OBSERVATIONS ON THE OCCURRENCE OF THE PARALLEL FORMS 'A' = 'AB' AND 'E' = 'EX' IN LATIN LITERATURE

1. Purpose and Method

The doublet forms a = ab, e = ex before consonants, being identical in everything but their sound-form, seem to occur indiscriminately; it is, however, improbable that their use in every specific case was due to chance or to the ad hoc decision of the author. As a first step towards attempting to find at least some of the factors influencing the usage of these parallel forms, I have examined the frequency of occurrence in various pieces of literature of a, ab, abs, e and ex.

The examinations showed that the frequency of these prepositions is related to genre, stage of development of the language and individual style.

At this stage no attempt has been made to find reasons for the preference of one of the parallel forms; this can be done by interpretation of selected passages belonging to different genres, periods and authors, according to the results presented and discussed in this paper.

The literary works examined include prose-writings from Cato to Tacitus and poetry from Ennius to Juvenal.

All instances of a, ab, abs, e and ex were counted1), all

¹⁾ In examinations of this kind there is always a degree of uncertainty owing to the possibility that old copyists and/or modern editors may not have marked all variants and may have been guided by their own rules. I think, however, that such objections may be discarded out of the following reasoning:

a) Wherever the critical apparatus notes variants of a, ab and e, ex, I have assumed that copyists and editors were aware of these distinctions and that all of them have been recorded.

b) If one of the alternatives is missing altogether, e.g. e in *Cato*, this may be due – in theory – to lack of distinction between them by copyists or editors; but the statistical data gathered throughout this examination show that e is indeed rare in prose; the fact that it does not occur in the earliest prose work exstant, is consistent with these data.

occurrences of ab and ex before consonants, as well as abs and e, were recorded in full²).

The frequency of each of these forms was stated in percentages of the total occurrence of a + ab + abs and of e + ex, respectively³).

The resulting data were listed in tables.

The various pieces of literature were then classified according to the frequency of preconsonantal ab and ex and of e. a – which occurs before consonants only⁴) – and ab, ex before vowels, the most common forms, which have no alternatives, generally remained outside the scope of examination.

2. Differences between 'a' and 'ab', 'e' and 'ex'

a (e) and ab (ex) differ in sound structure and therefore in possibilities of use, especially in poetry: whereas ā, ē are long-vowelled, open syllables, ăb, ăbs and ĕx are short-vowelled and closed 5). abs and ex (= ecs) parallel each other in their form, as do their less frequent derivatives absque and exque. It is generally assumed that these doublet forms have the same etymologic

c) Finally, the overall results appear to be such that they can be interpreted in terms of various other factors and are found to be consistent with results obtained from other sources. The statistical data gathered are not random results, although no mathematical accuracy must be sought. This fact strengthens the view that inaccuracies which may have been caused by lack of distinction between the alternatives in Mss. do not essentially influence the data presented.

2) This was done in order to make interpretation possible at a later stage. The problem of a, ab, abs has been treated thoroughly by John C. Rolfe in A.L.L.X, pp. 465-505, where much material is given. Especially interesting are the instances quoted of initial consonants after ab. Rolfe classifies such words in certain groups: Proper names, sacral formulas, political concepts, sermo castrensis, juridical language, expressions of place and time. (l.c., pp. 467-470.). Any future interpretation will have to consider the results of Rolfe's important research; the scope of the present examination, however, is different; therefore only scarce reference will be made to Rolfe's article.

3) When the total number of a+ab+abs or e+ex, respectively, is under 20, these percentages may not be reliable. In *Table 8* such cases have been specially marked.

4) Interjections consisting of a long vowel, however, sometimes occur before vowels: 'o et praesidium' (Hor., Carm., 1, 1, 2), 'a artem praeclaram' (Varro, Men. 361). It seems that the prepositions a and e were never used before vowels, *because* the alternatives ab and ex existed.

