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Signes dans les textes, textes sur les signes

**Érudition, lecture et écriture
dans le monde gréco-romain**

Actes du colloque international
(Liège, 6–7 septembre 2013)

Textes rassemblés et édités par
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Word Division in Bilingual Texts

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Word division is normally considered to be one of the clear advantages that our civilization has over those of the ancients¹. Because words are now divided at the time of writing, reading is for us a faster, easier, and more accurate process than it was in antiquity; indeed our heavily writing-dependent culture, which requires a nearly universal literacy rate, would arguably be impossible without word division. So word division can be classed with electricity, printing, and a host of other inventions that crucially distinguish the modern world from the ancient one.

Yet word division is fundamentally different from technologies such as electricity and printing, because it is not a modern invention. The ancients were fully aware of the possibility of word division and, on the whole, chose not to use it. We see it as conveying a host of advantages, but they would not have agreed. The purpose of this paper is to examine one of the few contexts in which word division did occur, namely bilingual texts, with the aim of understanding how, why, and when it was used.

Of course, writing without word division is fundamentally a Greek phenomenon. The Romans, like other ancient peoples of Italy such as the Etruscans and Oscans, originally divided their words and only gave up this practice under Greek influence around 100 AD². It is striking evidence of the way both Greeks and Romans considered Greek literary culture superior to that in Latin that the extensive contact between the two in the centuries leading up to 100 AD resulted in the Romans abandoning word division rather than in the Greeks adopting it. Roman word division relied not on spaces but on raised dots known as ‘interpuncts’, which were used between nearly every word. The only

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1. I am very grateful to everyone who helped in the research leading to this paper, particularly Maria Chiara Scappaticcio and Gabriel Nocchi Macedo for the invitation to participate in the conference that resulted in this volume and Maria Chiara Scappaticcio, Daniela Colomo, Willy Clarysse, and Philomen Probert for help with the content of this piece. I am also grateful to Serena Ammirati and Marco Fressura for allowing me to see their work on the layout of bilingual texts (AMMIRATI – FRESSURA [forthcoming]), which was composed independently of this piece and is in many ways complementary to it; in addition to making some of the same points that are made below (particularly about use of the dicolon), they discuss related aspects of the layout including indentation and the use of paragraphoi.
 2. See WINGO (1972): 14-17 and AMMIRATI (2010): 44-45.

exceptions were enclitics and proclitics, which were not separated from the words they depended on; thus *-que* was joined to the preceding word and prepositions to their objects. The former of these exceptions is continued today but the latter is not. Interpuncts are best known from inscriptions, where they are conspicuous, but they were in no way an epigraphic phenomenon: the very few early Latin papyri also contain regular interpunction, as do inscribed objects and most (but not all) of the Pompeiian graffiti.

Examples 1³ and 2⁴ show the typical layout of words in monolingual papyri of the early imperial period; both Latin (example 1) and Greek (example 2) texts are normally written in relatively long lines, but the Latin has interpuncts and the Greek does not.

1a. Diplomatic transcript⁵:

Fata·mihi·caesar·tum·erunt·mea·dulcia·quom·tu
 Maxima·romanae·parserit·historiae·
 Postque·tuum·reditum·multorum·templa·deorum
 Fixa·legam·spolieis·deiuitiora·tueis

1b. Restored with modern typographic and spelling conventions:

Fata mihi, Caesar, tum erunt mea dulcia, cum tu
 maxima Romanae pars eri(s) historiae
 postque tuum reditum multorum templa deorum
 fixa legam spoliis diuitiora tuis.

2a. Diplomatic transcript:

[ζευδεπα]τηρειδηθενεϋτροχοναρμακαιπρους·
 [ουλυμπο]νδεδιωκε·θεωνδεξ[ε]ικετοθώκου
 [τωδεκαι]προυςμενλϋσενκλυτοσεννοσιγαιος·
 [αρματαδα]μβωμδισιτιθεικαταλειταπετασας·

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3. Gallus papyrus (*P.Qasr Ibrîm* inv. 78-3-11/1 [LI/2], lines 2-5 (dated to first century BC or AD, LDAB 574, MP³ 2924.1), ed. ANDERSON – PARSONS – NISBET (1979); see photograph of this passage in ANDERSON – PARSONS – NISBET (1979): plate 5.
 4. *P.Berol.* inv. 6845, lines 5-8 (first or second century AD, LDAB 1532, MP³ 831), = *Iliad* VIII 438-441, ed. LAMEERE (1960): 81; see photograph of this passage at <http://smb.museum/berlpap/index.php/01720/>.
 5. In this and subsequent passages labelled as ‘diplomatic transcript’, modern capital letters are used to indicate letters that are physically larger than the others in a text, although of course these are not capitalized in the sense of being in a different alphabet.

2b. Restored with modern typographic conventions:

Ζεὺς δὲ πατὴρ ἴδθηεν εὐτρόχον ἄρμα καὶ ἵππους
 Οὐλύμπόνδ' ἐδίωκε, θεῶν δ' ἐξίκετο θώκους.
 τῷ δὲ καὶ ἵππους μὲν λῦσε κλυτὸς Ἐννοσίγαιος,
 ἄρματα δ' ἄμ βωμοῖσι τίθει, κατὰ λῖτα πετάσσει.

