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## THE JOURNAL

OF

## PHILOLOGY.

## NOTES ON THE TEXT OF CICERO DE NATURA DEORUM, BOOK II.

§ 2 mallem audire Cottam dum, qua eloquentia falsos deos sustulit, eadem veros inducat.

This is the general reading of the MSS., except that A, with one or two inferior codices, has malem; but, as A has also nolent for nollent in § 7 the variation is unimportant. Heindorf followed by Müller reads malim. I retain the old text, and take the sentence to be equivalent to mallem audire eundem inducentem qui sustulerat, translating 'for my part I should have preferred to hear that same Cotta using the eloquence with which he abolished the false gods, to bring in the true.' For audire dum cf. Suet. Dom. 4 auditus est dum ab eo quaerit, and my note on $N$. D. I. 58 videor audisse cum. For the discrepancy of tenses we have such parallels as Fin. I. 25 si concederetur, etiam si ad corpus nihil referatur, ista per se esse jucunda, N. D. III. 10 primum fuit, cum caelum suspexissemus, statim nos intellegere esse aliquod numen quo haec regantur.
§ 5 non...opinio...cum saeclis...inveterare potuisset. So almost all the MSS. Edd. read with two inferior MSS. inveterari. I incline to inveterascere, which is found in one inferior

MS. and defended by Forchhammer as the only classical form in this sense. Thus we have inveterascit Lucr. 1v. 1068, inveterascent 3 Cat. 26, inveterascere Nepos Att. 2, Caesar B. G. v. 40, iI. 1. Forcellini refers to a present invetero all the exx. of the Perf. stem inveteravi, whether transitive or intransitive, but as the Pres. stem appears to be only found with a transitive force, this seems to me very hazardous. On the other hand inveterari appears not to occur before the time of Pliny.
§ 6 saepe visae formae deorum quemvis non aut hebetem aut impium deos praesentes esse confiteri coegerunt. Allen conjectures coegerint which seems to suit quemvis better.
§ 7 praedictiones vero...quid aliud declarant nisi hominibus ea ostendi, monstrari, portendi, praedici? ex quo illa ostenta, monstra, portenta, prodigia dicuntur. Mr Swainson proposes to read prodici, as it is read by Ba. after Lamb. in the parallel passage Div. I. 95 , to suit the following prodigia. I think however that the preceding praedictiones makes praedici the more probable reading here.
§ 7 si res repudiarent is the reading of the best MSS., but edd. all read the Sing. I should retain the Pl., understanding by it 'the facts in each case,' cf. I. 75.
§ 10 P. Scipione, C. Figulo consulibus res ipsa probavit. Bouhier adds in before $P$. Scipione. This might easily be lost after the preceding $m$, and I think it gives a better sense to have the actual case referred to (for it was the abdication of these consuls which evidenced the truth of augury), rather than the mere date.
§ 11 litteras...misit se...recordatum esse vitio sibi tabernaculum captum fuisse hortos Scipionis. So MSS. generally, but Baiter brackets hortos Scipionis in both editions; one late MS. has in horto, another in hortos, Lambinus reads in hortis, Schömann ad hortos. I think the words must be genuine, as they are confirmed by $R$. P. I. 14 and Granius Licinianus p. 11; and it is hardly likely that a scribe could have supplied this information. As to the construction we might have tabernaculum captum est horti Scip. as in Pis. 8, initium fuit ludi; but would not this imply that the irregularity consisted in choosing this spot? whereas it seems to have been simply the omission to
take the auspices in crossing the pomerium. Mr Roby suggests that it may be an ordinary apposition, 'he remembered that his augural tent-the gardens of Scipio-had been faultily taken.'
§ 12 magna augurum auctoritas; quid? haruspicum ars nonne divina? The natural place for this sentence would be after an argument to prove the authority of the augurs, and before an argument to prove the authority of the haruspices. It seems to me impossible that C. could have meant it to stand where it does. Perhaps the passage may have been rewritten, and this sentence a relic of the earlier form.
§ 15 aequabilitatem motus, conversionem caeli. So all the MSS. Ernesti followed by Sch. and Mu. reads aequab. motus conversionumque caeli, Davies followed by Ba. aequab. motus in conversione caeli. I do not see that we need alter the text. Cicero is probably translating some such phrase as $\dot{\delta} \mu a \lambda \dot{\tau} \tau \eta \tau a$ $\kappa \iota \nu \eta \dot{\sigma} \epsilon \omega \varsigma$, форà̀ ovं $\rho a \nu o \hat{v}$, in which the abstract idea of uniform circular motion was distinguished from its concrete embodiment, and regarded as in itself an evidence of mind. I think too the MS. reading has a better rhythm than either of those which have been proposed in its place.
§ 15 lunae siderumque-distinctionem, utilitatem, pulchritudinem. So almost all the MSS., but the Edd. read with Manutius and one or two inferior MSS. varietatem for utilitatem, which is no doubt more in harmony with the other qualities specified ; but is this sufficient reason for the change? Strictly speaking utilitus would be included under the commoda mentioned at the beginning of $\S 14$, but $C$. is not very careful about these divisions, and the use of starlight referred to here, is different from the change of seasons instanced there. See too $\S 87$, where usus and species are predicated of omnes mundi partes; so utilitas and venustas, Orat. III. 178.
§ 16 id quo illa conficiuntur. The edd. insert $a$ before quo after Sch. (Opusc. III. 328, and 370), but the idea of agency is ubscured by the indefinite $i d$, and I think the simple Abl. is allowable here, as in § 4 numen quo haec regancur, and § 30 mundum natura divina contineri.
§ 17. In the sentence an vero-videare, I follow Heindorf in omitting (?) after putes, and ergo after tantum, thus giving an
antithesis like that often expressed by $\mu \dot{\epsilon} \nu$ and $\delta e^{\prime}$, where the former clause is only preparatory to the latter.
$\S 18$ ex ipsa hominum sollertia esse aliquam mentem, et eam quidem acriorem et divinam, existimare debemus. It is plain that something is wanted here to give more definiteness to the mind which is distinguished from that of man. Sch. and Brieger read aliam quam for aliquam, and the latter compares § 115 where some MSS. have aliqua instead of alia quae. He also suggests as alternative readings, aliquam mundi mentem (cf. II. 58), or in mundo mentem (cf. III. 27). I prefer mundi mentem.
$\S 18$ quin et umorem-animum illum. I read with Brieger animam illam (as in Ac. II. 124, Tusc. 1. 19, Tim. c. 14), because it is the element which is here referred to. The animus proper is derived from ether and is the subject of the next sentence.
§ 22 idem scilicet censeres in platanis inesse musicam. Baiter's conjecture item for idem (as in Murena 21) seems required, as the stress is on identity of procedure, not of person; unless we take idem as Acc. N. and place a comma after censeres.
§ 24 cujus etiam in reliquiis inest calor iis, quas natura respuerit. I read insit with Heind., making this a part of the oratio obliqua (for exx. of the Subj. after connective relative see my note on I. 12) ; otherwise it seems impossible to explain the mood of respuerit.
$\S 25$ terram fumare calentem. It seems to me unlikely that C. could have written this without noticing the hexameter rhythm, and therefore I am disposed to print it as a quotation. We have a similar instance of an unimportant verse introduced without warning in § 151 venas penitus abditas, see Ribbeck Frag. Trag. Inc. 85.
$\S 29$ natura est igitur quae contineat mundum. None of the edd. question the MS. reading here, but it seems to me very unsuitable to the context. From $\S 23$ the argument has been as follows: 'animal and vegetable life is sustained by internal heat, which is the cause of all motion. This heat is also the source of life in the universe. Traces of it may be seen in the sparks of flints, hot springs, the very fluidity of water. Nay even air, the coldest element, contains heat.' Then in § 29
it proceeds＇this living principle must be the ruling principle of the world，it must possess all the properties of its parts，it must be rational and sensitive，it must in fine be a soul．＇But the prominent position of natura would imply rather that it followed an argument，such as we have beluw（§ 82）and in Sext．Emp．Ix． 81，to prove that the unifying principle of the world is a фv́⿱宀八九 and not a mere $\tilde{\epsilon} \xi \iota \varsigma$ ．Unless something has been lost here，I think the true reading must be Est igitur ignea quaedam natura or something of the kind．Again the prominence given to natura makes more awkward the recurrence of the word in another sense just below．
§ 32 hominem－quoniam rationis esset particeps，pluris esse quam mundum omnem oporteret．I think esset，the reading of the majority of good MSS．，is better than est read by all the edd． It is subordinated to the Inf．in order to show that it gives the reason fur the following pluris esse，not for the preceding pars est，and the tense is attracted to that of the principal verb，as I． 45 deorum natura coleretur，cum aeterna esset（for sit）．
§ 33 prima enim animadvertimus a natura sustineri ea quae gignuntur e terra．So almost all the MSS．The edd．read primum or primo，but I think we may understand prima as referring back to the primis incohatisque naturis of the previous sentence， and opposed to the quartus gradus afterwards．I should trans－ late＇the first and lowest class in which we observe the sustain－ ing power of nature is that which constitutes the vegetable kingdom．＇
§ 37 fin．homo ortus est ad－imitandum，nullo modo per－ fectus，sed est quaedam particula perfecti．So MSS．and edd． generally．Heind．with one MS．reads qui ortus est，Allen with three MSS．omits est after sed，I think rightly ；set might easily give rise to st．

After perfecti I transpose from the beginning of the section， neque enim est－partibus，which is not really a proof of what precedes，but a portion of a new argument；whereas the sentence beginning Scite enim Chrysippus is the commencement of a long piece of reasoning，ending in propterea deus，and might there－ fore properly follow § 36 ，as confirmatory of the conclusion there arrived at．
$\S 42$ in his sensum inesse. iis and his are continually confused in MSS., but I see no reason why the edd. should have changed his into iis here. The stars are the immediate subject of discussion.
$\S 44$ nec vero Aristoteles non laudandus. So MSS. generally, but most edd. add est after laudandus with A. I prefer to omit it.
in sublime ferri. This is the reading of Orelli's MSS. here and in $\S 141$, but the edd. have omitted in in both places. Again in § 117, where the edd. read sublime, the MSS. have sublimi or sublinis. As the lexx. give several exx. of in sublime, in sublimi, ex sublimi from other writers, I do not think we need alter the MS. readings in Cicero.
$\S 47$ cumque duae formae praestantes sint ex solidis globus \&c. Nonius reads praestantissimae, which I am inclined to prefer, as the superlative is more natural with ex, and the reading of AV (praestantis sint) is easily explained by the dropping of the repeated syllable si.
$\S 47$ fin. a medioque tantum absit extremum. So the better MSS. except B $^{1}$, which has tandum. Some inferior MSS. add (after extremum) quantum idem a summo, which Sch. keeps in his last ed. Both readings being evidently untenable, Madvig suggested tantundem for tantum and has been followed by Baiter in both editions and Müller. But it is plain that the definition is still incomplete : it must be stated that the circumference is at every point equally distant from the centre, as in Tim. 6 globosum cujus omnis extremitas paribus a medio radiis attingitur. Brieger inserts omne before extremum, Sch. in his 2nd ed., following Klotz, inserted ubique after medioque, and defends the Ciceronian use of ubique against Lachmann. I am inclined to prefer tantundem undique ' equidistant on all sides.'
$\S 50$ in lunae quoque cursu. There seems no reason to alter the reading of the MSS. by prefixing inde (Or. Ba. Mu.) or ita (Sch.) or nam (Heind.). There are three different facts, the approach of the moon's orbit to the north, the pause (properly called solstitium in the case of the sun), the length of time during which the sun or moon is above the horizon, which is also connoted by the term solstitium. These facts, though
really connected, may be viewed independently; and so it is in this passage.
§ 58 ut ceterae naturae...sic natura mundi. Sch. treats this as a case of comparison of opposites, comparing Madv. on Fin. 1. 3. It will then oppose the necessary growth of plants to the voluntary movements of the universe. But immediately afterwards we have the ordinary comparison, actiones sic adhibet ut nosmet ipsi ; and, not to mention that the supposed opposition is very obscurely intimated, we find elsewhere the analogy between the seeds of plants and the natural impulses which determine the course of sentient beings (as Seneca $N . Q$. III. 29), and also between a seed and the divine principle in the universe (Diog. L. viI. 136). I am disposed therefore to put a stop after mundi and add que after omnes.
$\S 61$ vides Honoris a Marcello renovatum, quod multis ante annis. So MSS., but as only 28 years intervened between the two dates, a space which certainly cannot be called long in reference to the duration of a temple, and as Marcellus and Maximus were too well known for C. to have forgotten that they were contemporaries, I think we must either insert haud or non, or read nonnullis with Dav.
$\S 62$ Liberum cum Cerere et Libera. So MSS. and most edd. I should omit Liberum with Sch., as a marginal gloss on eum quem.
§ 63 nam cum vetus haec opinio Graeciam opplevisset. So I should read with $\mathrm{Ba}^{2}{ }^{2}$ making the apodosis begin with physica ratio. The best MSS. have nam vetus opplevisset, omitting cum after nam. Sch. Ba. ${ }^{1}$ Mu. read nam vetus opplevit with inferior MSS., and begin a new sentence with Physica.
$\S 64$ caelestem enim altissimam aetheriamque naturam. So edd. with three of Orelli's MSS. (judging ex silentio); but two of his MSS. (AE) have caelestum ; and, as in $\S 56$, where all MSS. give caelestem, caelestium is the accepted reading, it seems to me we should read the same here.
§ 65 qui quod in me est exsecrabor hoc quod lucet quicquid est. I have followed Gulielmius in reading qui for the cui of MSS., of which no satisfactory explanation has been given. Heind. translates 'on whom with all my might I will invoke
the curse of heaven,' but such a use of exsecror is unknown. Sch. suggests that it might mean 'to consecrate one thing out of all others,' and so Kühner takes the words cui exsecrabor quod in me est, hoc est quod lucet, quicquid est, 'that to which I will devote all my powers is this shining vault.' Vahlen and Ribbeck read cur for cui, which seems to me no improvement. I translate 'wherefore with all my might I will curse this shining heaven.' Mr Roby suggests that the words may be spoken in reference to the banquet of Thyestes.
$\S 66$ soror et conjunx Jovis, quod et similitudo est aetheris et cum eo summa conjunctio. So MSS., but all the edd. read ei for et after a citation in Probus. I rather think the two et's are wanted; Juno is sister and therefore like, wife and therefore united. Perhaps aeri has been lost before aetheris as in I. 103 where it was restored by Mu. There seems to me a little awkwardness in ei and eo referring to different subjects.
sed Junonem a juvando credo nominatam. Ba. is inclined to omit as a gloss. Allen inserts item after Junonem, perhaps rightly. I take sed to mean 'by the way.'
cui Proserpinam. So MSS., the edd. insert nuptam dicunt after cui without authority. The MS. of Davies, to which they appeal, adds these words two lines below after nominatur. I believe the original reading was cui Proserpinam nuptam, which C. intended to govern by fingunt, but the parenthesis broke the construction. The similarity of termination may explain the loss of nuptam after Proserpinam.
$\S 67$ nam Vestae nomen. I think it is unnecessary to change nam into jam with Ba. Nam implies that what follows is expected. Here C. had mentioned the beginning and end as of prime importance. He has finished with Janus, who presides over the beginning, and now goes on to Vesta, who presides over the end.
§ 74 nec vero hoc in te uno convenit moribus domesticis limato. So all the MSS. The edd. agree in changing the Abl. into the Acc. Madv. would then insert after convenit the clause vel potius in te unum non convenit ; Sch. and Mu. change the order, placing unum after convenit and joining it in construction with limatum, 'this does not apply to you, polished beyond all
others from your family and race.' I am disposed to keep the order and take it as Wyttenbach does, 'this does not however apply to you individually, polished as you are \&c., but to your sect in general.' It seems evident that unum is intended to be contrasted with reliquos, not simply to strengthen limatum.
$\S 75$ eam esse generatam: so I read with the MSS. The edd. correct ea generata, considering that natura cannot be said to be generated from 'living principles.' For the confutation of this view I must refer to the note in my forthcoming volume.
§ 89 sicut inciti atque alacres rostris perfremunt delphini, item alia multa Silvani melo.
So MSS. Lachmann suggests simis inciti, Ribbeck ed. I. sic aut inciti, ed. II. sicut lascivi. I should prefer to read as prose 'sic,' ait. Thus perfremunt would refer simply to the dolphins; the behaviour of the Argo is compared to dolphins at play; but reading sicut we seem to want either ships or men as Nom. to perfremunt. The former is impossible, as there is only one Argo, and the latter are not the subject of observation. The construction also of $i d e m$ is simplified by reading ait. If item alia multà is retained, I should print as prose with Ba. not as verse with Mu: Ribbeck has item alta mulcta.
§ 94 quem ad modum asseverant. The edd. take this as a question 'how absurdly.' I know of no similar instance, and in any case I agree with Heind. that, after such expressions as 'hic ego non mirer,' 'hoc qui existimet,' the interrogation would be rather frigid. I think therefore he is right in regarding this sentence as an instance of attraction, in which the principal verb est profectus is drawn into the construction of the Relative Clause, as in Off. I. quoniam...ut placet Stoicis...omnia creari... naturam debemus sequi, where the regular construction requires creantur ; so R.P. I. ฮั8 si, ut Graeci dicunt, omnes Graios esse, Verr. IV. 40 ut opinor...nomen recepisse, Orat. III. 3 ut saepe vidi, esse judicatum, Leg. I. 5 s̆ ut Chius Aristo dixit, solum esse, and in Greek, Xen, Anab. vi. 2 § 18 ผ́s є่ $\gamma \omega$ ต" ${ }^{\prime \prime} \kappa о v \sigma a ́ ~ \tau \iota \nu o s ~ u ̈ \tau \iota ~$ $\mu \hat{\epsilon} \lambda \lambda \epsilon \iota \eta \eta^{\prime} \xi \epsilon \iota \nu$, where either $\omega$ 's or ö ó $\tau$ is superfluous.
$\S 95$ ex illis abditis sedibus evadere in haec loca...atque exire potuissent. So MSS. and edd. Allen conjectures ex illis abd.
sed. exire atque evadere in haec loca potuissent. Again below he would transfer luminum from between lunaeque and varietatem to after eorumque omnium. Both seem to me improvements.
§ 97 an cum...moveri aliquid videmus...non dubitamus... cum autem moveri...videamus...dubitamus? Madv. followed by Ba. changes videamus into videmus. I think C. may have preferred the Subj. in order to avoid the hexameter ending, and that there is no objection to it, if we understand it to mean 'although.'
§ 104 descripta distinctio. I see no reason for reading discripta here with Mu. I understand it to mean 'the grouping of which is so clearly defined.'
utar, inquit, carminibus Arateis quae a te conversa \&c. So edd. after Walker, but Sch. with MSS. Arati eis, 'the verses of Aratus, those I mean which you translated.' If Cic. bad used the Adjective, I think he would have said utar Arateis tuis, as in Div. II. 14 nostra quaedam Aratea, ef, Leg. II. 7.

Just before this I propose to insert two lines from § 110 atque ita dimetata-appareat, then going on with xlI Atque hoc loco. They come in naturally here, but are quite out of place as they are given in MSS. and edd.
§ 107 ejus cum totius est praeclara species, in primis aspicienda est figura. So MSS. I follow Sch. in changing the former est into sit. Mu. and others retain est and add tum before in primis.