5) This difference in sound may be a factor governing the preference of a, e over ab, ex, but this has to be examined by interpretation of selected passages.

origin⁶); the ancient grammarians, at least, regarded a and e as abbreviated forms of ab and ex, respectively, without regard to vowel quantities⁷). Their rules were simple, but insufficient, perhaps mirroring contemporary usage: 'a, ('e') before consonants, 'ab' ('ex') before vowels. This rule is still found in some text-books

6) The assumption that a and e (in composition) originate from absand ex-, respectively, is generally accepted. Cp. M. Leumann, Lateinische Laut- und Formenlehre⁵, 1963, para. 113, 144. Although at first glance it seems quite convincing that amitto originates from *apsmitto and ebibo from *exbibo like tela from texla, there are nevertheless certain misgivings in accepting this assumption: (a) a- in compounds appears only before -m and -v, all others have ab-, abs- (before -c, -t) and au- (before -f only); there are no compounds of ab- (a-, abs-) with -b, -g, -p, -q. The use of a and of its alternatives in consonantal composition is limited, whereas the use of a as a preposition before consonants is not. (b) e occurs in compounds before -b, -d, -p, -g, -j, -l, -m, -n, -r, -v; ec- before -f, -s, ex (= ecs) before vowels and before -c, -p, -q, -t. (c) We should therefore have to suppose one of the two developments: (1) either a (e) in composition precedes its use as a preposition, which seems rather strange, or (2) although a (e) was existing as preposition and as an alternative to ab (ex), all its compounds had ab (ex) in first instance, and a (e) in composition developed from it for no recognizable reasons.

I should like to suggest that it seems more probable that the doublet forms a = ab, e = ex existed as prepositions and came to be used in compounds as well. By the way, if āmitto and ēmitto, with long first vowels, originate from *abs- and *ees-mitto, it should be exspected that ŏmitto (from ?obs-mitto, see Leumann, l.c.) should be exactly parallel, but it is not: its vowel is short: e.g. 'praesens in tempus omittat.' (Hor., A.P. 45). Why this difference? There seems to be only one explanation: āmitto and ēmitto were composed of the long-vowelled prepositions ā, ē, whereas ŏmitto was

composed of ŏb-, which has no long-vowelled doublet form.

Without being able to explain the origin of a (e) as prepositions or daring to state whether or not a (e) was prior to ab (ex), we may suppose with a certain degree of probability that a (e) as prepositions preceded a (e) in compounds. If that is so, it is superfluous to assume that a (e) in composition originated from abs- (ecs-); being in use as prepositions, they came to be used in compounds as well. Furthermore, it seems that ex is secondary to ec which is found before -f in early literature (ecfatus, ecfero). ecs seems to have been used originally before vowels only, like in Greek. By means of analogy from ec- before -s (ec-sisto, ec-sequor), this ecs came to be used before -p, -q, -t, while ecfero etc. became effero, as adficio became afficio. Where neither ec nor ecs- fitted (e.g. before liquids and before voiced consonants where eg- would have been required), the doublet form e was used.

ab, on the other hand, could be used before voiced consonants (-d, -r and liquids) as well as before vowels. This seems to explain the rather extensive use of ab- in composition compared with a- which was limited to words beginning with a consonant too closely related to b: m, v.

7) E.g. Diomedes 414, 31 K, quoted by Rolfe, l.c., p. 466: "ex' et 'ab' praepositiones, si sequens verbum a vocali incipiat, integrae proferuntur, ut 'ex oppido', 'ab illo'; si consonantes sequantur, extremam litteram perdunt,

and school-grammars, but even a superficial glance at passages of Latin literature selected at random, shows that there exists a certain percentage of preconsonantal ex and a – much lower – percentage of preconsonantal ab.

3. 'a', 'ab', 'abs' in Prose and in Poetry

A few facts emerge from tables 1 and 27a):

(1) abs is quite rare; in prose its maximum percentage is 5 %, in Cato and in Cicero's earliest speech, Pro Roscio; its frequency then decreases, but not exactly on chronological lines: the first Catilinarian has 10%, but this is inconclusive as the absolute number of occurrences is 3 only. Some of the other speeches examined have abs, some have not. There is 1.5% in the Letters to Atticus and none in the Brutus and in the Orator, while De oratore has 2%. But for Caesar's De bello Gallico, it does not occur any more in the prose-writings examined.

In poetry abs appears in *Ennius*, *Plautus* and *Terence*; its percentages are higher than in prose. Its frequency is increasing – contrary to chronology – from 12% in *Ennius* over 16% in *Plautus* to 18% in *Terence*. *Lucilius*, the last of the poets examined

who used it, has 3.5 % only.