Texts intended for language learners, however, used a very different format, with much narrower columns and a parallel translation. The translation was arranged so that each of its lines translated the corresponding line of the original text, as shown in example 3⁶. I have tried to illustrate the translation system by providing a third column with an English translation, but because English word order is much less flexible than that of either Greek or Latin it has not been possible to adhere entirely to the principle of line-for-line translation.

3a. Diplomatic transcript:

tempestatem	[χειμῶνα]	. . . to undergo the tempest,
subire	[υπεχειν]	
dummodo	[ειμονον]	as long as
auobis	α[πουμων]	away from you
huiushorribilis	τουτο[υτο]υφρ[ικωδους]	of this horrible and nefarious
belli	πολεμου	war
acnefarii	καιαθεμιτου	
periculum	οκινδυνος	the danger
depellatur	απωθηθει	is driven off.
dicatursane	λεχθησεταιμαλιστα	Indeed, let it be said
eiectus	εκβληθει	that he was banished by me,
[am]eesse	απεμουνειναι	
[dummodoe]at	[ει]μ[ον]ογπορευθει	as long as he goes
[inexilium	εις]εξορισμον	into exile . . .

3b. Restored with modern typographic conventions:

. . . tempestatem subire, dum modo a uobis huius horribilis belli ac nefarii
 periculum depellatur. dicatur sane eiectus a me esse, dum modo eat in exilium . . .
 . . . χειμῶνα υπέχειν, εἰ μόνον ἀπὸ ὑμῶν τούτου τοῦ φρικώδους πολέμου καὶ
 ἀθεμίτου ὁ κίνδυνος ἀπωθηθείη. λεχθήσεται μάλιστα ἐκβληθεὶς ἀπ' ἐμοῦ εἶναι,
 εἰ μόνον πορευθεῖν εἰς ἐξορισμόν . . .

6. *P.Ryl.* I 61 recto, lines 18-31 (4th or 5th century AD, LDAB 554, MP³ 2923, = CICERO, *In Catilinam* 2.15); see photograph of this passage at http://enriqueta.man.ac.uk:8180/luna/servlet/detail/ManchesterDev~93~3~22456~100287:In-Catilinam?sort=Image_sequence_number%2CFolio%2CImage_Title%2CDate_created&qvq=sort:Image_sequence_number.

This format was designed to make reading easier for learners in a number of different ways. The provision of a running translation was obviously a great help, but the columnar format had benefits even if the reader did not look at the translation. The frequent line divisions always fell at word-end, for in contrast to many monolingual versions of prose texts, bilingual texts in this format never divided words between lines. The line breaks thus provided about half the word divisions, making it much easier for the reader to work out where the remaining divisions should be placed. Moreover, the units on each line were not randomly chosen; in most cases the words grouped together on a line were ones that had some grammatical connection to each other, as with *dum modo*, *a uobis*, and *huius horribilis* in lines 3-5 of example 3. Highlighting such groupings was arguably even more helpful to the reader than the provision of regular word division would have been. The enhanced comprehensibility of the columnar format as compared to the normal layout for monolingual text, even without considering the translation, is illustrated in example 4.

4a. *Aeneid* I 1-2 in the normal format for monolingual texts:

armauirumquecanotroiaequiprimusaboris
italiamfatoprofuguslauiniaqueuenitlitora

4b. *Aeneid* I 1-2 in the columnar format, without translation:

armauirumque
cano
troiae
quiprimus
aboris
italiam
fatoprofugus
lauiniaque
uenitlitora

There were also other ways in which column structure and spacing could be used to help with the process of word division in a foreign language. Example 5⁷ shows a grammatical papyrus that presents the declensions of Latin nouns for Greek speakers; each noun is first glossed in Greek and then declined in Latin, accompanied by forms of *hic*, *haec*, *hoc* to indicate the case and number. The forms of *hic* are arranged in one column and the forms of the noun being

7. *P.Louvre* inv. E 7332 recto, lines 42-54 (5th or 6th century AD, LDAB 6148, MP³ 2997), ed. DICKEY – FERRI – SCAPPATICCIO (2013); see photograph of this passage at DICKEY – FERRI – SCAPPATICCIO (2013): 174.

declined in a second column, preventing any unclarity as to where one ends and the next begins. On the first line of each paradigm there was usually a space problem due to the need to fit in the Greek gloss, and this was often solved, as in the extract given here, by moving the Latin noun out of its proper column; even in such circumstances, however, a space was left between the form of *hic* and the noun. A space is also left after the indications of gender in the headings of each paradigm (*Neutralia* in this example), but no space is left between Latin prepositions and their objects (*in* and *or* in the heading, *ab* and *hoc/his* in the ablatives) or between Greek articles and the nouns they modify (*το* and *πελαγος* in this example).

5a. Diplomatic transcript:

Neutralia inōr
 hoc aequor: τοπελαγος
 huius aequoris
 huic aequori
 hoc aequor
 o aequor
 abhoc aequore
 Pl haec aequora
 horum aequorum
 his aequorib'
 haec aequora
 o aequora
 abhis aequorib'

5b. Restored with modern typographic conventions:

Neutralia in -or: hoc aequor (τὸ πέλαγος), huius aequoris, huic aequori, hoc aequor, o aequor, ab hoc aequore; pluralia: haec aequora, horum aequorum, his aequoribus, haec aequora, o aequora, ab his aequoribus.