Just below, the MSS. have obstipum caput a tereti cervice reflexum, to which I see no objection; but if a change is to be made, I prefer Sch.'s ac tereti to Madvig's at tereti (accepted by Ba . and Mu.). Obstipum is simply 'slanted,' not necessarily bent forwards : so I should translate 'the head was slanted, thrown back from the shapely neck.'
§ 108 ortus ubi atque obitus partim admiscentur in unam. So I propose to read. The MSS. have partim-una, corrected by edd. to partem-unam. For the old acc. see Lucr. VI. 88 and 384 , (L. and S. wrongly cite Orat. II. 94 where partim is adv.). Mu. reads admiscetur with 4 of Orelli's MSS. Sch. and Ba . have admiscentur with A .
§ 109 quem claro perhibent Ophiuchum nomine Graii. I pro-
pose to read lumine for nomine, as the original has фaєıvó $\mu \epsilon \nu o \nu$, and there is nothing famous in the name Ophiuchus. Below claro nomine is rightly used of Arcturus, and so we read of the Pleiades (Phaenom. 37) hae tenues parvo labentes lumine lucent: at magnum nomen signi clarumque vocatur. On the contrary, of other stars we read (ib. 182) obscurae sine nomine cedunt. Probably the corruption arose from a misunderstanding of the abbreviated construction claro lumine perhibent, which may be compared with Fin. III. 63 qui in concha patula pinna dicitur $=q u i$ habitat et dicitur.
$\S 110$ dein quae sequuntur. As there are only four words of the original Greek omitted, Heind. naturally thinks this clause unnecessary. I should like to place it four lines lower, where there is a considerable gap in the quotations, instead of the sentence transferred to § 104. It would then be necessary either to change the enim of the following clause into autem, or to omit it. Just below there is a tum quae sequuntur which is unmeaning here, but which would be appropriate in § 114 before Inde Nepae, where some forty lines of Aratus are omitted.
$\S 114$ truculentus caedit ad Aram. There is about equal authority for caedit or cedit (read by edd.), but I think probability is in favour of the former, because (1) we should have the repetition of cedit-tendit-cedit in two lines, (2) the idea of sacrifice is naturally suggested by the altar, (3) the word truculentus, to which there is nothing corresponding in the original, seems to have been added by C. to suit caedit.
$\S 117$ fertur ille quidem levitate sublimis. So Sch. and Allen with Cod. B, but most MSS. have sublimi (the $s$ being lost before sed). Ba. and Mu. read sublime, which seems to me not to read so well at the end of a clause.
$\S 118$ terrae, maris, aquarum vaporibus aluntur. So MSS. and edd., but Forchhammer after Probus reads aquarumque reliquarum. Probably right.
quod astrorum ignis et aetheris flamma consumat. So MSS., but edd. after Lamb. read consumit. This would make it a direct statement of C.'s, 'that part which it actually does.' I see no objection to the Subj. meaning 'whatever part, if any, it consumes.'
§ 123 aliae autem ut ex inopinato observant et, si quid incidit, arripiunt. So Orelli's ABCE; edd. omit ut with PV. I think ex inopinato is unsuited to observant, and propose to read aliae autem observant, ut ex inopinato, si quid inciderit, arripiant. The sentence will still remain liable to the objection, that there is no clear distinction between the two kinds of spiders (on which see Arist. H. A. Ix. 39), and that inciderit ought to refer, not to the web, but to the hole in which the second species hides. Possibly ex fovea has been lost before observant.
§ 124 admonita squilla pina morsu al. morsus. So MSS.; Ba . reads admonita a squilla morsu, Mu. adm. squillae , morsu pina, Sch. adm. squillae morsu. I prefer the last. When squillae had passed by a very common corruption into squilla, pina was suggested in its place, and afterwards found its way into the text.
$\S 125$ deinde sensim ab utroque latere. So MSS. and edd., but sensim seems to me unmeaning, as it stands. We have not got the original to compare it with, but Pliny describing the same thing says sensim dilatante se cuneo, and I think some such words may have been lost here.
in ejus locum succedit ex iis. I should like exx. of this construction. Sch. would insert una after locum.
$\S 126 \mathrm{cum}$ essent confixae venenatis sagittis. So MSS., but Allen suggests venantis, because nothing is said elsewhere of the arrows being poisoned. The corruption would easily arise from venenata carne above.
§ 128 (semen) rapit omnem fere cibum ad sese eoque saeptum fingit animal. These words, which Sch. translates 'with the food gives shape to the inclosed embryo,' present several difficulties; (1) the Abl. with fingo properly denotes the instrument; the material out of which anything is formed is expressed by $e x:(2)$ the semen is itself the animal in its earliest stage : (3) it is doubtful whether saeptum agrees with semen or animal; if the latter, it ought to have been followed by in utero. I am inclined to read ex eoque coeptum (or conceptum with Heind.) fingitur animal.
§ 130 accedit etiam ad non nullorum animantium. So MSS.

Edd. after Ernesti omit etiam because of its repetition afterwards. I see nothing un-Ciceronian in this.

Euphrates in quam quot annos. So MSS. and edd., but, as the only other instance of the Acc. occurs in Apuleius, and I see no special justification for it here, I propose to read annis with Allen.
§ 132 aestus maritimi multum accedentes et recedentes. So MSS. generally. Heind., Sch., \&c., read mutuo for multum with one MS., making no sense, as it appears to me. Lamb. conjectures maritimi tum acc. tum rec., Kayser motu lunae, Allen cum luna simul. I think multum may have arisen from dittographia of the last part of maritumi, and should either omit with Ba . and Mu . or else adopt Lamb.'s reading.
artes denique innumerabiles. The edd. all object to artes being ascribed to the bounty of nature, and suggest res or dotes or utilitates; but it seems to me that C. is merely saying here what he has said elsewhere, as in Leg. I. 26 artes repertae sunt docente natura, Div. I. 116 cum omni utilitate, quam di hominibus dederunt, ars aliqua conjuncta est, per quam illa utilitas percipi possit. The medicamenta just mentioned would remind him of the remedial arts mentioned in § 126, which the animals had received from nature and taught to us.
$\S 133$ sed quaeret quispiam. So I read with Cod. Glog. in preference to the hic quaerat of Walker's Cod. Reg. both because it approaches more nearly to the $\sin$ quaeret of the great majority of MSS., and because the Subjunctive is extremely rare in such cases, see Roby Gr. vol. 2, p. ci.
nihil probabilius deos mutarum-tantum laborasse. So MSS. generally, but I think Sch. right in reading mutorum (neut.) which includes bestiae mentioned in the previous line. The scribe would naturally change the gender.
§ 134 dentibus autem in ore constructis manditur atque ab iis extenuatur et molitur cibus. So the best MSS., but some have constrictis (1) others constitutis (2). I think, if we make this a separate sentence, (2) would be the best word: construo is generally 'to pile together,' while constrictis is too narrow for a general account of the teeth. On the other hand it is less probable that the common word constructis should have been
corrupted into the rare constrictis, than that the opposite should have occurred; and if we attach this sentence to the preceding, as showing the fitness of the mouth for the reception and preparation of food, there would be no objection to speak of this being done 'by the compression of the teeth' which are understood to be in the mouth. Then in the following clause the phrase $a b$ iis takes the place of the Abl. Abs. It is omitted by Or., Ba., Mu. and placed after manditur by Sch.; but why should it be objected to more than a lingua adjuvari below, or $\S 139$ nervos a quibus artus continentur?
eorum adversi acuti morsu. So MSS. and edd. I should like to omit acuti as a gloss on adversi, or else to read acuto.
§ 135 quae accepta sunt ore. Is utraque. In the MSS. this runs quae accepta sunt. Oris utraque. The correction is, I think, necessary, but possibly the is omitted here in MSS. was wrongly inserted below atque is agitatione. I should like to read with Kayser and Forchhammer terminatur, atque agitatione.
cum depulsum et quasi detrusum cibum accepit, depellit. I think it impossible that C. could have written thus. Allen suggests accepit, itidem depellit. I should rather read delapsum for depulsum and then perhaps denuo ipse depellit.
§ 136 pulmones autem et cor extrinsecus spiritum ducant. This is the reading of three of Orelli's MSS. and is adopted by the edd., but his two other MSS. have adducant. I believe the original to have had addant, which got corrupted to ducant as the commonest verb with spiritum: then adducant sprang from the combination of the two. My objection to ducant is that the clause then has no direct reference to alvus, the principal subject of the sentence; whereas the reason of the clause is to show how alvus gains the spiritus mentioned at the end of the sentence; also addant seems to me to go better with extrinsecus. The mention of cor is explained by the ancient belief, that it was the function of the left ventricle of the heart to supply the arteries with air.
$\S 139$ mirabiles commissuras habent et ab stabilitatem aptas et ad artus finiendos accommodatas. So MSS. I prefer Heind.'s fingendos.
nervi qui, sicut venae-a corde tractae-ducuntur. So MSS.
but edd. correct tracti. I do not see why the participle may not be attracted to the nearer substantive, as in Brut. § 262 omni ornatu orationis tamquam veste detracta.
§ 141 jam gustatus, qui sentire eorum quibus vescimur genera debet, habitat. So edd., but all the best MSS. have deberet. May not this be retained as referring to the original design of nature, 'since it was bound to'? compare § 123 habebat.
§ 142 palpebraeque-mollissimae tactu, ne laederent aciem, aptissime factae et ad claudendas pupulas. It seems necessary to add sunt after factae with Heind.
$\S 145$ colorum etiam et figurarum. I propose to read enim for etiam, as C. has just been speaking of 'painted and sculptured forms,' and this clause is to explain why the judgment of the eye is so important in works of art. The corruption would easily arise from the preceding etiam.
$\S 145$ fin. audacem timidumque cognoscunt. I follow Ba . in omitting cognoscunt, which has got inserted from above. The -que of timidum seems to me intended to close the sentence.
§ 146 nariumque item et gustandi et parte tangendi magna judicia sunt. So MSS. generally, but one of Orelli's omits parte tangendi, I think rightly. Ears, eyes, nose, taste, are the organs of connoisseurs and therefore naturally mentioned. But a reader might think it proper to add the 5th sense: if illiterate, he might write in the margin et parte tangendi 'and with the organ of touch,' or, as Sch. and Allen read after Dav., et pariter tangendi 'also of touch.' The only difficulty is in the following corporum lenocinia, which might be thought to refer to touch, as unguenta and conditiones to smell and taste; but I think C. is not there confining himself to this clause, but giving general exx. of the misuse of the senses through luxury, and that it is the judicium oculorum which is solicited by these lenocinia. Ba .'s reading arte tangendi, in the sense of 'pressing,' is certainly wrong.
§ 147 dum disputarem tuam mihi dari velim eloquentiam. So MSS., but Ernesti and Klotz read disputem, while later edd. read vellem. I think disputarem-vellem right, the former being attracted to the tense of the latter, ' I could have wished during my argument.'
ex quo videlicet quid efficiatur idque ratione concludimus. So MSS. generally, including three of Orelli's, but the other two (B E) have videmus for videlicet. Ba. omits idque ratione, Sch. reads et qua ratione. I think we want another word than concludimus to govern efficiatur. Vahlen suggests judicamus videlicet. Is it possible that C. here uses videlicet in the sense of videre licet, like Plautus and Lucretius? If not, I should be disposed to read videre licet.
§ 149 lingua est finita dentibus. There is something attractive in Sch.'s emendation munita, which he supports by several parallels; but looking at the words which follow (vocem immoderate profusam) I am inclined to keep to the 'MSS. The tongue is confined by the teeth and so is able to confine the sounds.
$\S 150$ ad nervorum eliciendos sonos, ad tibiarum. So most MSS., but Orelli's P , followed by edd., gives ac tibiarum. I prefer ad.
§ 151 jam vero operibus hominum, id est manibus (cibi varietas invenitur). Ba. following Lamb. reads operis. I am inclined to read opera, which is certainly the most natural word, and which I think was more likely to have been corrupted into operibus, by a reader who mistook it for the Pl . of opus.
§ 159 quibus cum terrae subigerentur fissione glebarum,... vis nulla afferebatur. So I should print with Ba., making quibus the Abl. after subigerentur; Sch. and Mu. place a comma after quibus, making it Dat. after afferebatur; but the important thing, it seems to me, is to state that the oxen were the instruments employed to break up the land, 'since the lands were ploughed by them, no violence was used towards them.'
$\S 163$ movere debebant. So four of Orelli's MSS., but Sch. and Mu. read debebunt with his 5 th (C). I prefer the Impf. 'had ought to have done.'

J. B. MAYOR.

## THE CLEOPHONS IN ARISTOTLE.

The account usually given us of the Cleophon ${ }^{1}$ mentioned in Aristotle's Poetics and Rhetoric takes two things for granted, (1) that he was the tragic poet on whom Suidas has an article, and (2) that he was the author of the 'Mandrobulus' (or Mandrobolus ${ }^{2}$ ) to which reference is made in the Sophistici Elenchi. On the subject of this 'Mandrobulus' there is a remarkable diversity of opinion ; it has been variously described as a poem, as a drama, as a tragedy, as a comedy, as an epicand as an oration. The idea that it was possibly an oration is the suggestion of Welcker, who in his Griechische Tragödien (p. 1011) endeavours to prove the paradox that the Cleophon of literature was one and the same person with the Cleophon of Athenian history, the famous demagogue.

[^0]The data outside Aristotle's writings show that there were at least two Cleophons, a politician and a tragic poet. The politician is a sufficiently well-known personage: he was a demagogue of the type of Cleon and Hyperbolus (Ruhnken's Opusc. I p. 318; Grote's Greece 8 p. 166), and as such he came under the lash of the Old Comedy, and was specially attacked by Plato in his comedy, the K $\lambda \epsilon o \phi \omega \hat{\nu}$ (Meineke F. C. G. 2 p. 634 ; Kock I p. 615). As regards the tragic poet on the other hand, the only direct proof of his existence is that contained in the brief notice in an article of Suidas:-K $\lambda \epsilon \circ \phi \hat{\omega} \nu$

 חє́ $\rho \sigma \iota s$ (v. Meineke F. C. G. I p. 497), T $\eta \lambda \epsilon \phi o s . ~ U n f o r t u n a t e l y ~$ even this information has to be used with some reserve, since we find Suidas attributing elsewhere an all but identical list of tragedies to Iophon, the son of Sophocles.

This being the sum and substance of the external data that have to be considered, I may now proceed to discuss the halfdozen passages in which the name Cleophon occurs in the pages of Aristotle. Two of these passages will give us no trouble at all, if we duly bear in mind the historical situation at Athens at the end of the Fifth Century b.c. :-





几акє $\delta a \iota \mu o ́ v \iota o \iota . ~ F r . ~ 370 ~ e d . ~ R o s e, ~ f r o m ~ t h e ~ ' A ~ Ө \eta \nu a i \omega \nu ~ \pi о \lambda \iota \tau \epsilon i ́ a . ~$




 $1375^{\text {b }} 30$.

The second of these passages refers to something said by the demagogue Cleophon in a speech against his political opponent

Critias, one of the Thirty (Clinton F. H. 2 p. xxxv ed. 3); there cannot be much doubt on the point, when one sees Aristotle in the very next sentence quoting in precisely the same way from a speech of Themistocles.

Turning now to the places in the Poetics and Rhetoric, which have been by writer after writer-by Welcker, Wagner, Nauck, Kayser, Bernhardy and I know not how many more besides-assumed to relate to a tragic poet Cleophon, I hope to be able to show that the assumption is not justified by Aristotle's language, whose words must be understood to apply (as Robortello long ago saw clearly enough, and since him Dacier and Ritter) to a writer of epic poetry and not to a writer of tragedy. The very first statement in regard to Cleophon in the Poetics is inconsistent with the current theory about him :-





The point insisted upon here is Cleophon's realism: his picture of men and manners being neither better nor worse than the prosaic realities of our ordinary experience, he stands midway between Homer on the one side and Hegemon and the parodists on the other. That Aristotle had in view an epic poem of some sort is proved (1) by the mention of $\psi i \lambda o \mu \epsilon \tau \rho i a$ as the head under which the work of Cleophon comes ; $\psi i \lambda o-$ $\mu \epsilon \tau \rho i a$ in fact is a term that excludes the possibility of its being a drama or a lyrical poem : (2) by the company in which Cleophon is placed in the text; Homer is an epic poet, and Hegemon (like Hipponax and Matro: see the fragments in Peltzer, De parodica Graecorum poesi) was as a parodist of Homer the writer of a base kind of epic. We have therefore two extremes, the heroic epic of Homer, and the mock-epic of Hegemon, with Cleophon as a middle-term, the epic poet of realism. Had Cleophon been regarded as a dramatist, Aristotle would have had to reserve him for consideration in a later section where the distinction between tragedy and comedy has to
be determined. The evidence of our next Aristotelian passage is of a more ambiguous kind :-



 $22,1458^{\text {a }} 18$.

Here Cleophon's style is condemned as mean and wanting in dignity; and he is compared in this respect with Sthenelus, a certain sorry tragic poet (Nauck T. G. F. p. 735 ; comp. Meineke F. C. G. 2 p. 640, Kock I p. 621). But the juxtaposition of the two names will hardly warrant the inference that Cleophon was like Sthenelus a tragic poet, as Aristotle throughout his chapters on poetic language takes his instances quite as often from epic poetry as from tragedy. I should be inclined to go further and say that, as two poets are cited as exemplifying the same defect, the presumption rather is that Aristotle does not regard them as coming under exactly the same category; so that, if the one is an instance of a bad style in tragedy, the other is probably mentioned as an instance of a bad style in a different but allied department of poetry. The presumption, that Cleophon's was a bad epic style, is borne out by the parallel in the Third Book of the Rhetoric :-







This statement reaffirms what has been already said in the two passages in the Poetics and supplements it by a very noteworthy addition-Cleophon is described as deviating now and then from his ordinary style of language in a way that produces a highly ridiculous effect. As a realist he takes his subjects
 style as a rule is on a level with his matter (тоîs viтокєє $\mu$ évos
$\pi \rho a ́ \gamma \mu a \sigma \iota \nu$ ávádojov), but there are moments when his mean diction has an element of ornament superadded in the shape of
 as ludicrously incongruous as if he said $\pi$ óтvıa $\sigma v \kappa \hat{\eta}$. I need hardly observe that $\pi \dot{\tau} \tau \nu \iota a$, though not unknown in tragedy, belongs essentially to the 'grand style' of the epic, and that to
 Кірк $\eta$, and the like: the combination то́т $\boldsymbol{\nu} a$ бик $\hat{\eta}$ accordingly would seem to have been invented by Aristotle with a double purpose, not merely to give us some idea of the absurdity of Cleophon's manner but also to suggest a comparison between it and Homer's manner. If this is the true state of the case, the criticism of Cleophon's language comes practically to this: 'His manner is generally, as befits his matter, mean and prosaic; and if he introduces a poetical word, as he now and then does, the result reads just like a parody of Homer.' The Cleophon of the Poetics then must have been a poet sufficiently like Homer for Aristotle to think it worth while to note with scientific precision the differences of form and matter which really distinguish him from Homer ; and, if so, the work Aristotle had in view must have been a degenerate specimen of the epic and not a tragedy. This is the general conclusion to which, as it appears to me, the three Aristotelian passages naturally point; and I suspect that a tragic Cleophon would never have been thought of, if it had not been for the supposed necessity of bringing Aristotle into harmony with the statement in Suidas. The Cleophon of Suidas, notwithstanding all that has been written about him, is still a mere name to us; there are simply no data for deciding the question whether he was identical with the Cleophon of Aristotle. If they were the same, we may say with Dacier that Cleophon must have written an epic as well as tragedies; and if they were different persons, as Robortello thinks, I imagine that there was room enough in Greek literature for them both.