(2) Preconsonantal ab in prose is most frequent in *Cato* (43%), followed by *Livy* (35%) and *Sallustius* (20%); at the lower end (2% and below) there are Cicero's *Letters to Atticus* and his rhetorical works: the *Brutus* and the *Orator* have no preconsonantal ab, *De oratore* has 2%, *Quintilian* has it only in a quotation of *Cicero*; Tacitus' *Dialogus*, however, has 6%.

ut 'e foro', 'a Marco'''. But *Priscian* (Gramm. III 47, 11) mentions: "consonante sequente ponitur 'ex' raro ...; 'ab' et 'ex' solent praeponi, si nulla asperitas vocis prohibeat'', which echoes *Cicero's* statement (Or. 47, 158): "Ex usu dicunt et e re publica, quod in altero vocalis excipiebat, in altero esset asperitas, nisi litteram sustulisses". For *Cicero* as well as for *Varro* and of course for the later grammarians e and ex were one word except for their number of letters. (Scaurus VII 29, 11 K) = Varro (fr. 6): "adverbiorum 'ex' et 'ab' posteriores litterae solent demi ... quando ergo 'ex', quando 'e' dici oporteat, ex consequentibus vocabulis animadvertitur." *Cicero* had hinted at some reason for the use of 'e' instead of 'ex' before a consonant, which seems to show that for him 'e' was not the rule; this is confirmed by our examination. See Table 3. But in *Cicero*'s writings 'ex re publica' is not infrequent: sometimes the use of ex can be explained: e.g.: "ex re publica expulissent" (EpFam. 6, 6, 2), sometimes no explanation can be found. Even Neue seems to think in the terms of the ancient grammarians; see e.g. Formenlehre², 1875, II 742: "Vor dem Halbvokal v verliert ab überall sein b ... Ebenso schwindet das b von ab vor m."

⁷a) See pp. 19 and 20.

² Rhein, Mus. f. Philol. N. F. CXIX, I

In poetry fluctuations can be observed which seem to be related to different factors: Preconsonantal ab is rather frequent (11%-15%) in early poetry and in *Horace's Odes* and *Epistles*; it does, however, not occur in *Horace's Satires*8) nor in *Persius*, *Juvenal* or *Martial*; this fact is clearly connected with the genre of the Satires and not with *Horace's* style.

On the other hand, it has its peak not, as may be exspected, in early poetry, but in *Lucretius* and in *Vergil's Georgics*, which

may hint at the affinity between these two poems 9).

Ovid does not seem to like it: he uses it only in the Metamorphoses and in the Fasti, and very rarely at that. Although Properce has some, there is none in Tibullus, which tallies with Ovid's avoidance of it.

(3) As to the frequency of a, Tacitus (Histories, Annals, Germania) as well as Cicero's most emotional speeches (The Catilinarians and the Philippics) are in the highest brackets, Cicero's Rhetorics as well as Quintilian come next (except the Brutus which has an extremely high percentage of a), with Tacitus' Dialogus following. Cato, Caesar and Livy have the low-

est percentages.

(4) Different factors governing the usage may thus be discerned; they can, however, not be separated from each other, but overlap: (a) The chronological line: The frequency of abs and of preconsonantal ab decreases from Cato to Quintilian, but within this development there are ups and downs caused by other factors. (b) The literary genre seems to be connected with the frequency of occurrence of these prepositions, as is shown by the fact that Horace avoids preconsonantal ab in his Satires only, and so do the other writers of Satire. (c) Individual style as factor governing the usage may be the cause for the extremely low percentage of a in Horace's Odes (7%) and its lack in his Iambi.

9) The fact that *Horace's Iambi* belong to the same group, may not be significant in view of the small absolute number of occurrences.

⁸⁾ Lucilius has 7.5%, but unfortunately we do not know, how far the remains of his Satires are representative for his language.

¹⁰⁾ Allowance should be made for inaccuracies in counting, as most of it was done manually, except in a few cases, where concordances could be used: Lucretius: A Concordance to Lucretius, L. Roberts, Berkeley, 1968; Horace: Lexicon Horatianum, D. Bo, Hildesheim/New York, 1965-66; Livy: A Concordance to Livy, D. W. Packard, Harvard U.P., 1968; Petronius: Lexicon Petronianum, Segebade-Lommatzsch, 1898 (1962); Seneca, Consolatio ad Marciam: P. Grimal, 1965.

Table 1: 'a', 'ab', 'abs' in Prose - Percentages10).