Despite the considerable help that narrow columns provided with word division, interpuncts were frequently used as well, thus providing the maximum possible assistance: the learner was guided both in where each word began and in which words should be taken together. Occasionally such interpunction was nearly complete, dividing almost every word, as in the Latin (but not the Greek) of the bilingual form letters in example 6⁸. More often it was sporadic, providing

8. *P.Bon.* 5, col. 5 lines 15-21 (3rd or 4th century AD, LDAB 5498, MP³ 2117), ed. KRAMER (1983): no. 16 and *PLP*II.1: no. 35; see photograph of this passage in *PLP*II.1: plate XX.

occasional help in lines where the column structure by itself might not be sufficient, as in the second line of the colloquium in example 7⁹.

6a. Diplomatic transcript:

memoriae[·]sulpici	μνημηςουλπικίου	That by the memory of Sulpicius
auctum·te	ηυ[ξη]μενον·ce	you are enriched, (Sulpicius who was)
pauperis·quidem	με[τρ]ιου[μ]εν	indeed poor
set·amici·tui	αλλ[α]·σουφίλου	but your friend,
gaudeo	χαίρω	I rejoice,
quod·uoluntas·eius	διοπερηκρισιςαυτου	because his decision
praestantiam·tuam	την·cην·παροχην	has so rewarded your excellence
sicremunerauit	οὕτως·ανταμειψατο	
utint[elle]gi[·]possit	ἵνα·αἰσθανεσθαι·δύνηται	that it is possible to perceive
eum[·]tibi	τοῦτον·coi	that he left you
quod·tantum·quod·boluit	οὐ·μόνον·το·ἠέληεν	not as much as he wanted,
set·quod·potuit	ἀλλ·αὐτοῦ·δύνυθη	but as much as he could.
reliquisse	καταλελοιπεν	

6b. Restored with modern typographic conventions:

Memoria Sulpici auctum te, pauperis quidem se(d) amici tui, gaudeo, quod uoluntas eius praestantiam tuam sic remuneravit ut intellegi possit eum tibi (non) tantum quod (u)oluit, se(d) quod potuit reliquisse.

Μνήμη Σουλπικίου ἠὺξημένον σε, μετρίου μὲν ἀλλὰ σου φίλου, χαίρω, διόπερ ἡ κρίσις αὐτοῦ τὴν cήν παροχὴν οὕτως ἀνταμείψατο ἵνα αἰσθάνεσθαι δύνηται τοῦτόν σοι οὐ μόνον ὃ ἠέληεν, ἀλλὰ ὃ ἐδυνήθη καταλελοιπέν(αι).

7a. Diplomatic transcript:

[a]udiuihomnia	ἤκουσα·παντα	‘I heard everything
[ab]alumno·tuo	παρὰ·τ[ου]τροφεωccου]	from your nurse.’
[me]ntitur	ψευδετ[αι]	‘He who said that to you is lying.
quitib[idi]xit]	ο·coi·ειπ[ων]	
duxit[eni]m[·]mē	ἡρεν·γαρ·με	For my father took me
[pa]t[er]·[meu]s	οπατηρ·μου	
[in]p[raetorium]	εἰς·τ[ο]·π[ραιτωρ]·[ιον]	with him to the praetorium.’
[s]ecum	μεθεαυτο[ν]	

9. *P.Prag.* II 118 verso, lines 25-32 (4th or 5th century AD, LDAB 6007, MP³ 3004.22 = *Colloquium Harleianum* 8b-9a), ed. DICKEY – FERRI (2012); see photograph of this passage in DICKEY – FERRI (2012): 130.

7b. Restored with modern typographic conventions:

‘Audiui omnia ab alumno tuo.’ ‘Mentitur qui tibi dixit. duxit enim me pater meus in praetorium secum.’

‘Ἦκουσα πάντα παρὰ τοῦ τροφέως σου.’ ‘Ψεύδεται ὃ σοι εἰπών. ἦρεν γάρ με ὁ πατήρ μου εἰς τὸ πραιτώριον μεθ’ ἑαυτοῦ.’

Bilingual texts could be used not only by Greek speakers learning Latin, but also by Latin speakers learning Greek; it is clear that some texts of this type went back and forth between different types of users, being adapted and re-adapted by each in turn. This history probably explains why sporadic (though never, as far as I know, complete) interpunction is sometimes found in the Greek halves of such texts, as in the last line of example 8¹⁰, which comes from the same papyrus as example 7.

8a. Diplomatic transcript:

[paratussum]	[ετοιμ]οε[ιμ]ει	‘I am ready,
[incendienim]	ηψαγαρ	for I lit
[lucernam]	τονλυχνον	the lamp
[etnocte]	καινυκτωρ	and studied at night.’
[meditatussum]	εμελετη[ca]	
[benefecisti]	καλωσεπ[οι]ηcas	‘You have done well;
[modotela]udo	αρτισε·επ[αιν]ω	now I praise you.

8b. Restored with modern typographic conventions:

‘Paratus sum; incendi enim lucernam et nocte meditatus sum.’ ‘Bene fecisti; modo te laudo.’

‘Ἐτοιμός εἰμι· ἦψα γὰρ τὸν λύχνον καὶ νύκτωρ ἐμελέτησα.’ ‘Καλῶς ἐποίησας· ἄρτι σε ἐπαινῶ.’