So much then for two of Aristotle's Cleophons-the Cleophon of Athenian history, and the Cleophon of poetry. A veritable 'third wave' has now to be faced: Who was the Cleophon of the Sophistici Elenchi, and what had he to do with
the mysterious 'Mandrobulus' there mentioned in connexion with him? As the passage in the Sophistici Elenchi is somewhat obscure, and seems to have been misread by many very eminent scholars, I subjoin the translations given by Pacius and Mr Poste :-






 ßoúnc. Soph. Elench. 15, $174^{\text {b }} 19$.
'Praeterea, ut in rhetoricis, ita etiam in elenchicis similiter animadvertenda sunt ea quae repugnant vel iis quae ab ipso respondente dicta sunt, vel iis quos ipse fatetur recte loqui aut agere...Sicut autem qui respondent saepenumero, quando elencho redarguuntur, distinctionem adhibent, si futurum est ut elencho redarguantur: ita etiam interrogantibus utendum est hoc praesidio contra obiicientes, ut si illo modo contingit, hoc modo non contingit, illo modo se accepisse dicant, ut etiam Cleophon facit in Mandrobulo.' Pacius, p. 823 ed. Francof. 1597.
'Again, as in Rhetoric so in Dialectic, discrepancies should be developed between the thesis and the tenets either of the answerer or of those whom he acknowledges to be high authorities. ... And as the answerer avoids imminent confutation by drawing distinctions, so the questioner who foresees an objection that applies in one sense and not in another, should explain that he means the proposition in the unobjectionable sense, like Cleophon in the Mandrobulus.' Poste, p. 49.

The situation here implied is a sort of dialectical disputation, with what would be termed in the technical language of the schools, a thesis, a respondent, and an opponent. The line of the opponent is to propound questions which involve a difficulty, i.e. something which appears to be incompatible with the truth of the thesis; and as the respondent may perhaps meet a per-
plexing question by saying distinguo, the opponent, if he foresees the possibility of a distinguo, should anticipate his adversary's move by stating the precise sense in which he means the words of his question to be taken, 'as Cleophon does in the Mandrobulus.'

This then is the passage which Welcker and I know not how many more besides Welcker have cited as intimating that Cleophon was the author of a writing called the Mandrobulus! Aristotle's words on the contrary show clearly enough that he was not the author of it, but a personage in it. We have to imagine a work-no doubt a dialogue-in which there was a disputation, with Cleophon as one of the disputants, the opponent of some unnamed respondent. His procedure as a disputant is characterized as that of Thrasymachus in the Republic or that of Callicles in the Gorgias might be characterized ; the mode of reference to him being just what we should expect in a case when Aristotle wishes to refer to a personage in a dialogue : compare, for instance,
 Soph. Elench. 12, $173^{\mathrm{a}} 8$.
 $\sigma \tau о ф а ́ \nu \eta \nu . ~ P o l . ~ 2 . ~ 4, ~ 1262 b ~ 11 . ~$
 3. $14,1415^{\text {b }} 30$.

Aristotle's way of quoting from dialogues is known to us from his references to the dialogues of Plato (comp. Ueberweg, Untersuchungen, p. 140). His quotations from Plato are generally speaking of two kinds, (1) those in which a statement in Plato is assumed to represent the Platonic theory on a certain pointin which case $\Pi \lambda a \dot{\tau} \omega \nu \phi \eta \sigma i$ or something of the same type is the formula used; and (2) those in which the statement quoted is still viewed as part of the dramatic situation in the dialogue, so that it may or may not represent Plato's own opinion on the matter under discussion-in which case ó $\Sigma \omega \kappa \rho a \dot{\tau} \eta \mathrm{~s} \phi \eta \sigma \ell$ or ${ }_{o} \mathrm{~K} a \lambda \lambda \iota \kappa \lambda \hat{\eta} \varsigma \phi \eta \sigma \iota$ is the sort of formula used ${ }^{1}$. Any one who has

[^1]to deal with a work in a dramatic form, a dialcyue or a play for instance, finds it necessary from time to time to distinguish between the writer himself and the dramatis personae of his work: we are obliged for the moment to treat the personages as though they were independent of the writer, e.g. when we say: 'Polonius in Hamlet gives his son some excellent words of advice'-though we know perfectly well that the words are really not Polonius' words but Shakespere's. Now this is precisely what Aristotle does in the case of the Mandrobulus. He says in effect: 'In a disputation the opponent should meet a certain move on the part of the respondent in a certain way, as Cleophon does in the Mandrobulus', just as we might say : ' A fool may give excellent advice to another, as Polonius does in Hamlet'. Here it would be absurd to say 'as Shakespere does in Hamlet'; and it is no less absurd to suppose Cleophon in the analogous case to be quoted as being the author of the Mandrobulus. Had Aristotle meant Cleophon to be regarded as the author of the book, he would have expressed himself differently and given us something like this: 'As Cleophon makes So-and-so do in the Mandrobulus'-oiov тò ${ }^{*}$ * * K $\lambda \epsilon \boldsymbol{\text { * }} \boldsymbol{\omega} \nu$


We see then (1) that the Mandrobulus of the Sophistici Elenchi must have been a dialogue, and (2) that the Cleophon mentioned was not the author but merely one of the interlocutors. This result has been arrived at by analysis of the Aristotelian passage, without taking anything extraneous into account. We may now perhaps look elsewhere and ascertain whether there is anything outside Aristotle that throws any light on the present question.

During recent years it has more than once been asserted (e.g. by Dindorf in H. St. s. v., and Susemihl on Poet. 2) that the Mandrobulus was a dialogue, but in these cases the assertion appears to rest not on the language of Aristotle but on a piece of external evidence which became known for the first time in 1842, when Spengel published the anonymous Paraphrast on the Sophistici Elenchi (Incerti autoris paraphrasis Aristotelis Sophisticorum Elenchorum-Monachii 1842) from a Munich ms. As the Paraphrase seems to me more important
than is generally supposed, I give in extenso the portion of it that corresponds with the concluding words of the Aristotelian passage with which we are now dealing:-









The Paraphrast must be credited with two things: (1) he knows that the Mandrobulus was a dialogue-which no one before 1842 seems to have been able to discover for himself: (2) he knows the Cleophon mentioned to be one of the interlocutors; this I take to be sufficiently shown by the careful way in which he generally refers to personages in the dialogues of Plato:-

 $\pi \lambda a \tau \omega \nu \iota \kappa \hat{\varphi} \delta \iota a \lambda o ́ \gamma \omega$. p. 71 (Aristotle has merely $\hat{\epsilon} \nu \tau \hat{\varphi}$


 p. 134.

When one compares these passages, and more particularly the second of them, with what is here said about Cleophon and
 $\tau \hat{\omega} \pi \lambda a \tau \omega \nu \iota \kappa \hat{\varphi} \delta \iota a \lambda o \sigma^{\gamma} \varphi$-the meaning of the Paraphrast is plain enough: he regards the Mandrobulus as a 'Platonic dialogue' just as the Gorgias is; and he regards Cleophon as one of the personages in it just in the same way as Callicles is a personage in the Gorgias, Euthyphro in the Euthyphro, and Protagoras in the Protagoras. And moreover, as he describes both the Gorgias and the Mandrobulus in
exactly the same terms, I do not see how we can avoid the conclusion that he regards the Mandrobulus as actually a dialogue of Plato. The work itself may have been, as Susemihl thinks, merely a dialogue of the Platonic kind, but that is certainly not what the language of the Paraphrast seems intended to intimate: for the Paraphrast the Mandrobulus is like the Gorgias a dialogue of Plato. I lay this stress on the point for an obvious reason, because his language indicates that in the opinion of the Paraphrast the Cleophon mentioned was not the author of the dialogue.

What is one to think of a man who calmly tells us that the Mandrobulus was a dialogue by Plato? Is the statement the 'turpe mendum,' as Spengel so contemptuously terms it, of a blundering Byzantine, or is it to be seriously considered as having presumably some basis of truth underlying it? I incline to the second alternative, partly because a Byzantine Greek, who must have known his Plato fairly and who wrote for people who had access to Plato's writings in libraries, was hardly likely to invent such a statement; and partly because the mattor of the Paraphrase is at any rate here and there too good for a Byzantine grammarian ; in the passage now before us for instance the Paraphrast shows a truer sense of Aristotle's meaning than a whole series of eminent modern scholars. The statement in the Paraphrase therefore must be traditional and not the invention of the Paraphrast himself. This is no doubt the view of those who have recently termed the Mandrobulus a dialogue; they do so on the strength of the Paraphrast's statement, but his words are obviously of no authority unless we suppose them to represent a genuine and trustworthy tradition.

The real difficulty, I need not say, is to explain how the Mandrobulus could be described as a dialogue of Plato. Two explanations may be imagined :-
(1) The Mandrobulus may have been one of the early Platonic pseudepigrapha, the work of some disciple which was popularly attributed to Plato himself. The objection to this theory is the fact that the name does not occur in the list of

Platonic pseudepigrapha in Diogenes Laertius or elsewhere (see Diog. Laert. 3. 62 with Menage's notes, and compare Ueberweg, Untersuchungen, p. 198).
(2) We may perhaps assume the tradition to have got somewhat out of shape by the time it reached the Byzantine Paraphrast, and thus surmise that the original form of the tradition assigned the book not to Plato but to some one else whose name was very intimately associated with that of Plato; so that in fact the phenomenon is to be regarded as due to a confusion of names.

But however the Paraphrast's words are to be explained, we may leave him to his fate and return to the main thread of the enquiry. There is still an important piece of ancient evidence to be pointed out and considered, which will, if I am not mistaken, suffice to show that the author of the Mandrobulus was no other than-Plato's nephew Speusippus.

A work entitled 'Mandrobulus' certainly appears in the list of Speusippus' writings given in Diogenes Laertius (4. 4). This list is, like so many of the lists in Diogenes, a most unsatisfactory document-it is defective; it is confused through want of proper classification of the writings enumerated; and there are cases in which it is clear that one and the same work figures twice over in it. These elements of difficulty are confessedly not peculiar to the list of Speusippus' works, but I have thought it as well to mention them before proceeding to discuss details. The text in Diogenes is as follows :-

Kãa入é入ourt $\delta \grave{e ́}$ (scill. Speusippus) $\pi a ́ \mu \pi \lambda \epsilon \iota \sigma \tau a ~ \dot{v} \pi o \mu \nu \eta \dot{\eta} \mu a \tau a$



[^2]genes, however, is often as it were his own interpolator; he (or the authority whom he is copying) seems to have known of this 'Aplatıruros $\dot{\delta}$ Kvpquaîos not from the $\pi$ ivakes, but from some other source; and the addition is not wholly valueless, since it shows that the 'Aplotım






This list of writings is clearly 'contaminated' (see Wila-mowitz-Moellendorff Antigonos, p. 330) and compiled from two distinct mivakes. The Mandrobulus was part of the literature of the second $\pi i \nu a \xi$. We may recognize it as being a dialogue not merely by its name but also through its proximity to the Lysias, which can hardly be anything else than a dialogue, and
 first $\pi i v a \xi$. And besides these we cannot doubt that the
 were in like manner dialogues, so that Diogenes seems to be quite right in ascribing to Speusippus 'several dialogues.'

Assuming then that the Mandrobulus of Speusippus was a dialogue, we have still to enquire whether there is any reason to identify it with the Mandrobulus of the Sophistici Elenchi. Diogenes gives us no help here, but we are fortunately able to supply the missing link from Clemens Alexandrinus, who preserves a few words from a writing of Speusippus not mentioned in the list of Diogenes:-



 fr. 193, Mullach F. Ph. G. 3 p. 91).
 a writing addressed by Speusippus to a certain Cleophon, a friend and contemporary (for I need not consider the alternative hypothesis, that the book was one written against Cleophon);


with the same bibliographical precision as those taken from the first.
a writing similarly addressed to a certain Cephalus. Now Speusippus must have put his friend Cephalus into a book, for we find a dialogue entitled the Ké申aдos in the immediate vicinity of the work $\pi \rho$ òs Ké $\phi a \lambda o \nu$. This being the case, we have only to imagine that Speusippus put his friend Cleophon also into a book, and the puzzle of the Mandrobulus is solved, as far as names and titles can enable us to solve the puzzle. If we remember the way in which the name of Cleophon is introduced in the passage in the Sophistici Elenchi, the analogy between the Ké $\phi a \lambda o s$ and the Mavסpóßovдos seems to be pretty complete: they were each of them dialogues by Speusippus, and in each of them Speusippus brought in one of his friends as a party in the discussion of the dialogue.

To sum up this lengthy argument: I have sought to show in regard to the passage in Soph. Elench. 15 (1) that the Mandrobulus was a dialogue, (2) that the Cleophon mentioned was one of the personages in it, and (3) that the author was Speusippus. Beyond the fragment in the Sophistici Elenchi we have no data to enable us to form an idea of the Mandrobulus. The name was already familiar to Greek ears on account of the proverb $\dot{\epsilon} \pi i \tau \grave{\alpha}$ Mavסpoßoúخov $\chi \omega \rho \in \hat{\text {, }}$, said of one who is 'progressing backwards,' which seems to have been current at the end of the Fifth Cent. b.c. The story on which the proverb is said to be founded is thus told by the Scholiast on Lucian De mercede conductis 21 (p. 111 Jacobitz; comp. Kock C. A. F. I p. 615 , and Paroem. Gr. I p. 77 ed. Gott.) :-






I will not speculate as to how Speusippus' dialogue got its name, though I can easily imagine the story becoming the text for a very pretty logomachy, in which one of the parties might be represented as showing himself a wary disputant 'as Cleophon did in the Mandrobulus.'

Welcker's notion that the Cleophon of the Sophistici Elenchi is identical with the Athenian demagogue of the same name is, as we now must see, a chronological impossibility. It is conceivable that the Cleophon of the Mandrobulus was the same person as the tragic poet of Suidas, just as the latter may have been the same as the epic poet of the Poetics and Rhetoric ; but the identity would be in the absence of fresh data very difficult to prove, and it seems to me that we have not gained much by the unverified and unverifiable assertions in which writers on this obscure little chapter of Greek literary history have so freely indulged.
I. BYWATER.

## NOTE ON TACITUS, HIST. V. 5.

Corpora condere quam cremare, e more Aegyptio; eademque cura et de infernis persuasio.

These words of course form part of Tacitus' celebrated account of the Jews. Regarding them as Egyptian outcasts he seeks Egyptian origins for their customs. It is hardly possible that Tacitus was ignorant of the fact that the Egyptians embalmed, and did not merely bury their dead. It had for ages been well known to the Greeks and Romans. Not to mention Herodotus, Plato in the Phaedo 80, c, speaks of oi $\bar{\epsilon} \nu$
 the embalming of Joseph), and Cicero, Tusc. Disp. I. 45̌, 108, says Condiunt Aegyptii mortuos et eos seruant domi, Persae etiam cera circumlitos condunt. Surely then we ought to read condire for condere in Tacitus. Whether the Jews practised embalming is another question. Here we are only concerned with what Tacitus believed. That however they sometimes at least employed a semi-embalming process, by which the body, without being disembowelled, was wrapped in spices, is evident from the case of our Lord in the New Testament, and from that of Asa in the Old, of whom in 2 Chron. xvi. 14, we are told that "they buried him in his own sepulchres, which he had made for himself in the city of David, and laid him in the bed which was filled with sweet odours and divers kinds of spices prepared by the apothecaries' art."

WILLIAM RIDGEWAY.

## "EPPEIN IN HOMER AND IN AN OLYMPIAN INSCRIPTION.

From the peculiar usage of the word ${ }^{\prime} \rho \rho \epsilon \iota \nu$ in a bad sense in Attic Greek, lexicographers and commentators have sought to force this sense upon it, wherever it occurs. L and S, sub voce, say, "strictly of slow halting gait, whence Il. 18, 421, Hephaistos is called $\epsilon^{\epsilon} \rho \rho \omega \nu$ :-'to wander in misery,' Od. 4, 367, cf. h. Merc. 259, II. more freq. (esp. in Attic) to go or come to one's own loss or harm, Il. 8, 239; 9, 364, etc." Seiler in his Homeric lexicon explains it as mühsam wandeln, elend gehen, wanken, elend umhergehen, zum Unglück gehen, etc.

If we can divest ourselves of the erroneous impression derived from the Attic dialect, and examine the passages of the Homeric poems in which é $\rho \rho \epsilon \iota \nu$ is found, we shall find that the word was originally free from all evil colouring, and that wherever it seems used in such a sense it is closely attended by

 give it the sense of melancholy mournful wandering. To force the meaning ill luck on the words $\epsilon_{\epsilon} \nu \theta a \dot{\delta} \delta \epsilon \epsilon \notin \rho \rho \omega \nu$ (II. 8, 239; 9, 364 ) is purely gratuitous. Again in Il. 22, 498, and Od. 10, 75,
 cation. So also when old Priam in his paroxysm of grief (II. 24, 239) says to his sons ${ }_{\epsilon} \rho \rho \epsilon \tau \epsilon$, he is not cursing them, but bidding them go away and leave him alone, as we see from l. 247. Above all, the line, Od. 5,139 , proves its use in a good sense, when poor Kalypsô, constrained to let Odysseus depart, says є́ $\rho \rho \in ́ \tau \omega$, though most plainly wishing no harm to befall him, as we see from her words four lines later, $\pi \rho o ́ \phi \rho \omega \nu ~ v i \pi o \theta \eta ं \sigma o \mu a \iota$,
 a verb of motion = "to go," not "to be gone" in Homer is clear from the use of the present participle in the places already quoted. It is perhaps already beginning to move away from the simple meaning "go," when used of Hephaistos, where the Scholiast, possibly under Attic influence explains it by the
 have later got a peculiar meaning attached is quite analogous to other words of the same kind. For instance oí $\chi \in \sigma \theta a \iota$ in Homer is not used in its derived senses of "to be dead," "to be ruined." We find such phrases as o" $\chi \in \tau a \iota$ єis 'A $i \delta a 0$, $\varphi_{\varphi}^{\prime} \chi є \tau о$
 in II. 4,382 has alike its simple form and simple meaning, oi
 is no doubt about the origin of oi $\chi \nu \in \hat{\imath} \nu$, and its usage in Homer, Ellendt in his Sophoclean Lexicon says it "maestae oberrationis uim habet." Such too has been the history of interire, obire, and perire, the last of which is probably used in its literal sense in Plautus, Epid. I. 1, 77 (puppis pereunda est probe) and Lucret. I. 270, and in the English "gone." é $\rho \rho \in \iota \nu$ shows traces

G. Curtius, while separating it from ${ }^{\prime} \rho \chi \in \sigma \theta a \iota$ and its cognates does not suggest any derivation for it.

Alois Vanicek (W. 906) attaches it to a root vars, and connects it with $\dot{a} \pi \mathbf{o}^{\prime} \mathrm{F} \epsilon \rho \sigma \epsilon$, $\epsilon \rho v(\omega$, uerro, uello. But the idea in this group of words seems to be to take away, whereas the idea in ${ }^{\prime} \rho \rho \in \epsilon \nu$ is simply that of motion. Might it not be better to connect it with $\operatorname{var}$ (in $\epsilon i \lambda u{ }^{\prime} \omega$, uoluo, etc.) $=$ " to roll, to go with rolling motion"? For the secondary meaning we may compare such an expression as "uoluens annus."

Having thus tried to find out the primary meaning of ${ }^{\epsilon} \rho \rho \in \iota \nu$ and having found it meaning simply "to go," we should not be surprised to find it bearing its primal sense in some Greek dialect.

