* 134.135);

## APPENDIX 1

### Texts with Anomalous Marginalia

« Antinoe Theocritus, » (*Ant.Th.*) *Two Theocritus Papyri*, ed. A.S. Hunt and J. Johnson (London 1930) 19-87 (5th-6th cent.; Pack<sup>2</sup> 1487).  
Bodl. Libr. Gr. class. f. 72P, G. Zuntz, *Die Aristophanes-Scholien der Papyri<sup>2</sup> (Ar. Schol.)* (Berlin 1975) 29-47 (4th-5th cent.; Pack<sup>2</sup> 141): Ar. *Eq.*  
MPER N.S. I 23; (6th cent.; Pack<sup>2</sup> 1356): Pind. *Pyth.*  
Mus. gr.-rom. d'Alexandrie (wooden tablet), *CE* 43 (1968) 114-25; (4th-5th cent.; Uebel 1300): Hom. *Il..*  
P.Berol. inv. 11629 + 13417 = R. Pfeiffer, *Callimachus* (Pf.), frr. 23, 228 (3rd cent.; Pack<sup>2</sup> 201).  
P.Berol. inv. 11759 *ined.*, *Rev.Phil.* Sér. 3.29 [1955] 201 no. 125 (1st-2nd cent.; Pack<sup>2</sup> 1119): Hom. *Od..*  
P.Berol. inv. 21105 + 13929, *Ar.Schol.* 5-27 (4th cent.; Pack<sup>2</sup> 142 + Uebel 1165): Ar. *Eq..*  
P.Berol. inv. 21182, *ZPE* 4 (1969) 114-16 (6th cent.; Uebel 1350): Theocr.  
P.Cairo inv. 47993b, W. G. Waddell, *Et.Pap.* 1 (1932) 13-15 (1st cent.; Pack<sup>2</sup> 189): Callim. *H..*  
P.Lille 76, *Suppl. Hell.* 257 (3rd cent. B.C.): Callim. *Aet.* 3 (Pf. 54-59).  
P.Louvre, *Ar.Schol.* 56 (6th cent.; Pack<sup>2</sup> 140): Ar. *Av..*  
*P.Oxy.* V 841 (2nd cent.; Pack<sup>2</sup> 1361): Pind. *Paeans.*  
*P.Oxy.* VII 1011 = Pf. frr. 191, 194 (4th cent.; Pack<sup>2</sup> 215): Callim. *Iambi.*  
*P.Oxy.* VIII 1082, Diehl 3<sup>3</sup> pp. 141-48 (2nd cent.; Pack<sup>2</sup> 237): Cercidas *Meliambi.*  
*P.Oxy.* XI 1370 (5th cent.; Pack<sup>2</sup> 402): *Eur. Or..*  
*P.Oxy.* XI 1371, *Ar.Schol.* 47-55; (5th cent.; Pack<sup>2</sup> 145): Ar. *Nub..*  
*P.Oxy.* XIII 1619 (1st-2nd cent.; Pack<sup>2</sup> 474): Hdt.  
*P.Oxy.* XV 1808 (2nd cent.; Pack<sup>2</sup> 1421): Pl. *Resp..*  
*P.Oxy.* 2064 + *P. Oxy.* L 3548 (2nd cent.; Pack<sup>2</sup> 1489): Theocr.  
*P.Oxy.* XVII 2080 = Pf. fr. 43 (2nd cent.; Pack<sup>2</sup> 206): Callim. *Aet..*  
*P.Oxy.* XX 2258 = Pf. frr. 110, 384 and *Hymn* 3 (6th-7th cent.; Pack<sup>2</sup> 186): Callim. *varia.*  
*P.Oxy.* XXVI 2442 (3rd cent.; Pack<sup>2</sup> 1360): Pind. *Paean* fr. 59.  
*P.Oxy.* XXVI 2450 (1st-2nd cent.; Pack<sup>2</sup> 1369): Pind. fr.  
*P.Oxy.* XXX 2526 = *Suppl. Hell.* 442 (2nd cent.; Uebel 1249): Euphorion.  
*PSI* VI 721 (2nd cent.; Pack<sup>2</sup> 332): Dem.



## APPENDIX 2

### Marginal Notes Inflected Anomalously

(Note: An asterisk (\*) precedes lemmata which form part of the note in the papyrus margin. Numbers from Pack<sup>2</sup> are preceded by a lower case "p". Dates, all Roman, are in Roman numerals.)