Prps.	Ca.	Caes.	Ro.	Mu.	Pomp.	Cicero Clu.	Cat.	Mi.	Marc.	Lig.	Dei.	Phil.
a ab (T) (V) (C) abs Total (a	26% 69% (26%) (43%) 5% + ab + ab	32.4% 67.4% (64.9%) (2.5%) 0.2%	52% 43% (40%) (3%) 5%	60% 37% (31%) (6%) 3%	46% 54% (46%) (8%)	46.5% 51.5% (41.5%) (10%) 2% 100%	77 % 19 % (15 %) (4 %) 4 %	59 % 41 % (41 %) 0	75% 25% (25%) 0	90% 10% (10%) 0	65% 35% (27%) 0	75% 25% (24%) 0
Prps.	Cael.	EpAtt.	Cicero De or.	Bru.	Or.	Nep.	Sall.	Li.*)	Sen. (Ma.)*)	Sen. (A	p.) Pe.*)	Qu.
a ab (T) (V) (C) abs Total (a	63% 34.5% (32%) (2.5%) 2.5% + ab + ab	71.5% 27% (26%) (1%) 1.5%	61% 37% (35%) (2%) 2%	78% 22% (22%) 0	52% 48% (48%) 0	57% 43% (36%) (7%) 0	51% 49% (29%) (20%)	35% 65% (30%) (35%)	75% 25% (25%) 0	54% 46% (38%) (8%)	63% 37% (37%) 0	63 % 37 % (36 %) (1 %)")
Prps.	Dial.	Ger.	Tacitus Agric.	Hist.	Ann.							
a ab (T) (V) (C) abs Total (a	47% 53% (47%) (6%) o + ab + ab	70% 30% (30%) 0	64% 36% (32%) (4%)	83% 17% (15.5%) (1.5%) 0	71% 29% (22%) (7%)							

Legend: Ca. = Cato, De agricultura; Caes. = Caesar, De bello Gallico, I-VIII; Ro. = Pro Sext. Roscio, Mu. = Pro Murena, Clu. = Pro Cluentio, Pomp. = De imp. Cn. Pompei, Cat. = In Catilinam I-IV, Cael. = Pro Caelio, Mi. = Pro Milone, Marc. = Pro Marcello, Lig. = Pro Ligario, Dei. = Pro rege Deiotaro, Phil. = Orationes Philippicae I-XIV, De or. = De oratore I-III, Bru. = Brutus, Or. = Orator, EpAtt. = Epistulae ad Atticum IX-XVI; Sall. = Sallustius: Catilina, Iugurtha, Hist.; Li. = Livy*); Sen. (Ma.) = Seneca, Consolatio ad Marciam*), Sen. (Ap.) = Seneca, Apocolocyntosis; Pe. = Petronius*); Qu. = Quintilianus, Institutio oratoria, I-XII.

(T) = Total; (V) = before vowels; (C) = before consonants; *) = Concordance used. ") Qu. quotes Cicero.

Table 2: 'a', 'ab', 'abs' in Poetry - Percentages.

Prps.	Enn.	Pl.	Ter.	Luc.	Lucr.*)	Cat.	Tib.	Prop.	Ecl.	Vergil Georg.	Aen.
a ab (T) (V) (C) abs Total (a	52% 36% (21%) (15%) 12% + ab + ab	48% 36% (23%) (13%) 16% os)	47 % 35 % (24 %) (11 %) 18 %	59% 37.5% (30%) (7.5%) 3.5%	46% 54% (24%) (30%)	74% 26% (20%) (6%) 0	60% 40% (40%) 0	33% 67% (59%) (8%)	28% 72% (64%) (8%)	35% 65% (41%) (24%)	32% 68% (59%) (9%)
Prps.	Iamb.	Horace Odes	Sat.	Epist.	Met.	Fast.	Am.	Ovid Ars am.	Her.	Trist.	ExP.
a ab (T) (V) (C) abs Total (a	0 100% (75%) (25%) 0 + ab + ab	7% 93% (79%) (14%) oss)	55% 45% (45%) 0	37.5% 62.5% (50%) (12.5%)	40 % 60 % (58 %). (2 %) 0	50% 50% (49%) (1%)	55% 45% (45%) 0	55% 45% (45%) 0	55% 45% (45%) 0	35% 65% (65%) 0	42% 58% (58%) 0
Prps.	Stat Theb.	ius Ach.	Pers.	Sen. (Tr.)	Juv.	Mart.					
a ab (T) (V) (C) abs Total (a	28% 72% (71.5%) (0.5%) o + ab + ab	30% 70% (70%) 0	75% 25% (25%) 0	53% 47% (47%) 0	80% 20% (20%) 0	65% 35% (35%) 0					

Legend: Enn. = Ennius (all fragments); Pl. = Plautus; Ter. = Terence; Luc. = Lucilius; Lucr. = Lucretius; Tib. = Tibullus; Prop. = Properce; Pers. = Persius; Sen. (Tr.) = Seneca's Tragedies (Including Octavia).