Interpuncts are not the only form word dividers can take in bilingual texts. They are the most common form, because of their long association with Latin (and with other languages of the Italian peninsula, including early Greek texts from Magna Graecia: see Lougovaya-Ast, this volume, pp. 27-42), but there were other options available. The most prominent of these was the *hypodiatole*, a symbol shaped like a comma that has a Greek tradition as a word divider.¹¹ In monolingual Greek texts the *hypodiatole* is a rare sign, used in scholarly contexts to clarify ambiguous forms. In bilingual texts it can be employed like

10. *P.Prag.* II 118 recto, lines 13-19 = *Colloquium Harleianum* 6d-f; see photograph of this passage in DICKEY – FERRI (2012): 130.

11. See *De Prosodiis*, Supplementum 1 to the *Τέχνη γραμματική* attributed to Dionysius Thrax, *GGL* 1: 106.1.

the interpunct to help learners with word divisions that would be clear to someone with a better command of Latin, as in example 9¹².

9a. Diplomatic transcript:

dum,stanbat:	εωσεστηκε	While he stood
regno,incolumis:	εγζωβα	unharmd in his kingship
	κιλιωγης	
regnúmq,	κ[α]ιτ[ων]ο'βακιλι[ω][ο]ν	and strong in the councils of kings,
vigēbat	ηκμαζεν	
conciliis	συγεδρίοις	
etnosaliquod:	κατημ[α]ει'τσιπτε	we too, to some extent, enjoyed
noménque	καιονομα	both reputation
decúsque	καικοσμον	and honour.
géssimus	εχιρικαμεν	

9b. Restored with modern typographic conventions:

Dum stabat regno incolumis regumque vige-
bat conciliis, et nos aliquod nomenque decus-
que gessimus.

ἔως εἰστίκει ἐν τῷ βασιλείῳ ὕγις καὶ τῶν βασιλέων ἡκμαζεν συνεδρίοις, καὶ
ἡμεῖς τί ποτε καὶ ὄνομα καὶ κόσμον ἐχειρίκαμεν.

Also notable in example 9 is the use of a double point, like an English colon; this sign also appears in example 5. The double point is used to indicate the point where the language changes, if that is not signalled by a space or column. In example 9 most lines do not have the double point, because the column structure makes it clear what is in Latin and what in Greek. But because some lines are much longer than others (significant variation in line length is an inevitable consequence of the principle of columnar translation, namely that each line contains a meaningful word grouping that can be translated as a unit in the other language), sometimes one column encroaches on the other, and in those lines the double point is used to make it clear which words belong to which column.

The papyrus just presented is a particularly interesting one, because it contains extracts from three books of the *Aeneid* and treats them in two different ways. For books I and II the papyrus gives every word of the passages it contains, so that one can read down the left-hand column and get the *Aeneid*, or read down the right-hand column and get a (more or less coherent) Greek translation of the *Aeneid*. In book IV, on the other hand, only selected words are

12. *P.Ness*. II 1, lines 506-515 (6th or 7th century AD, LDAB 4166, MP³ 2939) = *Aeneid* II 88-90, ed. SCAPPATICCIO (2013a). I have seen a photograph of this passage and verified the readings given here.

given; clearly the writer envisioned a progression whereby a student's facility in Latin improved over the course of reading the earlier books to the point where less information was needed in book IV. It is striking, therefore, that the surviving extracts from book IV contain no word dividers at all: clearly word division was one of the things the student was supposed to have mastered by that stage. (The lack of word division is not due to the scribe producing fewer multi-word lines once he was no longer including every word, for there are numerous lines containing more than one word.) The double points, however, are used in book IV just as in books I and II, indicating that their function was not one the student was supposed to be able to dispense with at that stage. Example 10¹³ is taken from book IV of this papyrus.

10a. Diplomatic transcript:

Suscepta	αναληφθεν	conceived
antefugam	προτηςφυγης	before flight
suboles	γονη	offspring
parbulus	νηπιος	little
luderet	επεξεγ	played
omnino	παντελως	entirely
referet	εδοκουν	recall/seem
monites	υπομνησθειςιν	warnings
etnumerare	εξαριθμη[ε]αρθαι	enumerate
obnixius	επερικαμ[εν]ος	firmly
uales	ιςχυρος	you are able to
praemebat	συνειχεγ	oppressed
numquam	ουδεπο[τε]	never
fando	εντωλαλ[ε]ιν	by speaking
promeritam	ευεργετησα(ν)	deserving
[[t]]pegetme	οκνησω	I regret
elissaememor	ελισσηςμνημ[ο]ν	of Elissa the memory
spiritus	πνοη	life
prore	υπερτουπραγματος	for my side of the case
locuarfurim:	λαλησωλαθρα	I shall speak stealthily
abscondere	αποκρυψαι	abscond
sperabitaedas:	ελπιτα[δα]δασ	I hoped torches
infoedare	εισπονδας	in union
uenisponte	ηλθο[ν]προαιρεσι	I came by choice

13. *P.Ness.* II 1, lines 748-773 = *Aeneid* IV 327-343; see photograph of this passage in SCAPPATICCIO (2013a): tav. 1.

paterentur	ηνιχοντο	allow
reliquias	λιψανα	remains

- 10b. *Aeneid* IV 327-343 with glossed words underlined and glosses, restored with modern typographic conventions, placed after them:

(Saltem si qua mihi de te) suscepta (ἀναληφθέν) fuisset
ante fugam (πρὸ τῆς φυγῆς) suboles (γονή), si quis mihi paruulus (νήπιος) aula
luderet (ἐπαιξεν) Aeneas, qui te tamen ore referret (ἐδόκουν, really for *uideret*
in next line),
non equidem omnino (παντελῶς) capta ac deserta uiderer.
Dixerat. ille Iouis monitis (ὕπομνησθεῖσιν) immota tenebat
lumina, et obnixus (ἐπερειαίμενος) curam sub corde premebat (συνεῖχεν).
tandem pauca refert: Ego te, quae plurima fando (ἐν τῷ λαλεῖν)
enumerare (ἐξαριθμήσασθαι) uales (ἰχυρός), numquam (οὐδέποτε), regina, negabo
promeritam (εὐεργετήσασαν); nec me meminisse pigebit (ὀκνήσω) Elissae
(Ἑλίσσης),
dum memor (μνήμων) ipse mei, dum spiritus (πνοή) hos regit artus.
pro re (ὕπερ τοῦ πράγματος) pauca loquar (λαλήσω). neque ego hanc abscondere
(ἀποκρύψαι) furto (λάθρα)
sperauī (ἤλπικα) — ne finge — fugam, nec coniugis umquam
praetendi taedas (δῶδας), aut haec in foedera (εἰς σπονδάς) ueni (ἦλθον).
me si fata meis paterentur (ἡνείχοντο) ducere uitam
auspiciis et sponte (προαιρέσει) mea componere curas,
urbem Troianam primum dulcisque meorum
reliquias (λείψανα) (colerem, Priami tecta alta manerent . . .)

The columnar format took up a great deal of space, because of the varying lengths of the lines, and a temptation to compress it must have been common. Indeed bilingual texts where the two languages are Greek and Coptic, rather than Greek and Latin, usually run the columns together, thus requiring double points on every line to indicate the changes of language. Example 11¹⁴ comes from a trilingual text, each line containing first Latin, then Greek, then Coptic. Since the Coptic alphabet is the same as the Greek one with a few additional letters, and in this text the Latin is transliterated into Greek script, the potential for confusing the different languages is high and the double points perform a vital function. Nevertheless there is little consistency in their use: in the first line there is a single rather than a double point between the Greek and the Coptic, while in the fourth line a double point is used as a word divider to separate *si* and *omnes* in

14. *P.Berol.* inv. 10582 recto, lines 1-7 (5th or 6th century AD, LDAB 6075, MP³ 3009), ed. DICKEY (2015); see photograph of this passage in KRAMER (2010): plate 106, but note that after seeing the original I do not agree with every element of Kramer's transcription in plate 107.

the Latin. The second line is composed of long words that could not all be fitted onto a single line, so a line break occurs in the middle of a Greek word and the rest of the line is given on the third line, which is marked with a paragraphos to indicate that it is a continuation of the preceding line rather than a new set of three words or phrases.

11a. Diplomatic transcript:

ομνιβουc: παcιν· οχονηιc;	. . . to everyone
ακκουμβεντιβουc: τοιc ανακει	reclining.
μενοιc: εφηχε βολ: οχ· τη[ρ]ογ·	
ci: ομνηc: επιαντεc: εc· χεντο	If all
βιβεριντ· επιαν· αγκω·	have drunk,
τεργε· καταμαζον· βοτ· τη·	wipe
μενcaμ· τηντραπεζαν·	the table.

11b. Expanded to the regular columnar format:

ομνιβουc	παcιν	οχονηιc:	. . . to everyone
ακκουμβεντιβουc	τοιc ανακειμενοιc	εφηχε βολ: οχ· τη[ρ]ογ·	reclining.
ci: ομνηc	επιαντεc	εc· χεντο	If all
βιβεριντ	επιαν	αγκω·	have drunk,
τεργε	καταμαζον	βοτ· τη·	wipe
μενcaμ	τηντραπεζαν		the table.

11c. Latin and Greek restored with modern typographic conventions:

. . . omnibus accumbentibus. si omnes biberint, terge mensam.
 . . . πᾶσιν τοῖς ἀνακειμένοις. εἰ πάντες ἔπιαν, κατάμαζον τὴν τράπεζαν.

Even more space could be saved, and variable line lengths avoided, by abandoning the principle that each entry should start on a new line. The Greek-Latin glossary to the letters of Paul in Chester Beatty codex AC 1499, illustrated in example 12¹⁵, follows this system and when necessary divides words between lines; the line breaks therefore offer no help in dividing either words or languages. To compensate for this lack of help a more sophisticated system of division signs is used, with double points marking the divisions between a lemma and its gloss and between different glosses on the same lemma, while a sign consisting of two short lines, similar to an English double quotation mark, marks the ends of entries. Word divisions within a lemma or a gloss are not marked at all, even in situations such as that in the first line of example 12, where the reader

15. Chester Beatty codex AC 1499, lines 1271-1275 (4th century AD, LDAB 3030, MP³ 2161.1, = Paul, 2 Corinthians 1:6-9), ed. WOUTERS (1988); see photograph of this passage in WOUTERS (1988): 184.

is very likely to take *intolerantia* as one word rather than two and thus to end up with the opposite of the intended meaning.