In 1877 there was found in the N.W. part of the temple of Zeus, at Olympia, an inscription on a bronze plate, which forms a very interesting pendant to the celebrated Elean Treaty Inscription, being in the same alphabet and dialect and seem-
ingly of nearly the same date. Ahrens and Kirchhoff have both treated of $i$ t. The text of Ahrens runs as follows:-


 $\Delta i ́ a, ~ a i ̉ ~ \mu \grave{~} \delta a ́ \mu о \iota ~ \delta о к є ́ o l . ~$

It has hitherto been taken as follows:-The agreement between the Chaladrians and Deukaliôn: that he, and his son (seed ?), is to be a Chaladrian with the rank of Proxenos and Demiurge, and that he is to have possession of the éstate at Pisa, and if any one invade his rights, such person shall be banished (and seek protection by going) to Zeus, only provided the people do not approve such invasion. The words à̀rò̀ épp $\rho \nu$ are explained as containing a threat against $\delta \sigma v \lambda \hat{\omega} \nu$ (and it has even been suggested that they might refer to a fine to be paid to Zeus of Olympia) and refer to the penalty of banishment
 there is an epithet of Zeus, $\Phi \dot{v} \xi\llcorner o s, ~ " p r o t e c t o r ~ o f ~ \phi u \gamma a ́ \delta e s " ~(c f . ~$

 from the land," and so to have recourse to Zeus only for protection, and not to human law. Again Kirchhoff finds such a want of sense in the negative expression of the condition in the last clause that he proposes to read ai $\mu \epsilon \delta a \mu o \iota=\mu \in \delta-\delta \dot{a} \mu o \iota=$ $\mu \epsilon \tau \grave{d}$ ठá $\mu o \iota$. But Ahrens objects to the unparalleled apocope of $\mu \epsilon \tau \dot{a}$ and the construction $\delta о \kappa \in \hat{\imath} \nu \mu \epsilon \tau \alpha ́$. The negative form of expression must therefore be defended by the Laconic brevity of the inscription, and is understood as meaning that the penalty threatened against the $\sigma v \lambda \omega \nu$ shall take effect, unless the $\delta \hat{\eta} \mu o s$ should approve of $\tau \grave{o} \sigma v \lambda \hat{a} \nu$. Old scholars who loved the "constructio praegnans" have in these clauses an abundant feast of their favourite dish. The amount of meaning which is stuffed into the hapless é $\rho \rho \epsilon \iota \nu$ is astounding as well as impossible. This is supported by the line from the Eumenides, where however the idea of banishment is not merely expressed by the
 $\pi \epsilon ́ \delta o v$. Far simpler is it to make av̇ò̀v refer as the previous
aúrò̀ does to Deukaliôn, and take ${ }^{\text {ép }} \rho \boldsymbol{\rho} \boldsymbol{\iota}$ motion = íćvau. Deukaliôn is holding land at Pisa within the sacred domain of Zeus. If he suffers wrong he is to go seek redress from Zeus; i.e. the temple court of Zeus, before which if a man was condemned, he became the slave of the offended god, and could only be ransomed by paying a heavy sum, and by which court a series of statutes was established, which obtained validity as the sacred law of Olympia (cf. E. Curtius, Gr. Hist. I. 234, Eng. trans.)-unless the $\delta \hat{a} \mu o s$ should resolve to act. The whole agreement now refers to Deukalionn and the Chaladrians, whilst by the old rendering one fourth of a very short document is given up to a separate provision respecting the "land-leaguer," who may outrage Deukaliôn; and further, there is no need to make the second aù $\boldsymbol{u} \grave{\nu}$ refer to a different person from the main subject of the document, or for Kirchhoff's emendation in the last clause, or to supply $\tau \grave{o} \sigma u \lambda a ̂ \nu$ to explain the negative. The contingency of the $\delta \hat{a} \mu o s$ approving of an act expressed by the word $\sigma v \lambda \hat{a} \nu$ is scarcely likely to have been provided for in such a document. Ahrens and Kirchhoff in their effort to force in the Attic use of ${ }^{\epsilon} \rho \rho \epsilon \iota \nu$, have spoiled the grammar and missed the sense. I may add that the word $\dot{\rho} \dot{\eta} \tau \rho \eta=$ agreement is found in Od. 14, 394, and that Pausanias

 kept in use words of the older language.

WILLIAM RIDGEWAY.

## THE AGE OF HOMER.

The readers of the Journal of Philology need not feel alarmed at the above title, as I do not intend to continue my discussion with Mr Monro, of which they must now be weary. All I propose doing is to supplement the linguistic evidence as to the late date to which I believe our existing Homer should be ascribed by evidence of another kind. As soon as we allow that Prof. Paley may be right in referring the Homeric Poems, as we have them, to the fifth century b.c., light is thrown upon allusions and ideas which upon the assumption of an older date remain unintelligible. I hope to show that the subject-matter of the Poems itself bears testimony to the general truth of Prof. Paley's theory. Language and what it embodies ought to tell the same tale, and I believe that they do.

What the evidence of language may be made to yield in the hands of a trained Comparative Philologist can be seen in the able and interesting article of Prof. Fick on "Die Entstehung des homerischen Dialektes" in a recent number of Bezzenberger's Beiträge (viI. 2). In the background of that " wonderful mishmash," as he rightly calls the Epic dialect; he believes sufficiently clear traces of the شolic original still exist to allow him to restore the opening lines of the Iliad as they were sung by Eolic minstrels before being passed on to the poets of Ionia. Homeric scholars will have to take careful account of this bold reconstruction, whether or not they agree with it in full. Much, it is true, of what Fick assumes to be Æolic will be held by others to be Old Ionic or pseudo-archaic, while the early period to which he would assign the disappearance of the digamma in Ionic is open to serious question. It is by no means certain, moreover, whether the Æolic of Homer can be considered to represent one dialect or several. The form miovpes, closely allied as it is to the Lesbian one, is nevertheless not Lesbian, and I have mentioned what may be called Kyprianisms else-
where (Jrl. of Hellenic Studies, I. 1, p. 258). But whatever criticism may be passed on Prof. Fick's attempt in detail, it will remain none the less stimulating and instructive.

As I have said, however, it is not with the language of Homer that I propose now to deal. I wish to draw attention to a certain class of facts which seem to me to show that the Iliad and Odyssey could not have assumed their present shape until the time when they were first committed to writing. We may judge how late this was when we remember that the Alexandrine grammarians had no texts before them in which either the aspirate or the digamma were expressed by separate symbols. Mr Paley appears to me to have made out a good case for his contention that there was no written Homer-at all events, as known to Plato and the Alexandrines-before the age of Periklês.

The theology of the two poems is the first point that claims our notice. The Odyssey seems to me to breathe the spirit of Aiskhylos, the Iliad the spirit of Aristophanês. No doubt there are individual passages in plenty in which we have the reflection of an earlier epoch;-this is necessitated by the fact that the poems of which our Iliad and Odyssey are the last development go back to the very beginnings of Greek political life;-but viewing the theology of the two poems as a whole, the theology of the one seems to me to be that of the age of Xenophanês, the theo$\operatorname{logy}$ of the other that of the age of the sophists. The Zeus of the Odyssey is the Zeus of a later philosophy, not of the time when the Ephesians defended themselves from Kroisos by stretching a rope from the city-wall to the temple of Artemis, or when the Athenians believed that Phyê was the goddess Athênê come in person to restore Peisistratos. The conception of the divine which pervades the Odyssey is wholly different from that of the 6 th century b.c. ; the gods of the Odyssey are invisible except when they reveal themselves exceptionally and of set purpose; they appear not to the mob of Athens but to their chosen heroes and favourites alone. Zeus is supreme over all, omnipotent (Od. IV. 237), and omniscient (xx. 75); and the Olympos wherein he dwells is correspondingly spiritual in its character. Such conceptions are inconceivable in the minds of strolling
minstrels or popular poets in the period before the Persian war ; more especially when we remember that they were dealing with subjects of popular mythology and reciting the old poems of the Epic cycle.

But if the theology of the Odyssey is inconsistent with the early date usually assigned to it, the theology of the Iliad is still more anachronistic. It is just possible to conceive of an early poet anticipating the discoveries of philosophy and presenting a view of the deity that was faithfully handed down, without being understood, by the rhapsodists who followed him; but I do not see how it is possible to conceive of an early poet who has not only lost faith in the gods of the multitude but ventures to treat them with the light ridicule of the sophistic age. To me the general tone of the Iliad sounds like that of Don Quixote: there runs through the greater part of it a mocking laugh which holds up to scorn all that had once claimed the deepest reverence of the Greek people. Time after time the heroes come before us like Hêraklês in the Birds of Aristophanês ; Agamemnôn, "king of men," himself is a mean-spirited poltroon, whom his subordinates treat with contempt, and Akhillês is a revengeful savage, who, though he insults his fallen enemy in a way repugnant to every true Greek of the Perikleian epoch, was yet unable to overcome him without the aid of a treacherous deity. But if the time-honoured heroes of Greek legend fare badly, the gods fare much worse. The depth of cynical unbelief betrayed in such gratuitous narratives as the "charming " of Zeus by Hêrê (Il. xiv. 153 sq.), or the abuse lavished by Zeus on the two contumacious goddesses Hêrê and Athênê (viII. 447-56), or the wounding of Aphroditê and Arês by Diomêdês (v. 330-43, 855-63), hardly finds its parallel in Aristophanês, and we must go to Lucian to meet with it again. The sarcasm implied in such lines as
is worthy of Lucian himself. The old faith must indeed have been worn out before verses like these could have been conceived
of, much less published to the world. Had these been the teachings of the old Homer of Greece Plato could not have failed to dwell upon them in his indictment of epic poetry (Rep. 606, 607). The charge brought against Homer and Hesiod by Xenophanês is very different:-





The charge is only too well borne out by both Hesiod and the older parts of the Iliad and Odyssey themselves, as well as by Greek mythology generally; but the immorality of which Xenophanês complains is the unconscious immorality of a child's fairy-tale, not conscious ridicule and sceptical sarcasm.

If the theology of the Homeric Poems thus betrays, as I believe, the marks of a later age, so also does their ethnology. We have only to compare the ethnology of Homer and of Hêrodotos together to be struck by the remarkable resemblance between them. Of course there is a good deal of the ethnology of Homer which goes back to a much older period, and belongs to the earlier Homer of which the Homer of Aristotle and the Alexandrines was a modernised edition; but if we look at the general outlines of Homeric and Herodotean ethnology and geography it is difficult not to feel that we are moving in the same age of Greek thought. This is more especially the case, as is natural, with the mythical geography and ethnology of Homer. In only two passages ${ }^{1}$, for instance, is the name Pelasgian used in its original sense to denote a particular tribe of Thessaly ; elsewhere (II. x. 429, Od. xix. 177) it has passed into the region of mythology and means that "divine" race of prehistoric Greece whom Hêrodotos and the historiographers that preceded him had invented. And along with the Pelasgians the ubiquitous Leleges and Kaukônes also figure in Homer just as they do in Hêrodotos. In dealing with the Leleges, how-

[^3]ever, Hêrodotos-Homeric student as he was-identifies them with the Karians ${ }^{1}$, apparently unconscious of the fact that Homer had distinguished between the two. It is tempting to conclude that the Leleges in the time of Hêrodotos had not yet been relegated so decidedly to the realm of mythology as was the case later when they were separated from the historical Karians. On the other hand, Hêrodotos agrees with Homer in making Minôs the Knôssian a Greek, contrary to the older and truer tradition which saw in him a representative of the Phœenicians, but in harmony with that new Panhellenic spirit that had been awakened by the struggle with Persia. It is only in Il. xiv. $320-22$ that the older legend is followed ${ }^{2}$.

What makes the modern character of these ethnological views the more remarkable is the studied archaism that otherwise distinguishes the Iliad and the Odyssey. Almost everywhere the hated name of Dorian is avoided-of those Dorians who had driven the first Æolic singers of the war of Troy out of their old homes and who under the leadership of Pausanias had again made themselves detested by the inhabitants of Ionia. Nowhere is Delphi mentioned ; Krissa, indeed, once occurs (II. II. 520), but it is in the Catalogue and the epithet $\zeta_{a} \theta^{\prime} \in \nu$ which is attached to it shows that it comes from one of those early Æolic poems which Fick has endeavoured to restore. Once only ${ }^{3}$ is there a temporary forgetfulness of the age to which the Homeric epic was supposed to go back, but it is sufficient to indicate the real cause of the silence preserved elsewhere in regard to the name of the Dorians. The Dorians, we find from this passage, have already won the Peloponnêsos and spread eastwards into the Ægean; already they are settled in Krêtê, the southernmost boundary of the Greek world, and are here divided into their three tribes ${ }^{4}$.

[^4]568 (where he rules in the Greek Hades), xvir, 523 and xix. 178 (where he seems to be made an Akhaian).
${ }^{3}$ Od. xix. 177.
${ }^{4}$ De Saussure is doubtless right in connecting т $\rho \iota-\chi$ áïкєs with 'A- $\chi a c o l$ and the Gothic gavi ("gau ") (Mémoire sur le système primitif des Voyelles, p. 69).

One more illustration of the modern origin of much of our present Homer, and I have done. It shall be taken from quite another kind of "undesigned coincidences" with a late date. Hêrodotos tells us (I. 68) that in the middle of the 6th century B.C. a Spartan, when paying a visit to Tegea, came across a smithy where a block of iron was being worked. He stood and
 $\mu \in \nu o \nu$ ), and he might well do so. For the first time in his life he saw a $\chi a \lambda \kappa \epsilon u ́ s$ who had become a $\sigma \iota \delta \eta \rho \in u ́ s$, and weapons being made of iron. Hitherto the Spartans and the enemies they encountered had been content with bronze, and the introduction of the art of forging iron into Tegea must have been recent, since it had been but a short time before that Tegeans and Spartans had been fighting against each other. The evidence thus given by Hêrodotos of the late date at which the working of iron was known in Greece is fully confirmed by the results of excavation as well as by the word $\chi a \lambda \kappa \in v$ s itself. How then can the advocates of an early Homer defend the frequent references to worked iron in the Iliad and Odyssey? How came the "divine Arêithoos" to be armed with a weapon (II. VII. 141) with which the Spartans were unacquainted before the time of Kroisos ${ }^{1}$ ?

Further examples of a Homeric scenery inconsistent with the assumption of an early date are needless. Every student of the Iliad and Odyssey will remember some at least. I am by no means the first to call attention to them. Apart from the instances brought forward by Prof. Paley, we find Mr Hodder Westropp maintaining that the art of Homer is the art of the Perikleian epoch and Dr Oberdick pointing out that the Iliad and Odyssey presuppose the full development of Greek poetry, and are based on the old tragedy of Attica ${ }^{2}$. Indeed, the per-

[^5]menaios or marriage-song (II. xvirl. 490), and the Thrênos or dirge (II. xxiv. 725, \&c., Od. xxiv. 61). The Thrênoi of Hekabê and Helen each consist of 4 strophes of 3 lines, while that of Andromakhe falls into seven tristich strophes (first recognised by Leutsch Philol. xı1. 23), and that of
fection of the Homeric hexameter, a perfection which implies a long period of previous elaboration, has always seemed to me incompatible with the theory of its early origin. These are facts which cannot be explained away by the convenient hypothesis of interpolation, which has been called upon to account for the reference to the division of the month in the Attic calendar in Od. xiv. 161, 162, or to the "nine muses" in Od. xxiv. 60, where the existence of astronomy, of comedy, of tragedy and of history are all presupposed. That the latter passage, however, is not an interpolation, so far as the Odyssey in its present form is concerned, seems to me made evident by the introduction to the poem where the single muse of epic poetry is invoked to inspire the author, as she had inspired those older bards who had gone before him ${ }^{1}$. The sense attached to $\mu \circ \hat{v} \sigma a$ has very far departed from the original signification of $\mu 0 \hat{v} \sigma a \iota$ "the prompters," the goddesses who brought the past to the memory of the strolling minstrel, and among whom Athênê was chief. It is a sense which belongs to that period of literary culture and refinement, when the meat was carved by a trained slave (Od. I. 141, \&c.), and set on its special tray (Il. IX. 215, Od. xiv. 432), when a particular knife had been invented for cutting cheese (II. XI. 640), and wheu the jeunesse dorée lounged in the $\lambda^{\prime} \sigma \chi \eta$ (Od. xviII. 329), and met together at club dinners (Od. I. 226, XI. 414). And yet there was a time, when according to Hesiod (Op.501) the $\lambda \in \in \sigma \chi \eta$ was but the resort of starving beggars. In fact, the touches of life and manners that appear from time to time in Homer go far to confirm the conclusion of Merzdorf that the Homeric dialect stands on the whole on the same stage of development as the New Ionic of Hêrodotos ${ }^{2}$.

A. H. SAYCE.

Brisêis(Il. xix. 287, \&c.) into 3 strophes of 4 lines each. After every thrênos a chorus of women is introduced. It is no wonder, therefore, that we have a description of a musical contest in Od. VIII. 100, \&c.
${ }^{1}$ Od. 1, 1-10. т $\omega \hat{\nu} \dot{\alpha} \mu \dot{o}^{\prime} \theta \epsilon \nu \quad \gamma \epsilon, \theta \epsilon \alpha$ Өи́yatєp $\Delta i o ́ s, ~ \epsilon i \pi \epsilon ̀ ~ к а і ~ \grave{\eta} \mu i ̂ \nu . ~ P r o f . ~$

Paley has already remarked the absence of the digamma in this line ( $\epsilon l \pi \epsilon$ for $F \epsilon \iota \pi \hat{\epsilon}$ ); $\theta \epsilon \dot{\alpha}$ is one of those later pseudo-archaic forms which never existed in the spoken Ionic dialect.
${ }^{2}$ Curtius' Studien zur griechischen und lateinischen Grammatik, Ix. 2, p. 214.

## THE DE arte poetich of horace.

In spite of the large amount of industry which has been spent in elucidating the de Arte Poetica of Horace, I am not sure that its actual relation to the history and literature of the Augustan age has been, in all respects, correctly appreciated. The following remarks are offered as an essay towards such an appreciation. Were the de Arte Poetica a mere cento of observations translated or adapted from a Greek original, there would not be any great interest in studying it. The case becomes, however, somewhat different if it can be shewn that Horace, although writing with a Greek treatise before him, was using it for practical application to the particular circumstances of his own time.

Recent study of the work has fully convinced me that this was the case, and I proceed to state the grounds on which I base this conclusion.

The first important point to determine is the date of the treatise. When this question is approximately settled, we may go on to analyse its composition and contents.

The evidence bearing on the question of date is scanty, but not hopelessly indefinite. It is to be looked for (1) in actual allusions to persons or events: (2) in the tone adopted by Horace in speaking of himself and others: (3) in the metre and general style of the piece.
(1) The persons mentioned are the Pisos, to whom the essay is dedicated, and of whom there will be more to say presently: Vergil and Varius, who are spoken of (v. 55) as well known: the orator Messala and the lawyer Cascellius Aulus (v. 372): the critics Maecius Tarpa (v. 387) and Quin-
tilius Varus (v. 438). Of these names only the two last give us much real assistance. Spurius Maecius Tarpa had achieved his position as a dramatic critic as far back as B.c. 54, when Cicero, writing to his friend Marius (Ad Fam. 7. 1, 1) says, of the plays represented in that year under the auspices of Pompeius, nobis ea perpetienda erant quae $S p$. Maecius probavisset. He is hardly likely, as Adolf Michaelis has recently pointed out, to have attained such a position before the age of thirty-five or forty. On the other hand, the language of Horace in this passage hardly allows us to suppose that at the time when the de Arte Poetica was written he was in extreme old age. Si quid tamen olim Scripseris, in Maeci descendat iudicis aures. Michaelis is quite right in arguing that Horace could hardly speak thus of a man who was not thought likely to have some years of life before him. Now supposing Tarpa to have been about thirty-five years of age in B.c. 54 , he would be in his sixtieth year by B.c. 30, and by B.c. 20 in his seventieth. So far as this allusion goes, then, it would seem hardly probable that the de Arte Poetica could have been written later than B.c. 20 or thereabouts, or, if we choose to make Tarpa five years younger, than B.c. 15.