*) = Concordance used.

4. 'e' and 'ex' in Prose and in Poetry

Here are some remarks on the data listed in tables 3 and 4: (1) e is rather scarce in prose: In the writings examined it is generally below 10% with a few significant exceptions: Cicero's Philippics have 13%, the Brutus 14% – and the Orator has even 42% 12). Tacitus has the highest percentage found in prose, 56% in his Histories 13), 31% in the Annals, – but there is no e in the Dialogus, which in this respect is closer to Cicero's De oratore and to Quintilian than to Tacitus' other writings. No e is found in Cato, neither in De agricultura nor in the fragments.

The usage in poetry is altogether different: Percentages are mostly over 30%, with Ovid's Metamorphoses (60%) and Tibullus (64%) as maximum, but here as well exceptions are significant: Comedy has much lower percentages: Plautus 11%, Terence 13%; so have the Satires: Horace 15%, Juvenal 13%; Persius has 27% – Lucilius' 45% do not seem to be consistent with this trait of the language of the Satires, but no conclusion can be drawn because of the fragmentary tradition. Lucretius and Vergil's Georgics have about the same percentage. The Elegies have rather high values: Properce 45%, Ovid's Ars amatoria, Epistulae ex Ponto about 50% and Tibullus 64%.

(2) Thus it could be suggested that the frequency of e may serve as a means to assess the style: The higher the frequency of e, the more poetical is the language of a literary work, the less e occur in it, the more prosaic is its language.

Lest we forget that it is impossible to achieve exclusive and accurate results in this kind of research, here are some facts which defy explanation so far: (a) *Horace's Odes* have no e, while a rather high percentage would have been exspected. The lack of e in his *Iambi* does, however, agree with the principle stated above. (b) In spite of the low frequency of e in the Satires, *Persius* has 27%. (c) Startling also is the low frequency in

¹¹⁾ This speech is rather peculiar with regard to percentages of a, ab, ex and especially of e; relations may be blurred by the small absolute number of occurrences.

¹²⁾ The *Orator* is exceptional not only in its high percentage of e, it has also a rather low percentage of a (52%) and a very low percentage of preconsonantal ex (26%).

¹³⁾ If the high percentage of e is indeed characteristic for poetical style, this may underline the poetical tendencies felt sometimes in *Tacitus*' writings.

Table 3: 'e' and 'ex' in Prose - Percentages.

						Cicer	0					
Prps.	Ca.	Caes.	Ro.	Mu.	Pomp.	Clu.	Cat.	Marc.	Lig.	Dei.11)	Phil.	Mi.
e ex (T) (V) (C) Total (e	0 100% (36%) (64%) + ex)	4% 96% (38%) (58%)	6% 94% (54%) (40%)	9% 91% (40%) (51%)	7.5% 92.5% (32.5%) (60%)	4% 96% (34%) (62%) 100%	3% 97% (53%) (44%)	0 100% (50%) (50%)	0 100% (33%) (67%)	38% 62% (54%) (8%)	13% 87% (37%) (50%)	11% 89% (23%) (66%)
Prps.	Cael.	EpAtt.	Cicero De or.	Bru.	Or.	Nep.	Sall.	Li.	Sen. (Ma.)) Sen. (Ap.)	Pe.	Qu.
e ex (T) (V) (C) Total (e	7% 93% (42%) (51%) + ex)	10% 90% (43%) (47%)	3% 97% (43%) (54%)	14% 86% (38%) (48%)	42% 58% (32%) (26%) 100%	7% 93% (43%) (50%)	3.3% 96.7% (30%) (66.7%)	7% 93% (38%) (55%)	9% 91% (60%) (31%)	20 % 80 % (33 %) (47 %)	7% 93% (39%) (54%)	5 % 95 % (39 %) (56 %)
Prps.	Dial.	Ger.	Tacitus Agric.	Hist.	Ann.							
e ex (T) (V) (C) Total (e	0 100% (47%) (53%) + ex)	16% 84% (32%) (52%)	20 % 80 % (25 %) (55 %)	56% 44% (17%) (27%) 100%	31 % 69 % (21 %) (48 %)							

Table 4: 'e' and 'ex' in Poetry - Percentages.