#### ARISTOPHANES

1. πρηγορεῶνας: πρόλοιβος. | ἡ τῶν ὀρνίθων φάρυξ.  
*Av.* 1113: P.Louvre, *Rev.Phil.* N.S. 6 (1882) 179-85, Zuntz 56; p140 (vi).  
Hesych. πρηγορεών (Αρ. *Av.* 1113, *Eq.* 374): τῶν ὀρνέων ὁ πρόλοιβος (-λογος  
codd.), διτι προσυλλέγεται ἐν αὐτοῖς τὰ σιτία.  
Cf. sch. (Dübner) πρηγορεῶνας · Δίδυμος τοὺς βρόγχους τῶν ὀρνέων κυρίως  
τοὺς λεγομένους προλόβους, διτι συλλέγεται ἐν αὐτοῖς τὰ σιτία. λέγεται δὲ  
καὶ ἐπὶ ἀνθρώπων πρηγορεών πάλιν ὁ βρόγχος. ἐκάτερον δὲ ἀπὸ τοῦ  
προαθροίζειν ἐκεῖ τὴν τροφήν.
2. ἵππι' ἄνας Πόσειδον: νῦν τὸν ἵππιον Ποσειδῶνα ἐπικαλεῖται, | ἐπεὶ ὁ χορὸς ἐξ  
ἵππέων συνέστηκεν.  
*Eq.* 551: P.Berol. Inv. 21105 + 13929, *Hermes* 96 (1968) 287-93, Zuntz 5-27;  
p142, u1165 (iv).
3. εὐρωτιῶν: φυπαρός.  
*Nub.* 44: *P.Oxy.* XI 1371, Zuntz 47-55; p145 (v).

#### CALLIMACHUS

4. Σελλός: Σελλ(οι) 'τό' Θράκ(ης) ἔθν(ος) ηπεοιοη.  
*Aet.* 1 (*Sacrificium Lindium*), Pf. 23.3: P.Berol. inv. 11629 B recto, Wilamowitz,  
*Sitz.Berl.Akad.* (1914) 222-44; p201 (iii).  
*P.Oxy.* XXVI 2442 fr. 96B, ed. Lobel (marg. note on Pind. *Paeon* fr. 59.3 Snell/  
Maehler, q.v.) [Πίνδαρος Ἐλλοί, "Ομηρος Σελλοί, Καλλίμαχος ἀμφό-  
τερα.] "ἔδρανον Ἐλλῶν" (Pf. 675) καὶ "Σελλός ἐνι Τιμαρίοις".
5. ἔμμοτογ: μό<τ>α δ(ὲ) λέγεται τὰ λ[ε]πτὰ φάκη τὰ βαλλόμενα ἐπὶ τὰ ἔλκη,  
ὅθεν ἔμμοτον ἐλέγετο.  
*Aet.* 1 (*Sacrificium Lindium*), Pf. 23.21: P.Berol. inv. 11629 B recto, Wilamowitz,  
*Sitz.Berl.Akad.* (1914) 222-44; p201 (iii).  
Sch. D. Hom. II. 4.440 ἔμμοτον · ἀπλήρωτον · ἀφ' οὐ καὶ μότα τὰ ἐπιτιθέμενα  
τοῖς κοίλοις τραύμασιν θόνια πρὸς ἀναπλήρωσιν τῆς σαρκός.  
Cf. Hesych. (D) μότα· τὰ πληροῦντα τὴν κοίλην τῶν τραυμάτων φάκη.
6. Ἐρυκα: "Ἐρυξ [υἱὸς] Βούτ(ον) | ἀφ' οὐ [ἡ πόλις | κ(αὶ) Ἀφροδίτη] 'Ἐρυκ(ινη)  
| οὐ[.]  
*Aet.* 2, (*De Siciliae Urbibus*), Pf. 43.53: *P.Oxy.* XVII 2080 ii.55; p206 (ii).  
Sch. Theocr. 15.100 "Ἐρυξ δὲ πόλις Σικελίας ἀπὸ Ἐρυκος τοῦ Βούτου καὶ  
Ἀφροδίτης.

Steph. Byz. s.v. Ἐρυξ· πόλις Σικελίας ἀρσενικῶς, ἀπὸ Ἐρυκος τοῦ Ἀφροδίτης καὶ Βούτου, τὸ ἔθνικὸν Ἐρυκίνος, καὶ Ἐρυκίνη Ἀφροδίτη ἐν Πόμη καὶ Σικελίᾳ.

Cf. sch. Ap. Rhod. 4.917 Ἐρυξ ὄνομα πόλεως, ἔνθα τιμᾶται ἡ Ἀφροδίτη· οἱ δὲ τὴν Σικελίαν.

7. ἄρπασον: ἄρπασος εἰ[δ](ος) | δρνέου βάσκαν(ον).

Aet. 2, (*De Siciliae Urbibus*), Pf. 43.61 : *P.Oxy.* XVII 2080 ii.63 ; p206 (ii).