12a. Diplomatic transcript:

υπομονη:intolerantia:patientia“τωναν
των:earundem“βεβαια:firma“καθυπερβο
λην:supramodum“υπερδυναμιν:suprabi
rutem“επεβαρηθημεν:oneratisumus“πρ
ηχθην:prumptus“θανατου:tormentis“

12b. Expanded to the regular columnar format:

υπομονη	intolerantia:patientia	patiently
τωναντων	earundem	the same
βεβαια	firma	unshaken
καθυπερβολην	supramodum	utterly
υπερδυναμιν	suprabiꝛtutem	unbearably
επεβαρηθημεν	oneratisumus	we were crushed
πρηχθην	prumptus	(editor cannot identify this word)
θανατου	tormentis	death

12c. Greek text of 2 Corinthians 1:6-9 with glossed words underlined and glosses, restored with modern typographic conventions, placed after them:

(εἴτε δὲ θλιβόμεθα, ὑπὲρ τῆς ὑμῶν παρακλήσεως καὶ σωτηρίας· εἴτε παρακαλούμεθα, ὑπὲρ τῆς ὑμῶν παρακλήσεως τῆς ἐνεργουμένης) ἐν ὑπομονῇ (*in tolerantia, patientia*) τῶν αὐτῶν (*earundem*) παθημάτων ὧν καὶ ἡμεῖς πάσχομεν, καὶ ἡ ἐλπίς ἡμῶν βεβαία (*firma*) ὑπὲρ ὑμῶν· εἰδότες ὅτι ὡς κοινωνοὶ ἐστε τῶν παθημάτων, οὕτως καὶ τῆς παρακλήσεως. Οὐ γὰρ θέλομεν ὑμᾶς ἀγνοεῖν, ἀδελφοί, ὑπὲρ τῆς θλίψεως ἡμῶν τῆς γενομένης ἐν τῇ Ἀσίᾳ, ὅτι καθ' ὑπερβολὴν (*supra modum*) ὑπὲρ δύναμιν (*supra virtutem*) ἐβαρήθημεν (*onerati sumus*), ὥστε ἐξαπορηθῆναι ἡμᾶς καὶ τοῦ ζῆν· ἀλλὰ αὐτοὶ ἐν ἑαυτοῖς τὸ ἀπόκριμα τοῦ θανάτου (*tormentis*) ἐσχήκαμεν . . .

Other systems for indicating such divisions were also used. For example *P.Sorb. inv.* 2069, illustrated in example 13¹⁶, uses wide spaces both for divisions between entries and for separating lemmata from glosses and different glosses from each other. In addition, interpuncts are found sporadically in this papyrus, sometimes providing word division within a Latin (or, less often, a Greek) unit and sometimes occurring at the end of a unit, where the interpunct comes before

16. *P.Sorb. inv.* 2069, lines 79-87 (3rd century AD, LDAB 5438, MP³ 3006), ed. DICKEY – FERRI (2010) with expansion from DICKEY (2010): 204-205; see photograph of this passage at <http://www.papyrologie.paris-sorbonne.fr/photos/2082069.jpg>.

a wide space and therefore seems redundant. This text is complex, because it is a glossary of Latin words with multiple Greek translations that has been adapted at various times both for Greek speakers and for Latin speakers. The basic structure of each entry is a Latin word, its several Greek translations, then a phrase illustrating how each translation would be used, then an indication of how the Latin word should be inflected.

13a. Diplomatic transcript:

[uentum α]νεμον εληλυθoc υ[e]νητημσε[c]υη[dum] ανεμοναισιον
 υ[entumest]domu εληλυθoc[ec]τινεικοικον[ungula] οπλη ονυχιον χη<λη>
 υη[gulaequi] οπληιππου υη[g]υlaporci [o]υ[υχιονχοι]ρου ungula [uobis]
 [bouis χ]ηληβοoc etcete[rau]talta καιταλοι[παocτο]υψηλη
 ulci[s<cor τιμωρ]ωκαιαμυν[ο]μαι [ulci]scorhostis αμ[υνομαι]τουςπολεμιους
 ult[rix νεμ]εσιc αμυν[τ]ηρι . . etcetera·utca[lx καιταλ]οιπα ocτοαcβετοc
 und[e ποθεν] καιοθεν unde· h[o]minesfiunt· [οθεναν]θρωποιγεινονται
 in[prioreutra]mq̄uesyllabam· εντωπροτερω[εκαc]τηνοξυτονουμεν
 acuimus c[υλλαβη]ν insecun[do]σεcυ[n]dam [εντω]εξηcτηνδευτεραν

13b. Expanded to columnar format and restored with modern typographic conventions:

Ventum	ἄνεμον, ἐληλυθός·	‘Wind (acc.)’, ‘having come (neut.)’:
uentum secundum	ἄνεμον αἴσιον,	‘favourable wind (acc.)’,
uentum est domu(m)	ἐληλυθός ἐστιν εἰς οἶκον.	‘there was an arrival home’
Vngula	ὀπλή, ὀνύχιον, χη<λή>·	‘Hoof’, ‘trotter’, ‘cloven hoof’:
ungula equi	ὀπλή ἵππου,	‘horse’s hoof’,
ungula porci	ὀνύχιον χοίρου,	‘pig’s trotter’,
ungula bouis	χηλή βοός·	‘cow’s (cloven) hoof’;
et cetera ut alta	καὶ τὰ λοιπὰ ὡς τὸ ὑψηλή.	and the other (forms of <i>ungula</i> are declined) like <i>alta</i> .
Vlciscor	τιμωρῶ καὶ ἀμύνομαι·	‘I avenge’ and ‘I punish’:
ulciscor hostis	ἀμύνομαι τοὺς πολεμίους.	‘I punish the enemy’.
Vlatrix	νέμεσις, ἀμυντηρι . .	‘Vengeance’, ‘avenger(?)’;
et cetera ut calx	καὶ τὰ λοιπὰ ὡς τὸ ἄcβετοc.	and the other (forms of <i>ultrix</i> are declined) like <i>calx</i> .
Vnde	πόθεν καὶ ὅθεν·	‘Whence?’ and ‘whence’:
unde homines fiunt	ὅθεν ἄνθρωποι γίνονται·	‘whence men arise’;
in priore utramque syllabam	ἐν τῷ προτέρῳ ἐκάcτην ὀξυτονοῦμεν	in the former (meaning) we accent each
acuimus	συλλαβήν,	syllable,
in secundo secundam	ἐν τῷ ἐξήc τὴν δευτέραν.	in the latter (we accent) the second.

The papyri so far considered have divisions inserted by the original scribe, but some bilingual papyri were originally written in *scriptio continua* and then divided up by later readers. The text in example 14¹⁷ shows a papyrus of Terence's *Andria* in which a later reader (a Greek speaker to judge by his glosses) has sporadically added both punctuation and word division, the latter using the traditionally Greek *hypodiatole* form.

14a. Diplomatic transcript:

negabouelle, [.] me modo qui pollicitus sum d[ucere] qua audacia]
facere, id, audeam· nec quid, nunc faciam scio d[āne] qui] dem[me]
adq[ue] [i]dagosedulo· dicam, aliquid, iam [. . .] me in]uentur]um] [thui]cmalo]
aliquam producam] [o]ram· p[ro]hda· uisus sum] [p[ro]hodu]m] [ne]u]r]
quidaisuiden, me, tuis consiliis miserum impedi] [tum] d[ā]a] [ti]amexpediam]

14b. Restored with modern typographic conventions:

negabo uelle me modo qui pollicitus sum ducere? qua audacia
facere id audeam? nec quid nunc faciam scio. DA. nec quidem me
atque id ago sedulo. dicam aliquid iam me inventurum ut huic malo
aliquam producam moram. PA. oh! DA. visu' sum. PA. eho dum, bone uir,
quid ais? uidem me tuis consiliis miserum impeditum? DA. at iam expediam.

Addition of partial word division, as in 14, is fairly common in texts used by language learners. Complete, systematic word division added by a second hand is much rarer, but examples of this also exist. One is illustrated below in example 15¹⁸. This text, part of the *Codex Theodosianus*, was originally written monolingually in Latin *scriptio continua*, with some punctuation marks. It was then read and annotated by a Greek speaker. Someone, probably the person who made the Greek annotations, has divided up the words by inserting a thin vertical line between each one; the only places¹⁹ these lines are not used are at line breaks (though these do not necessarily coincide with word breaks) and in places where the first scribe had used punctuation marks. The vertical line is unusual as a word divider but is useful here because the original scribe's punctuation included marks that looked like interpuncts and also ones that looked like *hypodiatolai*: using either of the two common word division marks would therefore have deprived some punctuation marks of their meaning.

17. P.Oxy. XXIV 2401, folio 1 verso (4th century AD, LDAB 3982, MP³ 2934) = TERENCE, *Andria* 612/3-616/7; see photograph of this passage at <http://www.papyrology.ox.ac.uk/POxy/>.

18. Città del Vaticano, Reg. Lat. 886, folio 76v (6th century AD, LDAB 7456) = *Codex Theodosianus* IX 45.5; see photograph of this passage in *CLA* I 110.

19. Apart from a very few omissions such as between *loci* and *tantum* in the sixth line of this selection; it is possible that a line was in fact placed there but is not visible on the photograph I transcribed.

15a. Diplomatic transcript:

Id|aa|hierio|ppo. super|confugientibus
 an|sanctae|religionis|altaria|sanctio-
 nem|inperpetuum|ualituram|credi
 dimus|promulgandam·'ut|si|quidem|ser-
 uus|cuiusquam|ecclesiam|altariaue|lo-
 citantum|ueneratione|confisus|sine
 ullo|telo|pet'erit.'is|non|plus|uno|die|ibi-
 dem|dimitatur.quin|domino|eius,uel

15b. Restored with modern typographic conventions:

Idem A(ugusti) Hierio P(raefecto) P(raetori)o.
 Super confugientibus a(d) sanctae religionis altaria sanctionem in perpetuum
 ualituram credidimus promulgandam, ut, si quidem seruus cuiusquam
 ecclesiam altariaue loci tantum ueneratione confisus sine ullo telo petierit, is
 non plus uno die ibidem dimittatur, quin domino eius uel . . .