Prps.	Enn.	Pl.	Ter.	Luc.	Lucr.	Cat.	Tib.	Prop.	Ecl.	Vergil Georg.	Aen.
e ex (T) (V) (C) Total (e	15% 85% (60%) (25%) + ex)	11% 89% (37%) (52%)	13% 87% (49%) (38%)	45% 55% (25%) (30%)	31% 69% (58%) (11%) 100%	40 % 60 % (35 %) (25 %)	64% 36% (30%) (6%)	45 % 55 % (55 %)	20 % 80 % (40 %) (40 %)	35% 65% (61%) (4%)	22.5% 77.5% (66%) (11.5%)
Prps.	Iamb.	Horace Odes	Sat.	Epist.	Met.	Fast.	Am.	Ovid Ars am.	Her.	Trist.	ExP.
e ex (T) (V) (C)	0 100% (50%) (50%)	0 100% (60%) (40%)	15% 85% (30%) (55%)	25% 75% (25%) (50%)	60 % 40 % (34 %) (6%)	26% 74% (61%) (13%)	25% 75% (45%) (30%)	52% 48% (33%) (15%)	32% 68% (39%) (29%)	45 % 55 % (40 %) (15 %)	48% 52% (32%) (20%)
Prps.	Statius Theb.	Ach.	Pers.	Sen. (Tr.)	Juv.	Mart.					
e ex (T) (V) (C) Total (e	43 % 57 % (39 %) (18 %) + ex)	45 % 55 % (22 %) (33 %)	27 % 73 % (36.5 %) (36.5 %)	39 % 61 % (36%) (25%)	13% 87% (52%) (35%)	6% 94% (56%) (38%)					

Vergil's Eclogues (20%), whose style is certainly poetical, more so than that of the Georgics.

In general, however, this principle seems to be sound and to represent a trend of usage, although the occurrence of e is governed by other factors as well.

(4) The grouping according to preconsonantal ex is not – as could have been exspected – complementary to that according to e, but somewhat different: in prose its most remarkable characteristic seems to be its concentration on the level between 40% and 60%; there are only few writings on both extremes: The *Orator*, *Tacitus' Histories* and *Seneca's Consolatio ad Marciam* with minimum (26%–31%) and *Cato* and *Sallustius* with maximum values (64%–67%).

In poetry there is a much wider range of percentages, from nil in *Properce* to 52% in *Plautus* and 55% in *Horace's Satires*. The Elegies have a rather low percentage, whereas the Satires have generally high values: Lucilius 30%, Persius 36.5%, Juvenal 35% and Horace 55%.

5. Synopsis of Usage – Preconsonantal 'ab', 'e', 'ex' – Prose & Poetry 14)

Table 5: Preconsonantal 'ab' in Prose and in Poetry.

Range of %	PROSE	POETRY
(1) NIL:	Cicero (Cat. I, IV, Mi., Marc., Lig., Brut., Or.); Sen. (Ma.); Petron.; Tac.	Tibullus; Hor. (Sat.); Pers.; Juven.; Mart.; Ovid (Am., Ars am., Her., Trist., ExP.);
(2) I %-4%:	(Ger.). Cicero (De or.); Quint.; Cic. (Ro., Cat., Cael., Phil., EpAtt.); Caes.; Tac. (Hist.,	Sen. (Tr.); Stat. (Ach.). Ovid (Fast., Met.); Statius (Theb.).
(3) 5%-10%:	Agr.) Cicero (Mu., Pomp., Clu., Deiot.); Nepos; Tacitus (Dial., Ann.)	Lucilius; Catullus; Properce; Verg. (Ecl., Aen.).
(4) 11%-15%:	(Dian., Timin)	Ennius; Plaut.; Terence; Horace (Odes, Epistl.).
(5) 20%-35%:	Sallustius; Livy.	Lucretius; Verg. (Georg.); Horace (Iambi).
(6) 43%:	Cato.	