Cf. EM 148,20 ἄρπη· εἰδος δρνέου δμοιον ἀετῷ....

8. ἀλείην παρ' ἄχ[ερδον]: ἄχερδος [ἢ ἀγρία ἄπιος?]

Aet. 3 (*Herculis et Molorchi Colloquium*), *Suppl.Hell.* 257.15 (Pf. 54-59) : P.Lille 76 ii.23-24, C. Meillier, *CRIPEL* 4 (1977) 261ff (iii B.C.).

EM 181,3 ἄχερδος· ἡ ἀγρία ἄπιος....

9. \*Χαλύβων ὡς ἀ[πό]λοιτ(ο) γέν(ος): Χάλυβ(ες) Σκυθί(ας) ἔθνος παρ' οἰς πρώτοις ηδρέθη | ἡ ἐργασία τοῦ δ[. .] σιδήρου κ(αὶ) ἴσως ἐντεῦθεν [λέ]γετ(αὶ) τὸ περιτεμεῖν τὸ περισκυθίσαι δ[. .] τῷ Σκύθῃ | σιδήρῳ.

Σκυθί(ας): Σκυσθι[κ(όν)]? δ[. .]: δέρ[α]ς? Pf.

Aet. 4 (*Coma Berenices*), Pf. 110.48 : *P.Oxy.* XX 2258 C fr. 1 front, bottom marg. .14-16 + addenda, p.104 (Pf. vol. 2 p.115) ; p186 (vi-vii).

Sch. Ap. Rhod. 1.1323 Χάλυβες ἔθνος Σκυθίας, δπου ὁ σιδηρος γίνεται. Καλλίμαχος: "Χαλύβων — γένος."

Hesych. Χάλυβοι· ἔθνος τῆς Σκυθίας, δπου σιδηρος γίνεται.

Cf. sch. Ap. Rhod. *Argon.* 2.375 οἱ δὲ Χάλυβες ἔθνος Σκυθικὸν μετὰ τὸν Θερμώδοντα, οἱ μέταλλα σιδηρού εύροντες μοχθοῦσι περὶ τὴν ἐργασίαν... μέμνηται αὐτῶν καὶ Καλλίμαχος "Χαλύβων — ἔφηναν."

10. σίττη: δρνεον.

*Iambus* 1, Pf. 191.56 : *P.Oxy.* VII 1011.121 ; p215 (iv).

Cf. Hesych. σίττη. δρνις ποιός, οἱ δὲ δρυοκολάπτης <cf. ἵττα>.

Cf. Hesych. σίττας: δρνις ποιός. ἔνιοι δὲ τὸν ψιττακὸν λέγουσιν.

11. ὕδρον: εἰδος δράκοντος.

*Iambus* 4, Pf. 194.22 : *P.Oxy.* VII 1011.218 ; p215 (iv).

12. \*πρόθ(εσιν): τὰ προφερόμενα.

*Lyrica (Ectheosis Arsinoes)*, Pf. 228.13 : P. Berol. inv. 13417 recto, Wilamowitz, *Sitz.Berl.Akad.* (1912) 524-44 ; p201 (iii).

13. Χάρι: ἡ σύνεστι τῷ | Ἡφαίστῳ Χάρις.

*Lyrica (Ectheosis Arsinoes)*, Pf. 228.47 : P. Berol. inv. 13417 verso, Willamowitz, *Sitz.Berl.Akad.* (1912) 524-44 ; p201 (iii).

14. \*φ τὸ μὲν ἐξ Ἐφύρης ἄρμα | σελινοφόρον :  
... Ἐφύρα δὲ ἡ Κόρινθος....

*Elegiacs (Sosibiou Nike)*, Pf. 384.4 : *P.Oxy.* XX 2258 C fr. 2 back, bottom marg. .26-27 ; p186 (vi-vii).

15. ἀλιζώνοιο κάθησαι | στείνεος : \*ἀλιζώνοιο : | ἀλιζώνον εἰπ(ε) | τὴν Κόρινθον | διὰ τὸ δυσὶ θαλάσσαις διεζῶσθαι, τῇ τε πρὸς τῷ | Λεχαίῳ καὶ τῇ | ἐν ταῖς Κεγχρεαῖς, στείνονς δὲ | εἰπ(ε) τὸν Ἰσθμόν· οἱ μὲν οὖν λβ' [σ]ταδίων φ(ασι) τὸ μεταξύ δυεῖν.

*Elegiacs (Sosibou Nike)*, Pf. 384.9-10 : *P.Oxy.* XX 2258 C fr. 2 back, left and bottom marg. .13-22 ; p186 (vi-vii).