Despite the large number of bilingual texts containing word division of one sort or another, the insertion of word dividers was far from universal in such texts. It was not a bilingual text *per se* but rather a text used by language learners that triggered the division of words, for bilingual texts not used by learners are normally written in *scriptio continua* without even division between the two languages. A typical example is the report of a court case illustrated in example 16²⁰, where the framework indicating who spoke at each point is written in Latin, the official language of Roman law, while the words spoken by each participant are recorded in Greek, the language actually spoken during the trial. There is no division between words in either language, nor is there any indication when the language changes from Latin to Greek — apart from a stroke indicating the abbreviation of *dixit*, the last word of each Latin phrase. (Abbreviation signs, of course, come at the ends of words and thus indirectly signal word division²¹.) Spaces are used, but as punctuation: they indicate divisions between different speeches.

16a. Diplomatic transcript:

]uḡfinuṣprotd/εἰμανικιοδυναταιτιεπειν
]αcθeic rufinusprotd/διαφθοραβανων
]εcοντοcαπεcπactai zenond/ημων rufinusprotd/
]αχρηciμocημεινην

20. *PSI* XIII 1309, col. I lines 1-4 (5th or 6th century AD, LDAB 6095, MP³ 3016), ed. SCAPPATICCIO (2013b): 32; see photograph of this passage in NORSÄ (1946): plate XXVI (mislabelled as being a photograph of *PSI* 1310).

21. I am grateful to Willy Clarysse for this insight.

16b. Restored with modern typographic conventions:

R]ufinus prot(ector) d(ixit): εἰ Μ. Ἀνίκιος δύνатаί τι εἰπεῖν
 βι]αρθείς. Rufinus prot(ector) d(ixit): διαφθορᾷ βαράνων
 π]ερόντος ἀπέπαται. Zenon d(ixit) ἡμῶν. Rufinus prot(ector) d(ixit)
]α χρήμιος ἡμῖν ἦν.

So the use of word dividers was closely connected to language-learning activity, whether the divisions were provided by scribes writing for an audience of learners or by the learners themselves as they worked through a text in a foreign language. The result was the paradoxical situation that although Greek influence was responsible for the abandonment of Latin word division, it was particularly Greek speakers who tended to divide words in Latin.

PSI VII 743 has a special place in the modern understanding of Latin interpunction. This papyrus, illustrated below in example 17²², contains a Greek text (part of Alexander's dialogue with the Gymnosophists) transliterated into Latin script, with interpuncts between almost every word. It has traditionally been used as evidence that ancient scribes saw interpunction as something that went along with the Roman alphabet, rather than with the Latin language²³. At the same time the interpuncts have been used to date the papyrus to the late first century or, at the latest, the very beginning of the second century AD, on the grounds that Latin interpunction lasted only until that date²⁴.

17a. Diplomatic transcript:

poel·ina·osin
 ode·thanatos·tús·onta[s]
 poeliname·osin
 ton·henaton·eróta
 hoson·chron·anthrop[o]
 calon·estin·to·zen

17b. Restored with modern typographic conventions:

... ποιῇ ἵνα ὦσιν, ὁ δὲ θάνατος τοὺς ὄντας ποιῇ ἵνα μὴ ὦσιν. τὸν ἕνατον ἡρώτα
 ὅσον χρόνον ἀνθρώπῳ καλόν ἐστιν τὸ ζῆν.

‘... causes them to exist, but death causes those who exist not to exist. He asked the ninth how long it is good for a human being to live.’

22. *PSI* VII 743, col. II lines 1-6 (LDAB 4445, MP³ 2100), ed. CIRIELLO – STRAMAGLIA (1998); see photograph of this passage in plate XXVII of CIRIELLO – STRAMAGLIA (1998).

23. See OLIVER (1951): 242 n. 19 and WINGO (1972): 15.

24. CIRIELLO – STRAMAGLIA (1998): 219 n. 3

In fact this papyrus, though not strictly speaking bilingual, is not really monolingual either and is clearly connected with language learning of some sort. The Greek must have been written in the Latin alphabet by or for a Latin speaker who knew or was learning spoken Greek without bothering with its alphabet (or, less probably, by or for a Greek speaker who was practicing the Latin alphabet without, at that stage, learning the Latin language)²⁵. It is precisely in such contexts of imperfect knowledge of a second language that interpunction is found well beyond the chronological span of its regular use in monolingual Latin texts, as we have seen, and therefore the use of interpuncts should not be used to date this papyrus.

In fact, the script itself suggests a date in the second century AD rather than in the first; it is similar to *P.Lond.* 2723 + *P.Mich.* 429, which Seider dates to *c.* 200 AD²⁶. Indeed E.A. Lowe was confident that *PSI* 743 belonged in the second century²⁷. If the use of interpunction is properly understood as belonging to the language-learning context rather than to the Roman alphabet, this papyrus can be dated where it belongs, in the second century AD.

25. Cf. AMMIRATI (2010b): 41. Transliterated texts, especially glossaries, were commonly used by Greek speakers in Egypt to learn basic spoken Latin without learning the Latin alphabet; numerous examples can be found in KRAMER (1983, 2001). We have fewer examples of Greek texts in Latin script (KRAMER gives one example, [1983]: no. 14), but this imbalance is probably because Egypt was a primarily Greek-speaking area and many more people knew the Greek alphabet than were able to read the Latin one; presumably transliteration of Greek into the Roman alphabet was more common in the Latin-speaking provinces, from which we do not have papyri.

26. *PLP* II.1: n° 5.

27. *CLA* Supplement: n° 1693.