In v. 438 Horace says Quintilio si quid recitares, 'Corrige, sodes, Hoc,' aiebat, 'et hoc.' This is Quintilius Varus of Cremona, the friend of Horace and Vergil, whose death Horace bewails in the twenty-fourth ode of the first book. According to Jerome's additions to the Eusebian Chronicle, Varus died in 24 b.c. If this date is correct, the de Arte Poetica could not have been written before that year. But Jerome's statement is all that we have to go upon, and he is, as is well known, not seldom inaccurate. Other considerations, however, point to the years between 24 and 20 b.c. as the date of the Ars Poetica. The commonly accepted theory is that it was the last of Horace's works, and written (say) between 12 and 7 b.c. But on all accounts this period seems too late. We have spoken above of Maecius Tarpa, who at this time would probably have passed his eightieth year. Again, it is somewhat strange that if the de Arte Poetica had been written in these years, there should be no mention of Augustus, with whom Horace in his later years
was on terms of intimacy. It was a long time before Horace could be induced to accept the offers of friendship which Augustus was constantly making him; and there is no sign that he had sent him any poems before 24 b.c. or thereabouts. Again, if we compare the way in which Vergil and Varius are spoken of in the de Arte Poetica with the passage about them in the second book of the Epistles $(1,247)$ we cannot fail to notice a difference. There can be no doubt that the passage in the second book of the Epistles must have been written after Vergil's death, for he is spoken of as a poet who had made his name, and justified the choice of Augustus when he selected him to celebrate his exploits. This of course can only refer to the Aeneid, and the Aeneid was not published until after Vergil's death. But in the de Arte Poetica there is no direct allusion to the Aeneid; Vergil and Varius are defended and justified, as if they had not yet outlived or silenced their detractors; Horace speaks of them in the same breath with himself, as though with him they were forming a new school. And if the de Arte Poetica was written before Vergil's death, it was anterior to 19 в.c.

One other point should be noticed here. In v. 18 Horace mentions the river Rhine as a favourite subject for poetical exercise. Now this would be exceedingly natural during the few years succeeding 33 B.c. or thereabouts. For the victory of Gaius Carrinas over the Suevi must be assigned to this period, as the Germans were represented in the triple triumph of Augustus in 29 B.c. And it is at the time of the composition of the tenth satire of the first book (? 34 B.c.) that turgidus Alpinus...defingit Rheni luteum caput. Comp. Vergil A. 8, 727 Rhenusque bicornis: Propertius 4, 3 (2) 45 barbarus aut Suevo perfusus sanguine Rhenus. But it is less likely that the Rhine would be a favourite subject during the later years of Horace's life. In b.c. 16 occurred the clades Lolliana, which would be likely enough to disgust the poets and Augustus himself with the river for some time to come.

And how does Horace, in the work before us, speak of himself? Not certainly as an old man, or even as past middle age. Yet he is a somewhat self-conscious writer, and fond of
talking about his age; in his later years his tone is Singula de nobis anni praedantur euntes, Eripuere iocos, Venerem, convivia, ludos, Tendunt extorquere poemata: quid faciam vis? (2 Epist. 2, 55). There is nothing of this sort in the Ars Poetica: nothing of the air of a man who is weary and feels that his work is done. The only passage which could possibly be interpreted in this sense is v. 306: munus et officium, nil scribens ipse, docebo. We should be making a very gratuitous hypothesis of affectation in the poet were we to refuse to take these words literally; and so far as they go, they coincide with the lines in 2 Epist. 1, 207 Ac ne forte putes me, quae facere ipse recusem, Cum recte tractent alii, laudare maligne. But this passage refers only to composition for the stage, while in the Ars Poetica Horace is speaking quite generally. At first sight it might seem as if the words in the Ars Poetica were decisive as to the point of chronology; as if it were only towards the end of his life that Horace could honestly talk of intending to write nothing more. But there seems to be little doubt that after the publication of the first three books of the Odes Horace intended to resign himself to inactivity. He is completely satisfied with his work: exegi monumentum aere perennius, \&c. The first Epistle opens with a complaint that Maecenas is wishing him to return to the pursuits he had abandoned. The fourth book of the Odes was extorted from him some six years later than the first book of the Epistles. There is therefore no reason why Horace should not, in the years between 24 and 20 B.C., have truly said that he was writing no poetry.

On the other hand I do not see why the de Arte Poetica should be dated later than the first book of the Epistles, which cannot have been published before 19 в.c. There is no historical allusion in either work which points to such a conclusion; while if we examine, as Haupt has taught us to do, the metre of the two works, we find that in one point at least Horace is, if anything, laxer in the Ars Poetica than in the first book of the Epistles. I allude to the coincidence of accent with metrical ictus, in other words, to the absence of caesura, at the beginning of the line. Such beginnings as iungere si velit (v. 2), sed nunc non erat (19), nesciet hunc ego (35), pleraque differat (44),
et nova fictaque (52), quanto rectius (140), tibia non ut (202), are more frequent in the Satires than in the Ars Poetica, and again in the Ars Poetica than in the first book of the Epistles. In the second book of the Epistles it must be admitted that Horace returns to his old freedom in this matter.

In other respects the metre of the Ars Poetica closely resembles that of the two books of Epistles.

It may be noticed that Horace in the Ars Poetica attributes much importance to the study of philosophy as training for a poet, and his language on this subject coincides fairly enough with his expression on the subject in the first book of the Epistles.

Taking one consideration, then, with another, I am disposed to think that the de Arte Poetica should be printed in future editions of Horace not at the end of the volume, but between the Satires and the Epistles. This arrangement would correspond, much better than that adopted since the time of Stephanus, with the order given us by the manuscripts; in which the Ars Poetica is always placed either after the fourth book of the Odes or after the Carmen Saeculare.

If the foregoing reasoning is sound, it follows, as Michaelis has pointed out, that the Pisos, to whom the piece is dedicated, cannot be Lucius Piso, the consul of 15 b.c., and praefectus Urbi, and his sons. Lucius Piso would at this time be hardly, old enough to have sons who could be called iuvenes. I therefore agree with those scholars who suppose the Pisones of the Ars Poetica to be Gnaeus Piso, consul suffectus B.c. 23, and his sons. Gnaeus Piso was at one time an ardent supporter of the anti-Caesarian party, and, like Horace, followed the fortunes of Brutus and Cassius in 42 b.c. His eldest son Gnaeus would in 24 b.C. be a young man of two and twenty. The friendship of Horace with the Pisos is perhaps further attested by the quotation from Philodernus in the second satire of the first book (v. 121): though I do not know whether there is any evidence to shew what was the relation between the family of Gnaeus Piso and that of Lucius, to which Philodemus was attached.

We may now proceed to examine the structure and composition of the poem, which at first sight present great difficulties.

It is obvious at once that Horace was writing with a Greek original before him, and equally obvious that (although some Aristotelian precepts may have filtered into it) this Greek original cannot have been the $\pi \epsilon \rho \stackrel{~ \pi}{\pi o \imath \eta \tau \iota \kappa \eta} s$ of Aristotle, with which the de Arte Poetica presents very few important points of contact.

The commentary, or fragment of a commentary, which bears the name of Pomponius Porphyrion, says that in the de Arte Poetica Horace put together the most important maxims of Neoptolemus of Parium : congessit praecepta Neoptolemi tô חapıavov̂, non quidem omnia, sed eminentissima ${ }^{1}$. According to the ordinary manuals of Greek literary history Neoptolemus of Parium was an Alexandrian critic: at what period he wrote I am unable to ascertain. The general excellence of the commentary of Porphyrion, which is evidently drawn from good sources, and is generally superior to that attributed to Acron or to the Cruquian scholia, should dispose us favourably towards any important statement contained in it which other considerations tend to substantiate. Now some parts at least of the de Arte Poetica can only have been taken from a treatise which contemplated a different condition of literature from that existing at the time of Aristotle or Theophrastus. The tragedy, for instance, contemplated by Horace and his authority has five acts; there is no mention of a trilogy; the precepts delivered are in the main concerned with composition, form, arrangement, harmony in the drawing of character, and similar points lying at a great distance from the breadth and grandeur of conception which animate the treatise of Aristotle. I do not know why it should be assumed (as for instance by Michaelis) that Alexandrian criticism should have been obscure and tortuous because this was the characteristic of Alexandrian poetry. From one point of view, indeed the de Arte Poetica seems to bear an Alexandrian stamp ; it contains the neatly-formulated criticism of a refined, intelligent, and well-trained scholar, not that of a philosopher whose eye is set upon great things.

[^6]An examination of the piece in detail will，I hope to shew， bear out Porphyrion＇s statement so far at least as the words praecepta congessit are concerned．Whether the author of the work which Horace had before him was Neoptolemus or not，it seems，or parts of it seem，to have served as an authority to other Italian writers besides Horace．There is a striking coin－ cidence between Horace＇s words about the inventor of the elegiac and those of Marius Victorinus p． 107 （Keil）quod me－ trum invenisse fertur Callinous Ephesius：alii vero Archilochum eius auctorem tradiderunt，quidam Colophonium quendam．Com－ pare Plotius Sacerdos p． 510 hoc metro mortuis fletus compone－ bant vel epigrammata consecrationum．．．auctorem vero huius metri．．．alii Pythagoram，alii Ortugen，non nulli Mimnermum dicunt．The same phenomenon will meet us later in the pas－ sage about the iambus．

If a division is necessary，the de Arte Poetica might be roughly said to consist of two parts，the first of which ends at v．291．But it is not the way of Horace to arrange his writing with any great regard to logical precision．What concerns us now more nearly is to point out that the work seems to consist of a string of texts，maxims，or historical statements，to which in most cases Horace adds a comment，developing the idea in his own way，and containing a direct practical reference to the circumstances of his own time．This fact，if kept clearly in view，will，I think，afford a key to the arrangement of the piece．

Horace opens（vv．1－37）with some remarks on the neces－ sity of observing proportion in writing，and proportion he views in various lights．Porphyrion says of vv．1－9 primum praeceptum est $\pi \epsilon \rho i$ т $\hat{\varsigma}$ àкодоv日ias．＇Aкодov日ia is con－ formity，agreement between the several parts of a composi－ tion．I suppose that the praeceptum of Neoptolemus is translated or paraphrased in vv．1－5，and that 6－9 form Horace＇s comment．In vv．9－10 another dictum（sequens praeceptum，says Porphyrion）is quoted from the Greek： ＂painters and poets，you say，have always been allowed any licence they please．＂＂Yes，＂answers Horace，＂but not so as to outrage all sense of natural law．＂On v． 14 Porphyrion remarks： Plerumque etc．Tertium каӨо入ıкóv．Probably from plerumque
to pannus is Horace's paraphrase of a sentence in his Greek original to the effect that proportion may be violated in another way, namely by the insertion of brilliant passages irrelevant to the matter in hand. There is a Greek colouring in the words et fortasse cupressum Scis simulare: Porphyrion says quod proverbium Graecis in usu est, $\mu \dot{\prime} \tau \iota$ є̀к кvтарíббov $\theta \dot{\epsilon} \lambda \epsilon \iota$; the allusions to Diana and the Rhine are of course Horace's own. On v. 24 Porphyrion says hoc tale $\pi a \rho a ́ \gamma \gamma \epsilon \lambda \mu a$ est: erramus, inquit, et dum conamur veram virtutem sequi, vicina virtuti in vitia incidimus: nam breviter scribentem sequitur obscuritas, levia' componentem inhibent, diserta profitentem какó乌ŋ入a vitiant spreta rerum inspectione. The law of proportion may again be violated by exclusive aiming at one kind of excellence; excessive brevity leads to obscurity, excessive polish to weakness, the attempt at grand writing to bombast, love of variety in fiction to incongruity. Horace's comment begins at v. 32, Aemilium circa ludum, and ends at v. 37, nigroque capillo.

In v. 38 another part of the subject is started: matter, order, and language. The first maxim is sumite materiam vestris, qui scribitis, aequam Viribus; closely connected with this is the following $\pi \epsilon \rho \grave{\imath} \tau \hat{\eta} \varsigma \epsilon^{\prime} \tau a \xi i a s$, as Porphyrion puts it. The virtue of arrangement is to say no more now than is now required, postponing a great deal to another occasion. With v. 45 begins a chapter on language. The text is contained in two lines, in verbis etiam tenuis cautusque serendis Hoc amet, hoc spernat promissi carminis auctor. If you make yourself responsible to the public for a new poem, you must be delicate and circumspect in combining words. Upon this text Horace hangs a long commentary; long and interesting, because he is here speaking from his heart and with a direct reference to the history of Italian poetry, in which nothing is more striking than the fondness of the poets for inventing new words. Philology and poetry went hand in hand in the ancient and classical literature of Italy. Whether this undoubted fact was due to the influence of the Greek masters, who after the second Punic war would represent at Rome the later Hellenic culture and its academical maxims, or due rather to the native bent of the Italians themselves, or to the mere necessities of the case, I do not attempt
to decide. In any case Horace is only saying what the whole previous history of Italian literature justified him in saying. An old word, he urges, may get new life from a new setting; indeed the poet may go further, and coin words unknown to older generations. New words may be taken from the Greek with such slight changes as are necessary to give them an Italian sound; for instance (as Porphyrion says) triclinium for cenaculum, vinum (for temetum) calix and cucullus. "Why should Caecilius and Plautus, Cato and Ennius, be allowed by general consent to do this, while Vergil and Varius and myself are forbidden?"

I must pause for a moment over vv. 60-69. As vv. 60-61 are now printed from the manuscripts, they present a great difficulty: Ut silvae foliis pronos mutantur in annos, Prima cadunt: ita verborum vetus interit aetas, Et iuvenum ritu florent modo nata vigentque. The general sense is clear; as old leaves fall off and new ones take their place, so old words go out of fashion and their place is taken by new ones. But as the words now stand the simile halts on one leg; what is wanted is the words corresponding to prima cadunt. Keller in his Epilegomena defends the omission (after Vahlen) by appealing to such


 $\tau \epsilon S$ (ib. p. 116 a): Cicero Legg. 1 § 15 in ripa inambulantes, tum autem residentes. But surely in all these cases it is not a whole clause which is wanting, but only some such adversative expression as $\mu \in ́ v$, $\boldsymbol{\tau}_{\boldsymbol{\prime}}^{\boldsymbol{\tau} \epsilon} \mu_{\epsilon ́ v} \nu$, or tum quidem. Now the medieval commentary published in 1877 from a Vienna manuscript by Dr Joseph Zechmeister paraphrases the passage as follows: prima, scilicet folia, cadunt, nova succrescunt; ita vetus aetas verborum, id est, verba in vetere aetate inventa intereunt, et modo nata...florent. As succresco is a word of the true classical stamp, and not at all likely to have been used suo Marte by a medieval commentator, it has occurred to me that we have here the very words of Horace, and that the line ran originally thus: prima cadunt, nova succrescunt; vetus interit aetas; the words ita verborum having originally been a gloss on aetas and having
afterwards crept into the text. The paraphrase just quoted need not imply that its writer found them in the text before him. On looking at Keller and Holder's apparatus criticus I find that they quote a passage from Jerome which seems to me materially to confirm this view. In the second book of his commentary on Hosea Jerome says (cum) alia venerit generatio primisque cadentibus foliis virens silva succreverit; as if the text of Horace from which he is quoting had in it the word succresco. I would propose therefore to strike out the words ita verborum, to insert in their place nova succrescunt, and to translate the whole passage "As the forests change their leaves as "the years hurry on, the first leaves fall, and new ones grow up "to take their place: so the old generation perishes, and the new "growth flourishes and is vigorous like the young generation of "men." Horace goes on to say that death comes to all men, and the works of men will come to nought, even as the mighty beginnings of Julius Caesar, the harbour at Ostia, the draining of the Pomptine marshes, and the changing of the river's course have all fallen dead ${ }^{1}$.

In vv. 73 foll. Horace gives a short history of the various metres, adding a comment (vv. 87-118) on the necessity of suiting words and metre to the feelings which they are to express. In v. 119, passing to tragedy, he begins with another text: "either follow the tradition of the stage, or, if you desert it, let your invention be harmonious and consistent." The lines 128-152 must, I think, refer to epic poetry. As Porphyrion says, Horace starts by putting forward a Greek text in the form of a question: "You say it is difficult to treat unclaimed ${ }^{2}$ "subjects in an original way, and that it is better to take the "story of Troy and write tragedies upon it, than to be the first to "attempt an epic on a new subject?" Yes, answers Horace: but such unclaimed matter will become of private right if you do not tarry in the beaten track of the epic cycle, nor in trans-

[^7][^8]lating from the Greek are over anxious to render word for word, nor in imitating (Homer?) get yourself into entanglements from which you cannot extricate yourself. Again, do not begin like the cyclic poet, but like Homer; like him plunge in medias res, blending fact and fiction into a harmonious whole.

It is difficult to resist the impression that Horace is here alluding to Vergil's manner of proceeding in the Aeneid, which was now (if the date assumed above be correct) in the course of composition. At any rate he could not have described more exactly the plan which Vergil actually followed, and which Apollonius Rhodius (and possibly some Roman writers) had chosen to abandon.

153 foll. The inner treatment of tragedy and epic being dismissed, Horace speaks of the characters of comedy. Each period of life, childhood, youth, middle and old age, is to be painted accurately. Then in vv. 179-202 comes a string of rules affecting the mechanical arrangement of the drama. A distinction must be made between actions which are fit for production on the stage and those which should be left to messengers to narrate; the deus ex machina must only be brought in on worthy occasions; the actors must be three and no more; a tragedy should have five acts, no more; the chorus, singing between the acts, must play a real part, encouraging the good and curbing the bad. A few remarks on the history and proper character of stage-music conclude this part of the subject.

Horace now passes to the satyric drama, opening the subject with a short history of it which I suppose to have come from his Greek original. The comment apparently begins v. 225, verum ita risores. The satyric drama, according to Horace's idea, should occupy a middle place between tragedy and comedy. Its language should not be too lofty, still less should it be too coarse or direct; there is a difference between the god Silenus and Davus the slave. The satyric drama must follow, naturally and easily, from the tragedy which precedes it; so easily that every one will think he could have composed the whole himself. The fauni must not talk like town-bred boys, running to the extreme either of effeminacy or of coarseness.

Scholars are now, I think, agreed that no satyric drama was
known to the Roman stage; but on such a hypothesis it is exceedingly difficult to assign any real meaning to the passage just paraphrased. I do not know whether we ought to accept the statement of Porphyrion on v. 221, satyrica coeperunt scribere ut Pomponius Atalanten vel Sisyphon vel Ariadnen, and assume that Pomponius, whether the poet of Bononia or his later namesake Pomponius Secundus, wrote satyric dramas. But I can see no possible reason for denying that some of the numerous Augustan poets or poetasters may have taken up the idea of doing so, and possibly of substituting the satyri for the Atellana or exodium, as a more decent and dignified close for the whole theatrical performance. I would sooner believe this, even in the absence of other evidence, than suppose that Horace was merely beating the air in the practical and careful precepts which he is here enforcing. Every other part of the de Arte Poetica has its practical application, and why not this?

But the account of the Latin drama given by Diomedes p . 490 (Keil) seems distinctly to imply that the Romans had a satyric drama which stood to the Atellana as the comoedia to the togata tabernaria, and the tragoedia to the togata praetextata. Togata praetextata a tragoedia differt quod in tragoedia heroes inducuntur, ut Pacuvius tragoedias nominibus heroicis inscripsit, Orestem Chrysen et his similia, item Accius: in praetextata autem quae inscribitur Brutus vel Decius, item Marcellus. Togata tabernaria a comoedia differt, quod in comoediis Graeci ritus inducuntur personaeque Graecae, Laches Sostrata; in illa vero Latinae....Latina Atellana a Graeca satyrica differt, quod in satyrica fere Satyrorum personae inducuntur, aut si quae sunt ridiculae similes Satyris, Autolycus Busiris: in Atellana Oscae personae, ut Maccus.

Vv. 251-257 treat of the metre suitable to tragic dialogue, and the practice of the Roman tragedians. Horace starts as usual with a paraphrase of his Greek original. The iambus, a short and a long syllable, was the basis of the trimeter iambeus or iambic of lampoon, consisting mainly of pure iambi: more recently spondees were admitted into the odd places. That this comes directly from the Greek is, I think, shewn by the words non ita pridem. I suppose Horace to be distinguishing the
pure or comparatively pure iambics written by ${ }^{1}$ Archilochus, and imitated to a certain extent by Catullus and the authors of iambic lampoons in the Catalepton and Priapea, from the freer and more dignified dramatic measure. Non ita pridem-these words can only have a meaning if written by some author who lived comparatively near the time when the change was supposed to have taken place. Some two centuries elapsed between the time of Archilochus and that of Aeschylus: perhaps somewhat less than that period between the age of Aeschylus and that of the Alexandrian writer from whom Horace is translating. Supposing him to have written in the third century B.c., and to have divided the history of the iambic into two halves, each of which consisted of about two hundred years, he might perhaps fairly say that (comparatively) 'it was not so long ago' when the change took place. Or he may simply have taken the words over from an older treatise.