¹⁴⁾ In Tables 5-7 the order of writings within each range is set not necessarily according to percentages, but rather with a view to internal relations.

Table 6: 'e' in Prose and in Poetry.

Range of %	PROSE	POETRY
(1) NIL:	Cato; Cicero (Cat. I, III, IV,	Horace (Iambi, Odes).
(2) 3%-16%:	Marc., Lig.); Tac. (Dial.). Sall.; Cicero (De or., Clu.); Caes.; Quintil.; Cicero (Ro., Cael.); Nepos; Livy; Petron.; Cicero (Pomp., Mu., Cat. II, EpAtt., Mi., Phil., Brut.); Sen. (Ma.); Tacitus (Ger.).	Martial; Juven.; Hor. (Sat.); Ennius; Plautus; Terence.
(3) 20%-27%:		Verg. (Ecl., Aen.); Hor. (Ep.); Ovid (Fasti, Am.); Persius.
(4) 31%-56%:	Tacitus (Agr., Ann.); Cicero (Orator, Deiot.); Tac. (Hist.)	Lucretius; Verg. (Georg.); Lucilius; Catullus; Pro- perce; Ovid (Her., Trist., ExP., Ars am.); Sen. (Tr.); Statius (Theb., Achill.).
(5) 60%-64%:		Ovid (Met.); Tibullus.

Table 7: Preconsonantal 'ex' in Prose and in Poetry.

Range of %	PROSE	POETRY
(1) 85%-60%:	Cato; Sall.; Cit. (Cat. IV, Clu., Mi., Lig., Pomp.,	
(2) 58%-40%:	Cat. III). Cic. (De or., Mu., Cael., Marc., Cat. I, EpAtt., Phil., Brut.); Caes.; Nepos; Livy; Petr.; Quint.; Tac. (Dial.,	Plautus; Verg. (Ecl.); Horace (Iambi, Odes, Sat., Epistl.)
(3) 38%-20%:	Ger., Agr., Ann.). Sen. (Ma.); Tacitus (Hist.); Cicero (Or.).	Ennius; Lucil.; Pers.; Juv.; Martial; Terence; Catullus; Ovid (Am., Heroides, ExP.); Sen. (Trag.); Stat. (Ach.).
(4) 18%-4%:	Cicero (Deiot.)	Lucretius; Verg. (Georg., Aen.); Tibullus; Ovid (Met., Fasti, Ars am., Tristia);
(5) NIL:		Statius (Theb.). Properce.

Table 8: 'a', 'e', 'abs', Preconsonantal 'ab' and 'ex' in Prose and in Poetry 15).

		Prose			
Author	ʻa'	ʻab'	'abs'	'e'	'ex'
Cato a)	26%	43%	5%	0	64%
Caesar	32%	2 $\frac{1}{2}\%$	0.2%	4%	58%
Cicero					
Speeches:					
Rosc. Mur. Clu. Pomp. Cat. I-IV Cael. Mi. Marc. Lig. Deiot. b)	52% 60% 46½% 46% 77% 63% 59% 75% 90%	3% 6% 10% 8% 4% 2½%	5 % 3 % 2 % 0 4 % 2 ½ % 0 0	6% 9% 4% 7½% 3% 7% 11%	40% 51% 62% 60% 44% 51% 66% 50% b 67%
Phil. I–XIV	75%	1%	0	13%	50%
Rhet.:					
De or. Brutus Orator	61% 78% 52%	2% 0	2% 0 0	3% 14% 42%	54% 48% 26%
Letters:					
EpAtt. IX–XVI	$7^{1}\frac{1}{2}\%$	1 %	$1\frac{1}{2}\%$	10%	47%
Nepos	57%	7%	0	7%	50%
Sallustius	51%	20%	0	3%	67%
Livy	35%	35%	0	7%	55%
Sen. (Ma.) (Ap.)	75 % 54 %	8%	o o	9% 20%	31% 47%
Petr. a)	63%	0	0	7%	54%
Quint.	63%	0.9%	0	5%	46%
Tacitus:					
Dial. Ger. Agric. Hist. Ann.	47% 70% 64% 83% 71%	6% 0 4% 1½% 7%	0 0 0 0	0 16% 20% 56% 31%	53% 52% 55% 27% 48%

¹⁵⁾ Approximate chronological order; percentages of total of a $+\ ab+abs$ and e $+\ ex$ respectively.