Hesych. (D) ἀλίζωνος· ἵσθμος, παρὰ τὸ ἄλι διεζῶσθαι. [καὶ ἔθνος βαρβαρικόν]. *EM* 63, 47 (845 Lasserre & Livadaras) ἀλίζωνος (this fr.)· ἵσθμος, διὰ τὸ ἄλι διεζῶσθαι (Lex. Diogen.).

Cf. *Et.Gen.* 469 Lasserre & Livadaras (= *EM* 63,57, 849 Lasserre & Livadaras).

16. *Κρωμίτην ... Λέχαιον*: οὗτοι τόποι τῆς Κορίνθου· κ(αὶ) λ[ε]γε[ν] | ιαφ(ων) καὶ σπονδ(ῶν) Κρωμνὶ [ | Λέχαιοι[ν] καλεῖται.

*Elegiacs (Sosibou Nike)*, Pf. 384.12 : *P.Oxy.* XX 2258 C fr. 2 back, right marg. + addenda p. 106 (Pf. vol. 2 p. 121) ; p186 (vi-vii).

Cf. Hesych. (D) Λέχαιον· ἐπίνειον Κορινθίοις· εἰς τούτους τοὺς τόπους ἀπεδίδρασκον οἱ οἰκέται.

Cf. Suda 347 (Harp.) Λέχαιον· ἐπίνειον Κορινθίων.

17. *Κίνυφι διστεφέα*: Κίν<υ>ψ ποταμὸς τῆς Λιβύ<η>[ζ. | ] ἵνα οὖν αὐτ[ὸν | καὶ 'Αλεξανδρεῖς καὶ Λιβύες ἀκούσωσιν διστεφέα.

*Elegiacs (Sosibou Nike)*, Pf. 384.23-24 : *P.Oxy.* XX 2258 C fr. 2 front, right marg. .9-12 ; p186 (vi-vii).

18. \*ἀμφοτέρῳ παρὰ | παιδὶ: τὸν Μελικέρτην λέγ(ει) καὶ τὸν Ἀρχέμολρον. ἐπὶ μὲν γάρ τῷ Μελικέρτῃ τίθεται τὰ | Ἰσθμια, ἐπὶ δὲ τῷ | Ἀρχεμόρῳ τὰ Νέμεα.

*Elegiacs (Sosibou Nike)*, Pf. 384.25 : *P.Oxy.* XX 2258 C fr. 2 front, right marg. .13-19 ; p186 (vi-vii).

19. πρηόσιν· πρηόνες οἱ ὑψηλότατοι κ(αὶ) πετρώδεις τ(ῶν) ὁρῶ(ν) | λόφοι.

*Hymn* 3.52 : P.Cairo inv. 47993b, W.G. Waddell, *Et.Pap.* 1 (1932) 13-15 ; p189 (i).

Cf. *Et.Gen.* Β πρώνες (*EM* 692, 47 πρῶνες)· οἱ ὑψηλοί τόποι.... "πρώνες ἄκροι" (*Il.* 8.557).

20. 'Οσσαίοισιν: "Οσσα Θεσσαλ[ι]ας | ὅρος ὑψηλότατ[ον].

*Hymn* 3.52 : P.Cairo inv. 47993b, W.G. Waddell, *Et.Pap.* 1 (1932) 13-15 ; p189 (i).

*P.Ant.* I 20.8-9 (comm. on *Hymns*) 'Οσσαίοισιν : τῆς "Οσσης, "Οσσα δὲ | Θεσσαλίας....].

Sch. <πρηόσιν 'Οσσαίοισιν> : "Οσσα ὅρος Θεσσαλίας.

21. μονιὸν δάκος: οἱ κάπ[ε]ροι ἴδικ[ῶς] νεμόμενοι | ἀπαγελάζοντ]αι γάρ ἀλλή[λων (suppl. e.g. Lobel).

*Hymn* 3.84 : *P.Oxy.* XX 2258 A fr. 4 front, Pf. vol. 2 p. 55 ; p186 (vi-vii).

Cf. Sch. <μονιὸν δάκος>: μονιὸν τὸ κατὰ μόνας νεμόμενον. δάκος δὲ τὸ θηρίον.

Cf. *P.Ant.* I 20 (comm. on *Hymns*) μονιὸν δάκος : | ὃς ἄγριος δς ἄν μὴ συν]αγελάζηται ἔτεροις.

Cf. Hesych. (LXX) \*μονιός: ὃς ἄγριος δ μὴ τοῖς ἄλλοις συναγελαζόμενος....

## DEMOSTHENES

22. 'Αλέξανδρον: Θετταλὸς οὗτος ἐστίν.

51.8: *PSI* VI 721 top marg. ; p332 (ii).