[^9]Iambicum autem quod ex omnibus iambis nullo alio admixto subsistit, quo iambographi maxime gaudent. Ib. p. 132, Iamborum scriptores quibus celeri versu opus est fere per iambos provolant. Plotius Sacerdos 1. c. Pura iambica trimetra quae Archilochia nuncupatur, quae solos iambos recipit et raros spondeos...Exempla Graeca
$\pi \alpha ́ \tau \epsilon \rho ~ \Lambda u 火 \alpha \dot{\alpha} \mu \beta a$, то̂ov $\dot{\text { é } \phi \rho d ́ \sigma \omega ~ \tau o ́ \delta \epsilon ; ~}$
 Latina haec

Ibis Liburnis inter alta navium et

Paratus omne Caesaris periculum, The rule is too symmetrically stated, yet it seems to have some truth in it. The lampoons in Horace's Epodes in no case consist of pureiambics: Catullus writes pure iambics in his 29th poem, which is a lampoon, and in his 4th, which is not; and some of the lam. poons of the Priapeia and the pseudoVergilian Catalepton are in pure iambies.

From v. 309-365 we have another and an exceedingly important section. So far Horace's praecepta have been mainly formal, and his statements historical; but he now approaches the ethical principles which lie at the root of true poetical composition. Scribendi recte saperest et principium et fons is his text, taken perhaps from Neoptolemus. Sense and philosophical culture lie at the basis of good poetry. You may learn the pith of the matter from the Socratic school, and when once you have mastered your thoughts, you will find (as Menander said ${ }^{1}$ ) that the words will not tarry. The writer of drama should be perfectly acquainted with all the limits of human relations: let him, when he copies, copy from life. It sometimes happens that a play without any recommendation on the score of charm or art, but with its characters well treated and with beauty in its sentiments, will hold the stage longer than one which lacks matter and has nothing to shew but the music of its verses. But, to attain all this, we should be like the masters of Greek literature and care for nothing but fame. Our youth is in danger of being corrupted by the love of gain which is corroding the heart of Roman society.

Returning again to his text he says "Poets write either to give pleasure or to do good." The true merit of the poet is to do both at once; if this be attained, a few errors may well be pardoned. The lines 333-4, aut prodesse volunt aut delectare poetae, Aut simul et iucunda et idonea dicere vitae, may be from the Greek ; the comment then will be vv. $335-365$.

Vv. 365-390. After all remember that second-rate poetry is of no value. There is a tendency in our time to suppose that respectable birth, a good income, and a good character, are sufficient qualifications for writing poetry. No; remember Helvius Cinna and his nine years ${ }^{2}$; poetry is a serious matter; as the Greeks tell us, the poet was the early prophet of civiliza-

[^10][^11]tion. It was the poets who inspired patriotic feeling, who uttered oracles and pointed out the path of life. Do not suppose then that the utmost cultivation of the poetic gift is a matter to be ashamed of.
V. 408. Perhaps another Greek text; is poetry the production of фv́⿱宀$\iota \iota$ or of $\tau \dot{\epsilon} \chi \nu \eta$ ? Of both, is Horace's reply; one is as necessary as the other. But he soon returns to what is nearest to his heart, the tendency of the existing state of Roman society to corrupt the poetical motive. Beware above all, he says, if you are rich, of being misled by the flattery of poor dependents whom you have obliged by some service; rather go for criticism to some honest judge like Quintilius Varus. And above all shun the mad enthusiasm which calls itself inspiration.

It will, I think, appear from the foregoing analysis that the arrangement of the de Arte Poetica is on the whole natural and easy, though not very strict. The only point in it which really strikes one as anomalous is the fact that the lines on the dignity of poetry and the question whether poetry is the offspring of art or of genius should come so late in the piece; and it would be interesting to know whether this was the case with the treatise of Neoptolemus. It is of course quite conceivable that the arrangement is Horace's own, for he nowhere binds himself, any more than Vergil does, to strict logical sequence. His satura or epistula is more a causerie than a treatise.

If my hypothesis as to the composition of the piece is correct, it follows that we have in the de Arte Poetica an instance of the same phenomenon that meets us so often in the philosophical works of Cicero. The work is really bilingual, consisting partly of translations or paraphrases from a Greek original, partly of comments on those taken from Roman history or applicable to Roman life. I am convinced that the looseness and obscurity of many of Cicero's philosophical works may easily be explained if this fact be carefully borne in mind. It is a phenomenon, so far as I know, peculiar to Roman literature; but when thoroughly apprehended it enables us to solve a great many riddles connected with the arrangement of Roman philosophical writing.

With regard to the matter of the de Arte Poetica, there are one or two peculiarities which cannot fail to strike an attentive
reader, and which may perhaps be explained by a careful consideration of the circumstances in which it was written. A large proportion of the whole is devoted to the drama; vv. 89127, 152-291, or some 170 lines: while epic has only twentyfour, 128-152. Of other special branches of composition there is hardly any mention except in the summary of metrical history vv. 75-85; of hint or instruction for composition in any other style but the epic and dramatic there is no trace. The rest of the piece is taken up with remarks which apply equally well to all styles of poetry, and which, though something is said about invention in language, are chiefly directed to the necessity of finish and the paramount importance of the study of Greek.

That there is some special reason for this I cannot doubt. It cannot of course be that Roman poets needed, in Horace's opinion, no instruction, or were not inclined to make any attempts, in the way of lyric or elegiac composition. Nor again do I suppose that the author of the Greek treatise which Horace had before him had confined his remarks to epic and the drama, or that, even if he had, Horace would have thought himself precluded from turning to other subjects. I am inclined to look for a reason in the peculiar circumstances of Horace's own time; and the more so because we shall find, on examination, that he pursues a similar line of criticism elsewhere. Turning to the first epistle of the second book we notice that, apart from remarks of quite a general character, Horace lays most stress upon the condition of the Roman stage (vv. 155-213), while again something is said about epic poetry, though here with especial mention of Vergil and Varius as having adequately satisfied its requirements.

What is the inference? It should be remembered that the stage was, during the last two centuries of the republic, a source of influence mainly in literature, but also to a certain extent in politics. It is therefore somewhat curious that the Ciceronian age, so full of political excitement, should have been chiefly fertile, not in comedy or tragedy, but in lyric, lampoon, and learned or didactic poetry. Matters however somewhat changed in the Augustan period, when Asinius Pollio, and after him Varius, and later still Ovid, wrote tragedies of great merit. The

Ajax of Augustus himself, though he fell on his sponge, not on his sword, was the offspring of the new time. From the third Epistle of Horace's first book we gather that epic, tragedy and the grander lyric were engaging some of the cohors of Tiberius. Epic poetry was more successfully revived by Varius and Vergil than by Varro of Atax in his bellum Sequanicum.

I think it therefore most probable that in the de Arte Poetica and the second book of the Epistles Horace was writing a manifesto in favour of his friends, and emphasizing the principles which they had followed or were following. It can hardly be doubted that the dramatists of the Augustan age must have given fresh study to the subject of tragic metre, diction, and composition generally, and in all points have bridged over the interval which separated the style and measure of Accius from those of Seneca. Indeed we may perhaps regard the tragedies of Seneca as the pale ghost of the once living body of Roman dramatic art, as it had grown and been nourished by the genius of Pollio, Varius, and Ovid.

And this fact leads to further reflections. The influence of the Alexandrian school on the poetry of the Augustan era is often exaggerated. That it was strong it would of course be idle to deny, but it is Catullus, Calvus, Helvius Cinna, and Propertius, not Vergil, Horace, and Ovid, who are the true Italian representatives of the Alexandrian manner. Can anything in Horace, for instance, be adduced at all resembling the tortuous and involved arrangement of the Coma Berenices, or the awkward conception of the Peleus and Thetis? Obscurity, as Suetonius remarks in his memoir, is the last fault that anyone would impute to Horace ${ }^{1}$. Or again, can it be alleged that the style of Horace or Vergil, when writing at their best, has anything which resembles the uniformly recurring sentimentality of Catullus in his really Alexandrian pieces? I am really disposed to think that the quarrel of Horace with Catullus and his school is due to the fact that he thought their line of poetry too artificial and too trivial to be permanent. He wished to bring literature back from the paths of Callimachus and Euphorion to

[^12]those of Homer, Archilochus, Aleaeus, Sappho, and Sophocles. The older Italian poets had, it is true, worked in this direction, but not, as Horace thought, with sufficient regard to finish. Example is better than precept, and when the de Arte Poetica was written Horace had already shewn in the Epodes and first three books of the Odes how the manner of Archilochus, Alcaeus, and Sappho could be given in Latin: Parios ego primus iambos Ostendi Latio, numeros animosque secutus Archilochi, non res et agentia verba Lycamben ${ }^{1}$. Horace and Vergil wished Italian poetry to combine the vigour and grandeur of the old epic and tragedy with the refinement and elaborate study of the Alexandrian school; the study of Greek could not, they thought, be too minute, but it must be applied to worthy subjects. The idea was true, national, adequate to the requirements of the age; and its result was a classical style, a monument which, as Horace himself said, will live when inscriptions in bronze and stone have perished.

The criticism of the de Arte Poetica represents the meetingpoint of the two currents of Alexandrian and Italiân thought. The rules laid down by Neoptolemus of Parium are far enough removed from the grand conceptions which inspired the $\pi \epsilon \rho i$ $\pi о \iota \eta \tau \iota \kappa \hat{\eta} s$ of Aristotle. They are rational, refined, indeed in a narrow sense classical, but they have something of an academical ring, and are suitable to a period of literary decline. Alexandria, with all her learning and culture, was after all no more than the schoolmistress of Italy; the real power of Italian genius was always independent of the forms which it chose to adopt from the later Hellenism. The best things in Lucretius, Catullus, Vergil and Horace are Italian or their own; even the Greek metres which they adopted were infinitely modified by the exigencies of the Italian ear. In attempting to exhibit Horace's criticisms in their bearing on poetical effort and creation at his own time we are also in a position to estimate the measure of their universal importance. Much in them, it need hardly be said, has little meaning now; much again seems to have had the meaning trodden out of it. Yet the utterances of a great poet, nay even of an inferior poet, on his own art are always of

[^13]the utmost value, as they spring from a living consciousness; and hence it is that a sentence of Goethe will often contain more than a page of Macaulay. Horace's criticism, pervaded as it is with a perhaps too exclusive sense of the importance of form, is less dangerous, especially towards the older poets, than that of Ovid; but it is based on the eternal principles that a poet, if he is to produce work that is to live, must be sincere, independent of the subtle corruption of social intercourse and opinion, unwearied in his study of form, undaunted in his scorn of triviality, and always in living contact with the noblest tendencies of his age.
H. NETTLESHIP.

## ON SOME PASSAGES OF OVID'S METAMORPHESES.

Among the mss of the Metamorphoses of which no notice has as yet been taken is one in the Brit. Museum, Harl. 2610, a fragment containing Books I and II with the first 622 vv . of III. I believe that next to the excellent codex in the library of S. Mark at Florence, the readings of which have recently been published by Otto Korn (1881), no MS of the Metamorphoses deserves higher consideration than this. Mr E. M. Thompson dates it at the end of the 10 th or beginning of the 11th century, and believes it to have been written in Germany, a conclusion confirmed by the fact that German equivalents have in some winstete
cases been written over Latin words, e.g. I. 299 uineta, and not inconsistent with the peculiar substitution of $b$ for $p$, and more rarely of $p$ for $b$, which it sometimes exhibits, asbice adsbicere asbexit hosbes susbiria exbirat resbonderat preuissimus.

The same authority considers our MS to be earlier than the other Brit. Mus. fragment of the Metamorphoses Add. 11967, which Dziatzko has collated for Korn's edition. This MS I have also examined and while admitting its goodness, am not inclined to rate it as highly as Korn. Mr Thompson dates it in the earlier part of cent. 11 and feels pretty confident that it was written in Italy.

As Korn calls this B, I shall call Harl. $2610 \beta$.
Before proceeding to discuss some passages of the Metamm. by the new light of $\beta$, I shall mention one of its chief claims to consideration. It is remarkably correct, speaking generally, in its orthography, contrasting favourably in this respect not only with B, but even with M (Marcianus), the best ms yet known.

1. In compounds with in con, $\beta$ preserves each, pretty uniformly, intact. Thus inposuit (3 times) inposuere inritamenta inrupit inmaduisse inmedicabile inmittite inmensa inmenso inrorauere inpiger inpatiens inperfecta inperfectus inpulsos inpulit inpulsu inpedientibus inpedit inminet inmania inlustre inperat (twice) inplerat inpleuere inplent inmunis inmixta inperfectus inreprehensa inprudens inrita. The exceptions are comparatively few, immensa I. 38 , imminet I. 52,146 , impia I. 200 , irritus 1. 273 , impluit I. 573 , irrita III. 336, immotus III. 418, impubes III. 422. Sometimes in has been corrected by the assimilated letter being written over it inridet I. 221. The cases of con are fewer, conpraensus conplectitur conlocat conpagibus conpagine conplexibus conplexus, but complet III. 312: in I. 480 conubia follows the accredited spelling of the best period.
2. The case is somewhat different in compounds with ad. Thus $\beta$ has adspirate admouerat adfectas adsidua adflatu adstitit adsensit adrides adsonat admiratur adsbicere; but on the other hand assiduis asiduo affectasse assensibus äffert affatur afflat annuit assere apparuit accliuo asbice asbexit. Sub appears as sum in summouet I. 664, summisit III. 23, 502 : subplice is found for supplice II. 396.
3. Is as the termination of the accusative plural is preserved by $\beta$ in seminicis I. 228 mollis I. 685 penatis I. 773 uomentis II. 119 patentis II. 179 feruentis II. 229 tris II. 738 leuis III. 43 : uocis III. 369 moles III. 376 point perhaps to the same spelling: once it is found in a nominative plural instabilis in. 146: igneis as an accus. occurs II. 271.
4. Of st for est two traces are preserved by $\beta$, I .89 satest for sata est, II. 86 regeres for regere est. I would not however lay much stress on these, as it is probable that in the Augustan poets the use of st for est was becoming rare, and Ovid, who belongs to the end of the period, would have been likely only to use it exceptionally.
5. Not less interesting, though fluctuating, is the testimony of $\beta$ as to initial $h$. Thus harundine I. 471, harundinibus I.

684, but harundine I. 707. Again harena is written five times for arena twice: ${ }^{h}$ arenosi occurs I, 702. But arista is twice written without $h$, I. 110, 492, the only passages where it occurs in the ms. On the other hand umor umidus umenti are so spelt three times against humor (twice) humoribus once, humida once, ${ }^{\text {h }}$ umida once : umeros occurs once against humeros twice, ${ }^{\text {h umeros }}$ once, humero once, humuri once (III. 109), ${ }^{h}$ umeri once. It would however seem to be true that where $h$ is written over, the more original writing is the more authoritative, which will give umor umidus umens four times against himor humidus four ; umerus three times against humerus four. A specially attractive case is that of ecquis, which, as I have before observed in this Journal, is constantly written even in the best MSS etquis : $\beta$ however writes either ecquis or hecquis or ${ }^{n}$ ecquis, never et quis which Munro considers a wrong spelling. The interjection ei is spelt without $h$ in I. 523, and this is believed to be the better form.
6. The following traces of the older $o$ for $u$ in words where two $u$ 's come together are clearly archaic and should be restored to Ovid's text. uerom I. 223, uacuos II. 165, suos II, 186, riuos II. 456, flauås iII. 617.

Similarly $\beta$ preserves the Greek o in Parnasos Tauros Cephisos Peneos Caicas (i.e. Caicos) Ismenos Aglauros Agriodos (Fierce-tooth, name of a dog) Harpalos Naxos Tenedos Claras (i.e. Claros); on the other hand Spercheus Amfrisus Molus (Tmolus).

Ortiguam for Ortugiam seems unique I. 694.
On the whole, among the MSS of the Metamorphoses which I have examined, I consider $\beta$ to hold a very high, perhaps the first place, in reference to this point of orthography. No ms that I have seen is at all as consistent in the uniform preservation of in in compounds, and I take this as a pretty good test. The evidence of $\beta$ is on this point pronounced, and it agrees with the practice of the latest editor Korn. The other Brit. Mus. fragment, Korn's B, is less certain here.

I now proceed to mention some passages where $\beta$ appears to me to shed a new light. It must not be supposed from this
that I ascribe too great a weight to its readings; for it at times exhibits variations which, however they may have arisen, cannot possibly be true, and are indeed mere errors. No one, I hope, in this age of mS research, will be misled by these occasional errors into the opposite and worse mistake of disregarding the ms where it seems to preserve a true tradition. Such I think is the case in the following passages.

## I. 664

Talia maerentem stellatus summouet Argus
Ereptamque patri diuersa in pascua natam Abstrahit. ipse procul montis sublime cacumen Occupat, unde sedens partes speculatur in omnes.
Such is the reading of $\beta$, rightly throughout. The passage follows immediately after the sorrowful words of Inachus to his daughter Io now metamorphosed into a cow. Hence maerentem refers to Inachus, whom Argus, in no sympathizing mood, rudely pushes aside (summouet) and then proceeds to remove Io to a different pasture. Argus himself then takes his seat on a high peak, whence to watch more securely. Every part of this is distinct, intelligible, and Ovidian. Madvig would read maerenti, 'nam Inachum Argus submouere non potuit' and constructs the words thus Talia maerenti patri Argus summouet natam ereptamque diuersa in pascua abstrahit. I cannot feel the force of this reasoning. Surely it is the intruding parent, that Argus, his daughter's keeper, would naturally order to budge. And who can believe that Ovid would have admitted an inversion of the natural construction so harsh as this? Ipse again is the recurring opposition, so common in Latin, of two acts done by the same agent, but in the one case to another, in the second to himself. From Korn's silence it would appear that M (Marcianus) has inde, which ought to correspond to unde, but does not.

## I. 718

## saxoque cruentum

Deicit et maculat praeruptam sanguine $\dagger$ rupem.
This is the reading of most mss. $\beta$ has repem, perhaps for sepem, with which cf. Trist. iv. 1. 81 portarum saepe receptum:
'a rocky enclosure' would well describe the high mountain summit on which Argus had stationed himself. If this should be thought harsh, sedem would be better than cautem (Heinsius).
I. 727

After the slaughter of Argus Juno
Protinus exarsit nec tempora distulit irae
Horriferamque oculis animoque obiecit Erinyn
Paelicis Argolicae, stimulosque in pectore caecos
Condidit et profugam per totum $\dagger$ terruit orbem.
Instead of terruit (M), a weak word which at once rouses suspicion, $\beta$ has circuit, and so far as I know alone. This gives an excellent sense, either 'compassed about' 'dodged', now appearing in the rear, now in front, or else 'environed' in the rear, so preventing Io's retreat backwards.

## I. 771

Clymene after swearing by the sun-beam that Phaethon is the true child of the Sun adds

> si ficta loquor, neget ipse uidendum

Se mihi, sitque oculis lux ista nouissima nostris.
fero
So the MSS generally. $\beta$ has si ficta neget, and I incline to believe this right: fero would be less commonplace than loquor and would recall Virgil's si uera feram, si magna rependam (Aen. II. 161).
II. 38

Pignora da, genitor, per quae tua vera propago Credar, et hunc oculis errorem detrahe nostris.

For errorem $\beta$ has horrorem which after being written in its place in the verse was erased and then added in the margin. The word is certainly wrong here; but I notice it to mention some other instances where it has been confounded with error. Anth. Lat. 296. 3 Riese quaerunt cuncti uox cuius oberret, one MS aborret. Petron, S. 68 praeter errantis barbariae aut adiectum aut deminutum clamorem, where horrentis is an easy correction.