Poetry							
ʻa'	ʻab'	'abs'	'e'	'ex'	Author		
52%	15%	12%	15%	25%	Ennius a)		
48%	13%	16%	11%	52%	Plautus		
47%	11%	18%	13%	38%	Terence		
59%	$7\frac{1}{2}\%$	3 1/2 %	45%	30%	Luc. a)		
46%	30%	0	31%	11%	Lucr.		
74%	6%	0	40%	25%	Cat.		
					Vergil:		
28%	8%	0	20%	40%	Ecl.		
35%	24%	0	35%	4%	Georg.		
32%	9%	0	22 1/2 %	11 1/2 %	Aen.		
60% b)	0	0	64%	6%	Tib.		
33%	8%	0	45%	0	Properce		
					Horace:		
0	25%	0	0	50%	Iamb. b)		
7%	14%	0	0	40% b)	Odes		
55%	0	0	15%	55%	Sat. Ep. ^b)		
$37\frac{1}{2}\%$	$12\frac{1}{2}\%$	0	25%	50%			
					Ovid:		
40%	2%	0	60% 26%	6%	Metam.		
50%	1 % 0	0	26% 25%	13% 30%	Fasti Amores		
55%	0	0	52%	15%	Ars am.		
55% 55%	0	0	32%	29%	Her.		
35%	0	0	45%	15%	Trist.		
42%	0	0	48%	20%	ExP.		
					Statius:		
28%	1/2 %	0	43%	18%	Theb.		
30%	0	0	45%	33%	Ach.		
75%	0	0	27%	36 ½ %	Pers. b)		
53%	0	0	39%	25%	Sen. (T.)		
80%	0	0	13%	35%	Juven.		
65%	0	0	6%	38%	Martial		

<sup>a) fragmentary tradition.
b) the total absolute number of a + ab + abs or of e + ex is less than 20; the mark is put near the preposition it refers to; it is written next to the name, if both prepositions occur less than 20 times each.</sup>

Summary

(1) The frequencies of preconsonantal ab, ex and e are shown to be related to literary genre, phase of development of the language and individual style; these factors are not isolated, but intermingle.

(2) abs is comparatively rare; it mostly occurs in early literature, being more frequent in poetry than in prose, except in *Lucilius* who seems to have been the last poet to use it. In prose

it is not found after Cicero.

(3) Preconsonantal ab has its peak in Cato, with Livy second; Sallustius uses it frequently, but his contemporaries Caesar and Nepos only rarely; this proves that individual style governs its use to a certain degree. In poetry it is evident, too, that fluctuations in its use do not correspond with the development of the literary language: Lucretius and the Georgics have the highest percentage, whereas Ennius, Plautus, Terence have much less.

(4) a is seen to have been less frequent in early literature; its frequency is sometimes inversely related to that of precosonantal ab; the lowest values in prose are in *Cato* and *Caesar*, with *Livy* next; *Cicero's Catilinarians*, the *Philippics* and *Tacitus* have the

highest percentages.

In poetry, the lowest values are nil in *Horace's Iambi*, 7% in his *Odes*, while a is most frequent in *Catullus*, *Persius* and *Iuvenal*.

The Satires have usually a high percentage of a except *Horace* whose other poems show that he rather dislikes it.

(5) e is comparatively rare in prose – it does not occur in Cato – but is very frequent in Tacitus, especially in the Histories, while there is no e in the Dialogus. In poetry it is rather frequent, with lower values in Comedy, and Satires (Juvenal), and highest

percentages in the Metamorphoses and in Tibullus.

(6) Preconsonantal ex is much more frequent than ab before consonants. It is present in all writings examined except in Properce. In prose its frequencies are almost evenly spread over the range of 40% to 60%, with Tacitus' Histories, Cicero's Orator and Seneca's Consolatio ad Marciam below, and Cato, Pro Milone and Pro Ligario as well as Sallustius above this range. In poetry the range of frequencies is broader and the percentages are generally lower than in prose. The Georgics, Tibullus and the Metamorphoses have the lowest, Plautus and Horace the highest values.

(7) Classification according to the frequency of preconsonantal ab, ex and e is shown to be parallel to grouping according to other criteria, such as literary genre, period, individual style.

The frequency of these prepositions, especially that of e, may thus serve as a means of literary research.

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