## EUPHORION

23. *Ληλάντοιο*: Λήλαντον | (ἔστι) δ(ὲ) ὅρος κ(αὶ) πόλ(ις).  
*Unidentified fr., Suppl. Hell. 442.4: P.Oxy. XXX 2526 B fr. 2.3; u1249 (ii).*  
(In error: Lelantum is a plain between Eretria and Chalcis; Lelantus is a river in the plain.)

## EURIPIDES

24. *εὐμάριστιν*: εἰδος ὑποδήματο[ς].  
*Or. 1370: P.Oxy. XI 1370; p402 (v).*  
Sch. ἐν εὐμάριστιν εὐμαρις εἰδος ὑποδήματος σανδαλώδους....  
Cf. Hesych. (D) εὐμάριδες εἰδος ὑποδήματος.

25. *παστάδων*: ἡ παστάς | π[ε]πο[ι]κιλμένο[ς] | [οι]κος.  
*Or. 1371: P.Oxy. XI 1370; p402 (v).*  
Cf. *EM* 655,41 παστός: ἡ ἐκ παραπετασμάτων ποικίλων κατεσκευασμένη σκηνή, ἡτις ἔστι πεποικιλμένη....

## HERODOTUS

26. *εἵρετο καλέσας τοὺς βασιλήιους καλεομένους δικαστάς*: βασιλήιοι δικαστα[ι].  
3.31.2: *P.Oxy. XIII 1619* v top marg. (referring to line 69); p474 (i-ii).

## HOMER

27. *ἀραρίας*: ἡρμοσμένη.<sup>1</sup>  
*Il. 11.18: Wooden tablet, Mus. gr.-rom. d'Alexandrie, J. Schwartz, CE 43 (1968) 114-25; u1300 (iv-v).*

28. *ἀλλ' ὑμεῖς κάρτεροι αἰεὶ*: ἀντὶ τ(οῦ) κ(οινοῦ) ἐγκρατής.  
*Od. 15.534: P. Berol. inv. 11759 ined. (H.J. Mette Rev. Phil. Sér. 3.29 [1955] 201 no. 125); p1119 (i-ii).*

## PINDAR

29. *Δηλρηνόν*: τόπος ἐν Ἀ[βδήροις] οὗτος καλούμενος [δ]που [.]  
*Paeon 2.5: P.Oxy. V 841 A i (fr. 1) .15; p1361 (ii).*  
Sch. Lycophr. *Alex. 440* Δηραινοῦ κύνες· Δηραινός τόπος οὗτος καλούμενος ἐν Ἀβδήροις, ἐνθα Δηραινοῦ Ἀπόλλωνος ιερόν ἔστιν, οὗ μνημονεύει Πίνδαρος ἐν Παιᾶσι.

30. *Μελαμφύλλον*: τόπος οὗ(τος) ἐν Ἀβδήροις | Μ[ελ]άμφυλλον.  
*Paeon 2.69-70: P.Oxy. V 841 A vi (fr. 3 iii) .4-5; p1361 (ii).*

<sup>1</sup> *σθένος*: δυνάμεις at *Il. 11.11* (Wooden tablet, Mus. gr.-rom. d'Alexandrie, J. Schwartz, *CE* 43 [1968] 114-25) is more likely a case of itacism than a shift of inflection. Cf. *Suda* 518 (Δ) *σθένος*: δύναμις· καὶ ἡ δοτικὴ τῷ σθένει.

31. Στν[γι] σύνδετον : [σ]ύνδετ[ο]ις λέγεται] [δτ]ι ἔσχε συνάφειαν τῷ Τιταρησίῳ, | δς ἀπόρροιαν ἀπό Στυγός ἔχει ως καὶ "Ομηρος | λέγει.  
*Paean* 10.4: *P.Oxy.* V 841 D frr. 129-31 i.5; p1361 (ii).

32. Ἐλλῶν : [Πίνδαρος Ἐλλοί, "Ομηρος Σελλοί, Καλλίμαχος | ἀμφότερα.] "ἔδρανον Ἐλλῶν" (Pf. fr. 675) καὶ "Σελλός | ἐν Τιμαρίοις (fr. Pf. 23.3).  
*Paean* fr. 59.3: *P.Oxy.* XXVI 2442 fr. 96a.3 + 96b; p1360 (iii)..  
Cf. sch. Hom. *Il.* 16.234c (Did.?) Σελλοί· δι μὲν Πίνδαρος Ἐλλούς αὐτοὺς οἴεται.  
Cf. sch. Hom. *Il.* 16.234b (Ariston.) Σελλοί· πρὸς τὸ τῆς γραφῆς ἀμφίβολον; οἱ μὲν γάρ Σελλούς, οἱ δὲ Ἐλλούς ἔξεδέξαντο. δεῖ δὲ νοεῖν ως ἔστιν ἐκ πλήρους Σελλοί....  
Cf. *Et.Gen.* AB (*apud* Erbse *Sch.* *Il.* 16.234) Σελλοί· οἱ μὲν Ἐλλούς αὐτοὺς ἔξεδέξαντο ως Πίνδαρος. δεῖ δὲ διὰ τοῦ ἀπὸ Σελλήντος ποταμοῦ....  
Cf. sch. Hom. *Il.* 16.234d (D, ex.), *EM* 209,30, Callim. Pf. 23.3, marg. n., Ap. Soph. 141,2.