Now in Sen. Controv. p. 361 Bursian Pylades in comoedia, Bathyllus in tragoedia multum a se aberrant, the meaning is 'Pylades when acting in comic parts, Bathyllus in tragic, are wide of their natural bent'. Munro objects to tantum abhorret ac mutat in Catull. xxir. 11: possibly we ought to read there aberrat 'so widely divergent, so changed is he'.

## II. 127

The Sun overcome by Phaethon's entreaties gives him a parting recommendation,

Parce, puer, stimulis et fortius utere loris.
Sponte sua properant; labor est inhibere uolentes.
So $\beta$; M has uolantes. This is a case where there can be no doubt, and where no array of parallels can do much to support the first impression: uolantes is as certainly wrong as uolentes is right. No place can be more telling than this for the goodness of our MS.

## IL. 237

After Phaethon had let the horses of the Sun run away with him, the world was scorched and all the principal rivers dried up.
tum nymphae passis fontesque lacusque Deflewere comis, quaerit Boeotia Dircen, Argos Amymonen, Ephyre Pirenidas undas.
$\beta$ has after Boeotia the word cirnon with $\pm$ dircen in the margin. It seems unlikely that Cirnon is a mere corruption of Dircen; rather I am inclined to trace in it an independent variant of the name of that stream. The name suggests $\kappa \rho \eta^{\prime} \nu \eta \nu$ or к⿰亻ồvov, and though I have not found any passage in which the Dirce is so named, there are indications which make it probable. It is well known that one of the gates of Thebes was called $\pi \dot{\prime} \lambda a \iota \mathrm{~K} \rho \eta \nu a i ̂ a \iota$ or $\mathrm{K} \rho \eta \nu i \delta \in s$ and this was identical with the Dircaean gate, and is called by Statius in his enumeration of the 7 gates culmina Dircaea viii. 357. That it was so called from the spring or fount of Dirce is expressly stated by the

$\pi \dot{\prime} \lambda a \iota s$ " $\mathrm{A} \rho \eta \pi \rho o \sigma \hat{\eta} \gamma \epsilon$. We might almost assume that if the gate were called the gate of the spring, and the spring was that of Dirce, Dirce itself would sometimes be known as the spring.
II. 283
tostos en aspice crines
Inque oculis tantum, tantum super ora fauillae.
This is another passage where $\beta$ represents the probable reading against M which has Inque oculis fumum, tantum super ora fauillae and that of the interpolated mss Inque oculis uolitant tantum est super ora $f$. or Inque oculis tantum uolitant s. o. $f$.
II. 476

Dixit et aduersam prensis a fronte capillis
Strauit humi pronam.
So $\beta$. M has auersam, wrongly, I believe. Callisto has encountered Juno, now doubly enraged by the infidelity of Jupiter and the son (Arcas) whom Callisto has borne to him as the fruit of their amour. Juno grasps her by her hair in front and, as a natural result, makes her fall forward to the ground. From this position Callisto tendebat brachia supplex. But, if auersam is read, we must suppose that Juno, as Callisto turns her back to flee, seizes her by her front-hair, and makes her fall forwards to the ground : a contradiction almost impossible in Ovid. As in so many other cases, Merkel's fine tact and good sense have led him to retain aduersam: perhaps however Naugerius' aduersa with pronam following in the next verse, is slightly more probable. On an exactly similar principle I would read in III. 187 where the poet is describing Diana shrinking from the rude gaze of Actaeon Quae quamquam comitum turba stipata suarum In latus obliquum tamen abstitit oraque retro Flexit, not adstitit or, as the word is written in B, the other Brit. Museum ms, astitit.
II. 518

Est uero quisquam Iunonem laedere nolit
Offensamque tremat, quae prosum sola nocendo?
0 ego quantum egi quantu ásta potentia nostra est.

So $\beta$. For quisquam M has quisqui ||||||||.
Heinsius from some mss gives cur quis, and so Merkel Haupt Riese and Korn. But quisquam of $\beta$ is confirmed by such very similar instances as to bear strong marks of probability. Aen. I. 48 Et quisquam numen Iunonis adoret Praeterea? a passage seemingly imitated by Ovid here. Am. III. 3.33 Et quisquam pia tura focis inponere curat? I would read then Et uero quisquam 'And after this is any one to refuse?' In 520 quantum (? quanti) is peculiar to $\beta$, for quam of most mss. But quam uasta potentia is an odd, not to say unexampled, expression for far-reaching power, and following the traces of $\beta$ I suspect the true reading to be quantum, or possibly quanti, ista potentia nostra est spoken ironically, 'what a mighty thing (or, of what vast account) is that power they talk of as mine'.
II. 642

Aspicit infantem 'totoque salutifer orbi Cresce puer', dixit.
$\beta$ toto and so Canonici vir a pr. manu, though it was subsequently altered to toti, a fact on which I lay great stress: M according to Korn has toti first hand, but all his other MSS and $M$ itself now toto. I cannot think this accidental ; it is more than probable that Ovid remembered Propertius' Septem urbs alta iugis, toto quae praesidet orbi.
II. 680

Illud erat tempus quo te pastoria pellis Texit onusque fuit baculus siluestre sinistrae.

So $\beta$ : M has baculus corrected from baculum (Korn).
Can. vII also has baculus, but siluestris oliuae. That the masc. form is right here seems probable from F. I. 177 Tum deus incumbens baculo quem dextra gerebat, where the masc. seems undoubted; and if baculus was written by Ovid in 680 it is nearly certain that the same form was retained in 789, baculumque capit quem spinea totum Vincula cingebant; and so Can. viI, though $\beta$ there gives quod, and quod is the first hand of M , què $\mathrm{M}^{2}$ (Korn).
II. 722

Quanto splendidior quam cetera sidera fulget Lucifer et quanto quam Lucifer aurea Phoebe.
$\beta$, Can. viI, and M all have quanto quam. I consider the fact quite sufficient to establish this reading against quanto te which Heinsius introduced from the Berneggerianus and three other mss. It is just one of those insidious alterations which euphony suggests, and which attentive study of Ovid's manner rejects as feeble and senseless prettinesses.
II. 765

Huc ubi pervenit belli metuenda uirago.
So $\beta$, rightly: M and Can. vir with the majority of MSS bello. This is a good test of $\beta$ 's integrity.
II. 787

Illa deam obliquo fugienten lumine cernens
Murmura parua dedit, $\dagger$ successuramque Mineruae Indoluit.
Envy, who is described as she who uidet ingratos intabescitque uidendo Successus hominum (780, 1), after hearing Minerva's request that she would poison the mind of Aglauros with jealousy of her sister, mutters at the retreating goddess and pines to think she is destined to succeed in her undertaking. Hence successurumque, the accepted reading, must I think be right, as the only other plausible conj. successorumque (Vivianus) gen. plur. of successum, has no sufficient support from Cic. Fam. xvi. 21. 2 cum omnia mea causa uelles mihi successa even if we do not accept Lambinus' condemnation of that as soloecistic. And if so, $\beta$ again shines with a clear light most favourably contrasting with the corrupt readings of other MSS successibus usque (Can. VII), successibus atque, successu namque \&c.
II. 863

Oscula dat manibus, uix a uix cetera differt.
$\beta$ has uix ha uix, B uix iam uix, Can. VII uix uix et. M's reading is not stated. Surely there is a playfulness in uix a uix worth retaining at any cost ; in comparison with which uix iam
'scarcely any longer' is coarse, while in uix uix et the et is otiose and slightly absurd.
III. 290

Quoque magis credas, Stygii quoque conscia sunto
Numina torrentis. Timor et (es $\beta$ ) deus ille deorum.
After deorum some MSS including Can. vil add est. $\beta$ omits it, perhaps rightly; at least in II. 747 where a similarly short sentence is introduced, Herse causa uiae : faueas oramus amanti, and where $\mathbf{M}$ and some other MSS add est after wiae, both $\beta$ and Can. VII omit it. But this is perhaps a clearer case than III. 290.

I now come to a passage (III. 641, 2) which has exercised the ingenuity of editors as much as any of the Metamm. and where Mss fail us altogether, all exhibiting the same corruption. Unluckily $\beta$ does not reach as far. Bacchus has appeared before Pentheus in the assumed character of a fisherman Acoetes. He tells Pentheus how he and his comrades (socii) had been sailing to Delos and taken Ceos on the way. There they stay one night; the next morning Acoetes looks out fora wind and sends the others to get spring water. They soon rejoin him, Opheltes (Adsumus en, inquit, sociorum primus Opheltes III. 605) bringing with him a boy staggering with wine whom he had found on the beach, and in whose mien and face Acoetes traces something more than mortal. He objects to admitting him on board, fearing the presence of a god may be injurious to the ship's voyage. The crew resist, a Tuscan named Lycabas going the length of knocking Acoetes down into the sea, had he not been caught by a cable. The youthful Bacchus, roused by the uproar, asks where he is, and is reassured by Proreus, who tells him he shall be put ashore wherever he wishes. He begs to be taken to Naxos. The crew swear they will do so.

Per mare fallaces perque omnia numina iurant Sic fore, meque iubent pictae dare uela carinae.
Dextera Naxos erat. Dextra mihi lintea danti Quid facis, o demens? quis te furor-? inquit Opheltes
$\dagger$ Pro se quisque timet. laeuam pete maxima nutu
Pars mihi significat, pars quid uelit ore susurrat.

Acoetes is the speaker. The crew have ordered him to sail for Naxos, which was on the right. Acoetes turns the ship accordingly in that direction. No sooner has he done so than Opheltes interferes, determined that his youthful captive shall not escape: and calls Acoetes a madman for his pains, the rest of the crew seconding their leader and by signs or whispers urging A.coetes to sail in the opposite direction.

All this is clear; but the words Pro se quisque timet are obscure. Merkel in his edition of 1881 gives
> ' quis te furor' inquit Opheltes, [Pro se quisque, 'tenet? laeuam pete.' Maxima nutu]
which I suppose would mean 'what madness,' said Opheltes;'possesses you?' each of the rest chimed in; 'make for the left'; though Merkel elsewhere (Praef. p. xi) seems to regard the verse as a clumsy interpolation. There is a simpler remedy, I fancy, than this. Opheltes, we must recollect, is represented as the ringleader throughout; he it was who sociorum primus had announced the arrival of the young god : how natural then to introduce him as the first to interfere when an attempt was made to deliver the prize from the grasp of his captives. In fact he acts as the spokesman of the whole crew, expressing their alarm at the threatened loss. Hence I would read

> quis te furor-? inquit Opheltes,

## Pro sociisque timet.

The aposiopesis after furor is thus made less harsh, as the clause Pro socirsque timet conveys in a different way what would or might have formed part of Opheltes' speech; we might fancy him saying 'what madness possesses you, Acoetes? don't you see all the crew want you not to go to Naxos?' I assume that Opheltes the reading of M and a Bodleian ms which I have reason to think valuable (Rawl. Auct. G. 103) is right, not Acoete, as Can. viI and others give.

The crew are again called socii 611 Et sensi et dixi sociis. For the position of que cf. viII. 617 Ante omnesque Lelex, XIII. 79 Post clypeumque late: for the change of șocis to SEQvis cf. NECE for NEQVE XII. 69.

There is a well-known passage in the Helena of Euripides which may perhaps be explained from this story of the betrayal of Bacchus. Hel. 1589
$\nu \alpha$
The MS gives $a^{\xi} \xi^{i} a \nu$, and Najiav, if not the original reading, is at least the easiest correction. We have seen how Ovid dwells on $N a x o s$ as the central point round which the treachery of the crew in their attempt to inveigle the young Bacchus turns. I think it probable that from this well-known legend, partly too perhaps from the other Bacchic myth which connected the betrayal of Ariadne with Naxos, a Naxian journey was sometimes, and here by Euripides, used to express a treacherous journey. The phrase might originate with the mariners of the Aegean, and would easily be caught up by the numerous voyagers among the islands : or it might be a special allusion to some now lost but then familiar poet. On this hypothesis I would translate 'let us sail back our Naxian journey' i.e. retrace what is really meant to be a voyage of treachery, carrying us away from our home to a land of strangers.
vi. 197

## Fingite demi

Huic aliquid populo natorum posse meorum. Non tamen ad numerum redigar spoliata duorum Latonae turbam; qua quantum distat ab orba. $\dagger$ Ite satis propere sacris $\dagger$ laurumque capillis Ponite.
If we suppose the original line to have been ITE SATISQ. SUPERQ. SACRIST
we may imagine a not impossible genesis of the corruption. At a later period, wheu writing was no longer in uncials alone, and had begun to confuse the shapes of letters, Q. su were copied as $p$ ro and the second $Q$. was then changed to $e$ to make a word; the dropping of $t$ at the end of sacrist followed of course. I venture to think this emendation more forcible than either

Bothe's Ite, sat est, propere ite, sacri or Haupt's Ite, satis, propere ite, sacri est: and would compare for the expression iv. 429 satisque Ac super ostendit. It is to be observed that Niobe's defiant speech ends with this line; anything therefore undignified is out of keeping. 'Away, enough and more than enough of worship already : put the bay-wreath from your hair.' Then, as if overpowered by Niobe's emphatic protest against any further worship of her rival, the poet adds

Deponunt et sacra infecta relincunt, Quodque licet, tacito uenerantur murmure numen.' vII. 461—4

Marmoreamque Paron quamque impia prodidit Arne Sithonis accepto quod auara poposcerat auro
Mutata est in avem, quae nunc quoque diligit aurum
Nigra pedes, nigris uelata monedula pennis.
Sithonis is the reading of four Bodleian mss Can. I, Can. vir, F. Iv. 31, Rawl. Auct. G. 103. M has Sithon; Sithon et which is found in some mSS, looks like an interpolation. The reading now admitted into most edd. Siphnon et is due to Heinsius, who inferred from the fact of Siphnos possessing goldmines that Siphnos was the place which Arne betrayed for gold. To me this reasoning is unconvincing; and I find a most unOvidian awkwardnéss in the sentence thus constructed, quamque impia prodidit Arne Siphnon et accepto quod auara poposcerat auro Mutata est in auem, quae к.т.入. The Rawl. ms which for quamque has the contraction $q^{w} q^{w}$ quam quam, suggested to me that quamque was the seat of corruption, and that quam quae is what Ovid wrote; several months after I found that Canter had already made the same conjecture. The sentence thus regains its proper Ovidian transparency, and also avoids the here strange awkwardness of describing a place by a recondite legend which has hitherto baffled the learning of all editors.

## viI. 737 sqq.

Cui non ista fide satis experientia sano
Magna foret? non sum contentus et in mea pugno
Vulnera, dum census dare me $\dagger$ promitto loquendo $\dagger$

> Muneraque augendo tandem dubitare coegi.
> Exclamo †male fictor adest male fictus $\dagger$ adulter Verus eram coniunx: me perfida teste teneris.

So M: a fact which I would specially signalize, as it proves beyond a doubt that $M$ is not an invariably safe guide. Ovid is telling how Cephalus, distrusting his wife Procris' fidelity, absented himself from his home, then returning in a disguise solicited her for a long time in vain. Still incredulous he offers larger and larger presents, till at last she is on the point of yielding. Then Cephalus throwing off his disguise proclaims himself her husband, not her paramour.

M's promitto is of course wrong; we need not doubt the reading of most mss pro nocte. Whether loquendo is right is less clear; locando which Heinsius found in one ms is perhaps possible in the sense of stipulating. But the words introduced by Exclamo are, I think, fixable, and, if I am not mistaken, have hitherto not been rightly edited. The excellent Canonici vir gives male fictor adest, ego fictus adulter, two Bodleian mss F. iv. 31 and D'Orville x. 1. 5. 24 mala (mea D'O.) pectora detego fictus (tectus D'O.) adulter, in which the same reading is obscurely conveyed, with one difference of some importance, mala for male. Hence I would restore 'Mala, fictor adest; ego fictus adulter Verus eram coniunx': 'Vile one, it is a dissembler you see: I who dissemble adulterer was all the time your real husband.'
xiv. 514

In quibus antra videt, quae multa nubila silua
Et leuibus cannis $\dagger$ manantia semicaper Pan
Nunc tenet.
The word manantia is corrupt; Merkel's nutantia Korn's latitantia can neither of them be thought very plausible. In Cul. 78 the cod. Vossianus (Bährens Poet. Lat. Min. II. p. 51) gives mariantia for manantia: it would be only a further step in the development of error to find mariantia corrupted into uariantia, and conversely I believe uariantia to be the original word which the mss of the Metamm. now give as manantia. The caves shimmer with the agitation of the reeds, i.e. a variable light plays through the caves produced by their agitation.
xiv. 585 sqq.

Ambieratque Venus superos colloque parentis
Circumfusa sui 'numquam mihi' dixerat 'ullo
Tempore dure pater, nunc sis mitissimus opto.
Aeneaeque meo, qui te de sanguine nostro
Fecit auum, quamuis †paruo des, optime, †numen
Dummodo des aliquod.'
So M: paruo is obviously a mistake for paruom, a more correct form than paruum of other MSS. But numen dare can scarcely be right; and as in 594 munere appears in some MSS as numine, I would restore munus in 589.

## xiv. 765

Haec ubi nequiquam forma †deus aptus †anili
Edidit in iuuenem rediit et anilia demit
Instrumenta sibi.
So M, with actus in the margin, whence Merkel conj. acta senili. Korn edits celatus, which suggested to me what is nearly the same in meaning, but far nearer palaeographically, deceptus 'counterfeited' Plin. H. N. xvi. 84 sic iubent citrum pretiosius fieri, sic acer decipi, viz. by painting with maple colour. The form of the corruption is very like ipsaṃ mathen for Psamathen xI. 398 ; but similar expansions of single words into two are tolerably frequent and found in all kinds of mss.

R. ELLIS.

## NOTES ON PLACIDUS, NONIUS, \&e.

Placidus xxviif. 16 (Deuerling).
Callibus, calculorum primigenia appellatione.
For callibus we should read calcibus, cf. Paulus xlvi. 2, Calces, qui per diminutionem appellantur calculi.
ib. xuI. 12.
Exdorsuandum, iudicandum. For iudicandum, I would suggest exinterandum, the common Ms. form of exenterandum.
ib. XLII. 1.
Exte, esse.
Paulus lxxxii. 9 has a gloss, Exesto, extra esto, and it would seem possible that the true reading in Placidus may be, Exeste, extra este, three words so much alike that they would almost certainly be confused.

Nonius xxxvi. 8 (Quicherat).
Coniugare, copulare \&c. This is the reading of the Montpellier Ms., and apparently of it alone, all the other Mss. seeming to read, Coniungere copulare. I would suggest, Coniugare, coniungere, copulare, cf. 75. 7, Adiugare, adiungere. 101. 23, Deiugare, deiungere, separare.
ib. LIX. 10.
Propitium, dicimus prorsus pium, aut proprie pium, Ter. in Ad.

Quam illa quae parentes propitii.
For prorsus pium the Harleian has originally prorsuspicium. Is it possible that prorsuspicium is right, and that Nonius meant to connect propitius with prospicio?
ib. Lxxxvir. 1. Celeratim, celeriter, Sisenna Hist. lib. v. Quo magis celeratim poterat, in insidiis suos disponit.

Gellius xir. 15 has, Sisennae in Hist. sexto sic scripta sunt, Quam maxime celatim poterat, in insidiis suos disponit.

I would suggest that a gloss on Celatim has dropped out, and would propose to read,

Celeratim, celeriter, Sisenna Hist. lib. v.
Quo magis celeratim
[Celatim,

> Sisenna Hist. lib. vі.