33. Βιστονίδι λίμνα : Βιστον[ε]ς Θρακῶν ἔθνος καὶ Βιστονις λίμνη | ἐν <Θ>ράκη.  
*Fragments* : fr. 169a.11: *P.Oxy.* XXVI 2450 fr. 1 ii.6; p1369 (i-ii).  
Cf. sch. Ap.Rhod. 2.704 Βιστονίη Θρακική. Βιστονες γάρ ἔθνος Θρακῶν ὀνομάσθη δὲ ἀπὸ Βιστόνος τοῦ Κίκονος, ως Φιλοστέφανος (fr. 7 M. III 30). καὶ Βιστονις λίμνη Θρακική.

#### PLATO

34. δυνάμεναι : δυναμέν(ας) (τάς) ύποτεινούσας.  
(Context: ἔστι δὲ θείω μὲν γεννητῷ περίοδος ἦν ἀριθμός περιλαμβάνει τέλειος, ἀνθρωπείω δὲ ἐν φ πρώτῳ αὐξήσεις δυνάμεναι τε καὶ δυναστευόμεναι, τρεῖς ἀποστάσεις, τέτταρας δὲ δρους λαβοῦσαι δύοιούντων τε καὶ ἀνομοιούντων καὶ αὐξόντων καὶ φθινόντων, πάντα προσήγορα καὶ ῥητὰ πρὸς ἄλληλα ἀπέφηναν.)  
*Resp.* 546: *P.Oxy.* XV 1808 i marg. .9-10; p1421 (ii).  
Cf. Alex. Aphrod. *In Arist. Met.* 1.8.990a.23 (on the Pythagorean triangle, cited by ed.pr.) ἐπεὶ τοίνυν ἡ ύποτεινούσα ἵστον δύναται ἀμφοτέραις ἄμα, διὰ τοῦτο ἡ μὲν δυναμένη καλεῖται, αἱ δὲ δυναστευόμεναι.

35. δυναστευόμεναι : (τάς) ἄλλ(ας) πλευρ(άς)· | δρθῆν (καὶ?) βάσιν.  
*Resp.* 546b: *P.Oxy.* XV 1808 i marg. .11-12; p1421 (ii).

36. \*ῥήτ(ῶν) : ἀριθμ(ός) δι πλευράν ἔχω(ν).  
(Context: ὃν ἐπίτριτος πυθμήν πεμπάδι συζυγεῖς δύο ἀρμονίας παρέχεται τρίς αὐξηθείς, τὴν μὲν ἵσην ἵσακις, ἐκατὸν τοσαντάκις, τὴν δὲ ἱσομήκη μὲν τῇ, προμήκη δὲ, ἐκατὸν μὲν ἀριθμῶν ἀπὸ διαιμέτρων ῥητῶν πεμπάδος, δεομένων ἐνὸς ἑκάστων, ἀρρήτων δὲ δυοῖν, ἐκατὸν δὲ κύβων τριάδος· ξύμπας δὲ οὗτος δι ἀριθμός γεωμετρικός τοιούτου κύριος ἀμεινόνων τε καὶ χειρόνων γενέσεων.)

*Resp.* 546c: *P.Oxy.* XV 1808 ii marg. .6-7; p1421 (ii).

#### THEOCRITUS

37. τάν κελέβαν: κελέβη· λεκάνη.

2.2: *Ant.Th.* fr. B3 verso; p1487 (v-vi).

Cf. sch. 2.2a ...κελέβη δέ ἐστι ποτήριον ξύλινον κυλικῶδες. Εὐφορίων ἐν Ποτηριοκλέπτη (fr. 8 Scheidweiler *Diss.phil.Bonn.* 1908, 25). “δστις ἐμὴν κελέβην Ἀλυβηῆδα μοῦνος ἀπηύρα”....

38. φάρμακα ταῦτ' ἔρδοισα χερείονα μήτε τι Κίρκας / μήτε τι Μηδείας μήτε ζανθᾶς Περιμήδας : <Περιμήδας ?>: ἡτις δεδώκει τὸ | φάρμακον τῇ Ἐλεῖνῃ (?) | κ(αὶ) ἔξ αὐτοῦ τὸν Τηλέμ(αχον) | ἐποίησ(ε) πινεῖν ἐν τῇ | Ὀδυσσείᾳ.

2.15-16: *Ant.Th.* fr. B3 verso, written beside line 13; p1487 (v-vi).

Cf. sch. (b) Περιμήδας: αὗτη ἐστὶν ἡ παρ' Ομήρῳ (II. 11.740) Ἀγαμήδη, “ἡ τόσα φάρμακα εἰδεν, δσα τρέφει εὐρεῖα χθών.” (Neither Perimede nor Medea is mentioned in the *Odyssey*, however.)

39. καλύκεσσι: κάλυκες λέγονται τὰ μήπω | ἐκπεπτα]μένα ρόδων (?) . ἀπ[ὸ το]ῦ καλύ[πτεσθαι].

3.23: *P.Oxy.* L 3548 (*P.Oxy.* 2064 add.) p. 114; p1489 (ii).

40. ἀπ' Ὀθρνος δγε Μελάμπονς : ] δρος Θεσσαλίας.

3.43: *P.Oxy.* 2064 xviii; p1489 (ii).

Sch. Ap.Rhod. 2.515 (p. 170 Wendel) “Οθρυς δρος Θεσσαλίας ύψηλόν, καὶ ὁ Ἀπιδανὸς δὲ ποταμὸς Θεσσαλίας.

*Et.Gen.* (EM 616,18) Όθρυς: δρος Θεσσαλίας, οἰον (Argon. 2.515).

41. τῶν δέ τ' ὁδόντων / λευκοτέραν αὐγάν Παρίας ὑπέφαινε λίθοιο : λίθος (ἐστιν) ἐγ Πάρῳ φερομέγ[η]....

6.37-38: *P.Oxy.* 2064 xvii (see *P.Oxy.* L 3548 p. 105); p1489 (ii).

Sch. (e) τῶν δέ τ' ὁδόντων τῶν ὁδόντων ἡ λευκότης λευκοτέρα ἐδείκνυτο Παρίας λίθου. Παρία γάρ ἐστι λίθος λευκή.

Sch. (f) Παρίας: εἶδος λίθου.

42. Φιλίταν: Φιλῆτας π[ο]ιήτης ἐγένετο | ?μητρό]ς δ(ὲ) Εὐκτιόνης [ | θανο]ῦσαν ἔθαψεν.

7.40: *P.Oxy.* 2064 xii; p1489 (ii).

Cf. sch. (f) Φιλῆτας Κώρος τὸ γένος, ὃς δέ τινες Ρόδιος, νιός Τηλέφου. ἐγένετο δὲ καὶ αὐτὸς ποιήτης.

43. Ἡδωνῶν μὲν ἐν ὠρεστὶ... / “Ἐβρον πάρ ποταμόν: Ἡδωνοὶ ἔθνος Θράκη(ς), ωγ[ | ]Ι[. .] εν Λυκοῦργος [ | ]. ποταμὸς Θράκη(ης).

7.111-12: *P.Oxy.* L 3548 (*P.Oxy.* 2064 add.) p. 110; p1489 (ii).

Cf. sch. 111 (a) εἴης δ' Ἡδωνῶν: ἔθνος Θράκης: οὐτως δέ ψυχροτάτη ἐστι η Θράκη, ὃς τρόπον τινὰ ἐργαστήριον ὀνέμων κληθῆναι. “Ομηρος (II. 9.5): “Βορέης καὶ Ζέφυρος, τώ τε Θρήκηθεν ἄητον.”

44. Βυβλίδος: Βυβλί[ς | ]. [ ης ὁ] πατήρ Μίλη[το]ς ἀδελφὴ [ ην Καύνου. <sup>2</sup>

7.115: *P.Oxy.* L 3548 (*P. Oxy.* 2064 add.) p. 111; p1489 (ii).

<sup>2</sup> The conjectural restoration of one other note in this text presupposes the same sort of inflectional shift: ὑπὸ Βλεμάων: Βλέμεινες ἔθνος | τῆς Αἰθιοπίας. (Theocr. 7.114: *P.Oxy.* L 3548 = *P.Oxy.* 2064 add., p.110); cf. sch. *ad loc.* (a) Βλέμεινες ἔθνος Αἰθιοπικὸν μελανόχρουν. οἱ αὐτοὶ δὲ τοῖς Τρωγλοδύταις.

45. *οἰναρέοισι*: τὰ φύλλα τῆς ἀμπέλου.  
 7.134: P.Berol. inv. 21182, *ZPE* 4 (1969) 114-16; u1350 (vi).  
 Sch. (b) *οἰναρέοισι*: κυρίως τὰ φύλλα τῆς ἀμπέλου.  
 Hesych. (D) *οἰναρά*: τὰ τῆς ἀμπέλου φύλλα.  
 Cf. Sch. Nic. *Al.* 55 θρία ἰδίως τὰ φύλλα τῆς συκῆς, ὥσπερ οἰναρά τὰ τῆς ἀμπέλου.  
 Cf. sch. Ar. *Pax* 1147 οἰναρίζειν: τὸ ἀποφυλλίζειν οἰναρά γάρ τὰ φύλλα τῆς ἀμπέλου. . . οἰναρίζειν δὲ τὰς οἰνας ἐργάζεσθαι, καὶ οἰναρά τὰ φύλλα.

46. *ως κεν ὁ Θεσσαλὸς εἴποι, δίτην*: Θε]σσαλ(--) οἱ ἐρώμεν[οι].  
 12.14: *Ant. Th.* fr. B2 recto; p1487 (v-vi).  
 Sch. 12.12 (a) ... δύο πρὸ ήμῶν ἐγένοντο ἄνθρωποι, ἔτερος μὲν ὑπὸ Λακώνων λεγόμενος εἴσπνηλος, τουτέστιν ἐραστής, ἔτερος δὲ ὑπὸ Θεσσαλῶν ἀίτας, τουτέστιν ἐρώμενος.  
 Cf. *Et.Gen.* 282 Lasserre & Livadaras ἀίτης (from this passage); *EM* 600; *Et.Sym.* 346.

47. *Κιανῶν*: Κιανοί | θένος ἔστι | τῆς Μυσία[ς]. | ἐκεῖ γά[ρ] |..  
 13.30: *Ant.Th.* fr. B2 verso; p1487 (v-vi).  
 Sch. (b) *Κιανῶν* <Κιανοί> οἱ τὴν Κίον κατοικοῦντες γεωργοί. ἔστι δὲ πόλις τῆς Μυσίας, ἡ νῦν καλούμενη Προύσα ἀπὸ τοῦ <τῶν> Βιθυνῶν βασιλέως Προυσίου. Κίος δὲ ἀπὸ Κίον τοῦ νίού 'Ολύμπου, ἀφ' οὗ τὸ δρός δ 'Ολύμπος.

48. *Δίνωνα*: Δίνων καλεῖται | δ ἀνὴρ αὐτῆς.  
 15.11: *Ant.Th.* fr. B5 recto; p1487 (v-vi).

49. *Γολγός τε καὶ Ἰδάλιον...* / *αἴπεινάν τ' Ἔρυκα*: Γολγοί θένος τῆ[ς] Κύ]πρου ἔστιν. | Ἰδάλιον καὶ Ἔρυξ πόλε[ι]ς τῆς Σικελίας.  
 15.100-101: *Ant.Th.* fr. B6 verso; p1487 (v-vi).  
 Steph.Byz. 210,3 Γολγοί, πόλις Κύπρου, ἀπὸ Γόλγου τοῦ ἡγησαμένου τῆς Σικουνίων ἀποικίας... ἀφ' οὗ Γολγία ἡ Ἀφροδίτη...  
*Ibid.* 281,3 Ἔρυξ, πόλις Σικελίας. ἀρσενικῶς, ἀπὸ Ἔρυκος τοῦ Ἀφροδίτης καὶ Βύτου. τὸ θηνικὸν Ἔρυκίνος, καὶ Ἔρυκίνη Ἀφροδίτη ἐν Ρώμῃ καὶ Σικελίᾳ.

50. *ἀλάβαστρα*: ἀλάβαστρον | λιθινόν.[]  
 15.114: *Ant.Th.* fr. B6 verso; p1487 (v-vi).  
 Cf. *Etym.Magn.* 55,34 (753 Lasserre & Livadaras) ἀλάβαστρον (Theocr. 15.114 ?): ἀλάβαστος, λήκυθος λιθίνη πρὸς μύρων ἀπόθεσιν. καὶ συνθέσει τοῦ ρ, ἀλάβαστρος. οὗτος εἰς τὸ Διογενιανοῦ ἐγέγραπτο....

51. *ἀρσενα χοῖρον*: ἐπ(ει)δ(η) ἄγριός | (έστιν) ὁ χοῖρος.  
 24.99: *Ant.Th.* fr. B8 verso; p1487 (v-vi).

52. *σχῖνον*: βοτανή | ἔστιν.  
 26.11: *Ant.Th.* fr. B7 recto; p1487 (v-vi).

53. *ώμοπλάτᾳ*: ώμοπλάτῃ λέγ(εται) ἡ σάρξ ἐπάνω | τοῦ γώτου οὖσα.  
 26.22: *Ant.Th.* fr. B7 verso; p1487 (v-vi).





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