Quam maxime celatim] poterat, in insidiis suos disponit.
It may be noticed that there are many instances in Nonius where two or more glosses illustrated from Sisenna follow in immediate succession.
cxxix. 3. Incrustatum, Varro Taфŋ̂ Mevítrov; Lithostrota pauimenta et parietes [in]crustatos. For parietes incrustatos most Mss. have parietes crustatus, the Parisian Ms. C (Lat. Mss. 7666) alone apparently, has parietes crutatus, from which I conjecture that the original reading was parietem incrustatum scrutatus, which would correspond to incrustatum in the lemma and account for the loss of $i n$ in the example.
ib. 26.
Impuratus, quod est impudens, Lucil. lib. II.
Homo impuratus, et est impune rapister.
All the Mss. seem practically to read here,
Impuno, quod est impudens, Lucil. lib. II.
Homo impuratus et impuno est rapister ;
I would suggest,
[Impuratus pro] impuro quod est impudens, \&c.
cxlvi. 29. Extinctas [et] iam oblitteratas memoria.

Ribbeck Frag. Trag. Attius 43 (Ed. 2) reads,
Extinctas pausa, oblitteratas memoria.
Junius conjectured,
Extinctas iam atque oblitteratas memoria,
which is the first reading of the Harleian and seems clearly right. Most Mss. seem to read

Extincta tam oblitteratas.
cxlix. 21. Inguine, plenam, papulam, panum, tympanum

For inguine the Mss. have inquem, Ribbeck reads Inguen, penem, \&c.

Paulus 89. 8 has,
Flemina dicuntur, cum ex labore viae sanguis defluit circa talos, and 360. 5,

Tama dicitur cum labore viae sanguis in crura descendit, Lucil.: Inguen ne existat, papulae, tama.

Comparing these passages I would read in Nonius Inguen, flemen, papulam, panum, tympanum, the flemen here corresponding to the tama in Lucilius, with which as the passages from Paulus shew it is identical in meaning.
CL. 35. Possestrix a possidendo,

Ita tonstrix, ita impulstrix, ita cursrix, ita plaustrix, ita assestrix.

The Harleian, first hand, reads ita tontrix, ita impultrix, ita curatrix, ita plautrix, ita assestrix. The Leiden ita tontrix, ita impulsatrix, ita curitrix, ita plautrix, ita adsestrix.

Priscian II. 371 к. has, Cicero ab eo quod est expulsor expultrix dixit. Following this analogy we may read, Ita tontrix, ita impultrix, ita curtrix, ita plautrix, ita assestrix, a suggestion, which I owe to Professor Nettleship.
cli. 86. Pisculentum . . . Cato Orig. lib. v. . . . .

Et. lib VII. Fluuium Hiberum : is oritur
The Harleian, first hand, reads Fluuius Hiberus oritur, which seems clearly right.

## CLIII. 25.

Ergo puerum interea ancillae subdam lactentem meae Ne fame perbitat.

The Mss. read ego . . . laetantem, Ribbeck,
Ego puerum interead ancillae subdam lactantem meae.
I would suggest
Ego puerum interea ancillai subdam lactantei meae. Cf. Serv. Aen. v. 285. Pholoe erat autem lactans, infantes enim lactentes dicimus.
cLIV. 3.

Prouehere movere efferre. Pacuiius Teucro:
Aut me occide, [aut] illa abhinc sine usquam proueham grádum.
For prouehere and proueham the Mss. read prouidere and prouideam, Ribbeck probitere and probitam. Comparing 166. 21,

Regredere, reuocare. Ennius Achille:
Quo nunc incerta re atque inorata gradum
Regredere conare?
I would suggest here
Progredere
progrediam gradum.
Ib. 5. Puellascere, effeminari uel reuirescere.
For reuirescere the Harl., first hand, has euirescere, which should be right.
clv. 33. Propitiabilis

Ita et adulabilis. For adulabilis the Mss. have adolabilis, for which I would suggest adorabilis.
clxix. 4. Verg. in Buc.

Quantum vere nouo uiridis se subicit alnus.
For Verg. in Buc. the Mss. have Verg. Georg. irir.
It would seem probable that an example from the fourth Georgic has fallen out, and that we should read,

Verg. Georg. IIII.
[Ter flamma ad summum tecti subiecta reluxit. Idem in Buc:]

Quantum uere nouo uiridis se subicit alnus.
clxxiv. 31. Afranius Fratriis:

Curre, et nuntia
Venire $[m e]$, et mecum speratam adduce[re].
The Harleian, first hand, alone apparently of all the Mss. has adducere, which was conjectured by Lipsius for adduce of the Mss.
CLXXVIII. 22. Jam istam colaphis comminuissem [testam] testatim tibi.

Testam was conjectured by Quicherat and accepted by Ribbeck. The Harleian however has as its first reading,

Iam istam caluam colafis comminuissem testatim tibi, which is clearly right.
clxxxyi. 21. Te sancte uenerans. The Harleian, first hand, has venerans which was conjectured by Junius and accepted by Ribbeck. The second hand with the other Mss. has uerans.

## cxcIv. 10. Caecilius Imbriis:

For Imbriis the Harleian, first hand, has infoebis: we should read Caecilius Synephebis, of which word infoebis is a frequent corruption.
C. 10.

## Pecunia

Quid? bonum breue est, respondi: Sardis ueniens caseum.
For Sardis ueniens the Harleian and Leiden Mss. have Sardis ueniense, for which I conjecture Sardiniense.
CCI. 10. Lippus edenda acri assiduo ceparius cepa.

For assiduo the Harleian, first hand, has assiduae, i.e. assidue, which should be right, as Priscian quotes the line with this form in a fragment published by Hagen in the Anecdota Helvetica.
ccviii. 28. Horrea genere neutro . . Feminino, Claudius : Quarum iacent muri, nec ullae horreae, curiaque, et tabulariae publicae. Eiusdem generis tabularias quo et horreas dixit.

The Harleian reads, Quarum iacent munera ulla horrea, the Leiden, Quarum iaceni murena ulla horrea. I would suggest, Quarum iacent moenia, uillae, horreae.
CCXII. 16. Lanitium, genere neutro, Verg. Georg. III.

Si tibi lanitium curae.
The Harleian, first hand, reads, Laum genere masculino, Verg. Georg. in. \&c.

I cannot help suspecting that a paragraph containing a passage from the third Georgic has fallen out, and would suggest,

Lacum, genere masculino [Verg. Georg. III. (481) Corrupitque lacus.
Lacuna, feminino
Lanitium, genere neutro.] Verg. Georg. III.
It may be mentioned that Varro, Paulus, and other commentators quote lacus and lacuna as cognate words.
Ccxiv. 7. Metus, masculini, Naeuius: Magni metus tumultus pectora possidet.
[Feminini] Ennius:
The Harleian and Leiden Mss. both have
Metus, masculino. Feminino, Naeuius:
Magni intus tumultus pectora possidet (Harl.) possidit (Leid.)
I would suggest as the true reading,
Magnae metus tumultus pectora possidit.
ccxix. 30. Penus, generis feminini. Lucilius :

Magna penus paruo spatio consumpta peribit.
Pomponius Dotata:
Vinum panemque omnem, ceterum aliam praeberem penum. Nouius Dotata:

Meam penum componam satius est.
The Harleian reads after peribit, Masculino. Pomponius:

Unum penemque omnem ceterum aliam praebere penum. Nouius: Meam in poenum componam satius est.

Masculino seems clearly right, and I would suggest as a possible reading,
Masculino. Pomponius:
Vinum panem atque omnem alium praeberem penum.
Nouius:
Meum in penum componam satius est.
ccxxxii. 1. Varro in Endymionibus: Animum mitto speculatum tota urbe, ut, quid facerent homines, quum experrecti sint, me faceret certiorem: si quis melius operam sumeret, ut eius consilio potius uigilium adminicularem nostrum, quid uidit aliud curuantem extrema noctis tempori.

So Buecheler with the Leiden Ms., he conjectures however, qui ut uidit (or qui uidet) alium aliud curantem extremo noctis tempore. The Harleian, first hand, has, qui uidet alium curuantem, which strongly supports the conjecture, qui uidet alium aliud curantem.

CCxxxili. $13 . \quad$ Quae mihi
Ubi domum adueni, ac sedi, extemplo sauium
Dat ieiuna anima.
For ac sedi, the Harleian has adsedit altered to assedi, the Geneva adsedi, the Leiden atsedi altered to assedi; I would read adsedi, which is also given by Gellius II. 23. 13. (Hertz.)
ccxlviII. 1. Adolescere, crescere; unde olescere dicit Lucretius II.:

Donicum olescendi summum tetigere cacumen.
Laberius in Sororibus:
Laus nomini adolescit.
The Mss. have Adolescere, crescere: unde adulescentem dicimus (Montpellier), dicimi (Harl. ${ }^{1}$ ), dici (Leid. ${ }^{1}$ Gen. Bern.), dicit (Harl. ${ }^{2}$ Leid. ${ }^{2}$ ), Lucretius II.: Denique adulescendi summum tetigere cacumen.

Laus nomine agendi nomine gloria alescit (Harl. ${ }^{1}$ Gen.), Laus nomine gloria alescit (Leid. ${ }^{1}$ ), Laus nomine gloria adolescit (Harl. ${ }^{2}$ Leid. ${ }^{2}$ ).

Ribbeck reads Laus nomine gloria alescit.

I would suggest:
Alescere, crescere, unde adulescentem dicimus:
Lucretius II. :
Donec alescendi summum tetigere cacumen.
Laberius in Sororibus :
Laus nomine agendi nomine gloria alescit.
The longer form of the line should be right, as agendi nomine might easily be omitted after the preceding nomine, and it is difficult to see how these words could have been introduced.

Similar glosses occur, Paulus 5. 6, Adolescit a Graeco $\dot{a} \lambda \delta \dot{\eta} \sigma \kappa \omega$, id est accresco, venit. Unde funt adultus, adulescens, \&c. Festus 309. 19, Suboles ab olescendo, id est crescendo, ut adolescentes quoque, \&c.
ib. 14. Socius es hostibus [et cum] sociis ita bellum geris, ut bella omnia domum auferas.

The Mss. have Socis (Harl. ${ }^{1}$ Leid. ${ }^{1}$ Gen.), sociis (Leid. ${ }^{2}$ ), socius (Harl. ${ }^{2}$ ), es hostibus socius bellum ita, \&c.

Buecheler reads, Socius es hostibus, hostis sociis, for which I would suggest, Sociis es hostis, hostibus socius, bellum ita geris, \&c., which comes nearer to the Mss.
cclviil. 37. Sisenna Historiarum lib. III.: Simul et tormenta contenduntur.

The Mss. have Simul et armenia (Harl. Gen.), tormenia (Leid.).

I would suggest ammenta or admenta for armenia, and read, Simul et admenta contenduntur, cf. Verg. Aen. Ix. 665, where R. has armenta for ammenta.
cclxviir. 7. Quid dicis? cur est factum quod coniicis istuc?
Scaliger conjectured,
Quid dicis? cur est factum? quo coicis istud?
which should be right, as it is the first reading of the Harleian.
cCCviii. 18. Fingere est lingere, Lucil. lib. vimi.

For Lucil. lib. viri, the Mss. have Verg. lib. virir.

I would suggest that a passage from Vergil has fallen out, and propose to read,
Verg. lib. [viII. (634)
Mulcere alternos et corpora fingere lingua.
Lucil. lib.] viIII. \&c.
cCcxvi. 5. Errat anus sine diploide [atque] a recta grassatur uia.

The Mss. have, Errat anus (Harl. ${ }^{1}$ Gen. Bern.), Cretanus (Leid. Harl. ${ }^{2}$ ), sime deploida (Harl. ${ }^{1}$ Gen.), deploidi (Leid. Harl. ${ }^{2}$ ), deploide (Bern.), recta (Harl ${ }^{1}$. Leid. Gen. Bern.), a recta (Harl. ${ }^{2}$ ).

I would suggest,
Errabundus sine diploide a recta grassatur uia.
cccxxiil. 17.
Phrygiam mitiorem esse animo immani Graeciam.
The Mss. have frygiam miti more (Harl. ${ }^{1}$ Gen. Bern.), frygiam minore (Leid. Harl ${ }^{2}$ ), esse samimmani (Harl. ${ }^{1}$ Gen. ${ }^{2}$ ), esses amimani (Harl. ${ }^{2}$ Leid. Gen. ${ }^{1}$ ), greciam.

I would suggest,
Phrygiam mitiore more esse anima inmani Graeciam.
CCCxxviir. 5. Iactare, ambitiosius gloriari. Verg. lib. vi.
Quem iuxta sequitur iactantior Ancus
Nunc quoque iam nimium gaudens popularibus auris.
[Iactare, dicere] Verg. lib. x.
Ecce Paro uoces dum iactat inertes.
Instead of Verg. lib. x. the Mss. have after popularibus auris.
Item lib. IIII.
Ecce Paro, \&c.
Servius has the following remarks on iacto parallel to those in Nonius. Ecl. vi. 73, quo se plus iactet, in quo plus glorietur. Aen. I. 140, Iactet pro glorietur. Aen. I. 3, Iactatos aequore Troas, proprie locutus est; iactamur enim in fuctibus; fatigamur in terris.

Aen. I. 102, Iactante inaniter loquente ut alibi: Ecce Paro, \&c.

I would propose to read,
popularibus auris.
Item lib. XII. (II and X are constantly confused)
[Nec sese Aeneae iactauit uulnere quisquam.
Iactare, inaniter loqui. Verg. lib. x.]
Ecce Paro, \&c.
ib. 12. Iactare, iactu mittere.
Iactu was conjectured by Guyet and adopted by Quicherat It is actually read by the Montpellier Ms., and the Bern Ms. No. 347.
cccxxx. 31. Lucil. lib. xxviim.

All the Mss. have xxviri.
CCCXxxi. 4. Lucil. lib. xxviiif.
xxviil. (Harl. ${ }^{1}$ Leid. ${ }^{1}$ Gen. Bern.).
Mueller reads xxvini in both cases, but xxviir should apparently be restored, as it suits the usual order of the books of Lucilius followed by Nonius.
cccxlvii. 24. Sisenna Historiarum lib. niI. Mulierem missa fide ac pietate propter amoris nefarii lubidinem exstitisse.

For exstitisse, the Harleian, first hand, Berne, and Geneva Mss. have obstitisse, which may well be right.
cCCCV. 2. Lucil. lib. xvinir.
xviris. (Leid.), xxvimi. (Harl. Gen. Bern.).
xxvimi should be right, as it suits the order of the books of Lucilius followed by Nonius.
cccexxeimi. 14.
Iurentus et iuventa et iuuenilitas differunt. Iuventus iuvenes, iuuenta aetas ipsa Verg. Georg. lib. II. Interea superat gregibus cum laeta iuuentas.

The Harl., first hand, has laeta iuuenta, which should be right, as it corresponds to the iuuenta above,
389. 2 however the Mss. have

Praeterea superat gregibus cum laeta iunentus.
ccccxlit. 1. Matronae et matrisfamiliae dissimilitudinem, \&c. At haec fidelis: Matronam locupletioris quae in matrimonio sit mariti etiam ante susceptos liberos dictam meliore tamen matris futurae spe et omine nuncupatam.

The Mss. have, ad haec fidelis locupletiores...matris futura (or futurae) spe m.t. nomine nuncupatam.

Gellius xvim. 6. 7, says, Matronam dictam esse proprie, quae in matrimonium cum uiro convenisset, quoad in eo matrimonio maneret, etiamsi liberi nondum nati forent, dictamque ita esse a matris nomine, non adepto iam, sed cum spe et omine mox adipiscendo. Serv. Aen. xI. 476, Matronam dici quae in matrimonium cum uiro conuenerit, et in eo matrimonio manserit, etiamsi liberi nondum fuerint; dictam matris nomine, spe atque omine.

I would read, Ad haec fidelius locupletiores: Matronam quae in matrimonio sit mariti etiam ante susceptos liberos dictam; meliore tamen matris futurae spe, matris nomine nuncupatam.
ccccxliv. 12. Pernicitatem et uelocitatem Cicero discreuit, Tusc. lib. v. Praestans ualetudine, uiribus, forma, acerrimis integerrimisque sensibus: adde etiam si libet pernicitatem [et uelocitatem]. Et Verg. Georg. hoc sensit:

Dura iacet pernix instrato saxa cubili.
Ut illud sit celeritatis hoc patientissimae fortitudinis.
The Mss. have Pernicitatem et praestantiam Cicero discreuit (Harl. Par. 7667), Pernicitatem Cicero discreuit (Leid. Montpellier, Par. 7665).

The Montpellier Ms. and Par. 7665 omit all after si libet pernicitatem.

It seems clear that we should read Pernicitatem et uelocitatem Cicero discreuit, Tusc. lib. v. Praestans ualetudine, uiribus,
forma, acerrimis integerrimisque sensibus: adde etiam, si libet, pernicitatem et uelocitatem.

The remainder of the passage should apparently be omitted, having been borrowed from 368. 16, where we read,

Pernix, significat celer, Verg. \&c.
Pernix, perseuerans. Verg. Georg. II.
Et inter
Dura iacet pernix instrato saxa cubili.
First et uelocitatem disappeared, then this second passage was introduced to illustrate the second meaning of pernix.

CCCCXLVI. 19. Niti [eniti], inniti, et obniti, cum ex uno sit intellectu, acceptis tamen praepositionibus fit diuersum. Niti enim [est conari, eniti] potest uideri ad aliquam gratiam, aut honorem, aut utilitatem aerumnoso tendere sine labore; quamquam in aliquibus grauius audiatur, ut sint enixae pariendi labore defunctae. Inniti autem incumbere manifestum est. Verg. lib. vi.:

## Ille uides pura iuuenis qui nititur hasta.

The Mss. have Niti inniti et obniti (Harl. ${ }^{1}$ Par. 7667), Niti et obniti (Harl. ${ }^{2}$ Leid. Par. 7665)....Eniti enim potest uideri (Harl. ${ }^{1}$ Par. 7667). Niti enim (Harl. ${ }^{2}$ Leid.)...qui innititur hasta (Harl. ${ }^{1}$ Par. 7667). Nititur (Harl. ${ }^{2}$ Leid.).

I would read
Eniti, inniti et obniti cum ex uno sit intellectu acceptis tamen praepositionibus fit diuersum. Eniti enim...Inniti autem... Verg. lib. vi.

Ille uides pura iurenis qui innititur hasta.
353. 14, however all the Mss. have

Ille uides pura iuuenis qui nititur hasta.
CCCClxxiil. 1. Labascor pro lab[asc]o, Attius :
Nullum est ingenium tantum, neque cor tam ferum
Quod non labascat lingua, mitescat malo.

So Ribbeck. For labascat, the Montpellier, Par. 7665, and Bamberg Mss. have labescat, the others labascatur. For lingua Par. 7665 has linga, from which I would suggest, Quod non labascat longo ac mitescat malo.

## CCCClXxviI. 4. Pacurius Periboea:

Mane expedibo: fac tu mihi contra quod rogo respondeas.
The Harl., first hand, reads fac mihi contra, omitting tu, which should be right as it makes an iambic octonarius.

CCCCLXXXI. 30.
Dic quo pacto eum potiti: pugna[ne] an dolis?
The Harleian, first hand, has pugnandolis.
I would suggest,
Dic quo pacto eum potiti; pugnando an dolis?
CCCCLXxxviI. 16. Sed peruico Aiax animo atque inorabili.
The Harleian, first hand, with the Bamberg and two Paris Mss. has aduorabili.
I would read,
Sed peruico Aiax animo atque haud orabili.
Ribbeck reads aduorsabili.
Dxxiv. 20.

Non uides quam turbam quosue fluctus concites.
The Mss. have quantos uel fluctus, Ribbeck quantos belli.
I would suggest,
Non uides quam turbam quantos irae fluctus concites?
irae, or ire, as it is usually written, would very easily be corrupted to $u e$ or uel, and seems to be exactly the sense required by the passage.
dxxxiv. 27. Prores, actuariae, tragi grandes ac phaseli primo.

For Prores, I would read parones; cf. Gell. x. 25, 5, parones, myoparones, lintres, \&c. Isid. Orig. xIx. 1. 20, Paro nauigium piratarum usui aptum. For grandes the Harl. and Par. Mss. have gantes. Is it possible that lintres should be read?

Serv. Aen. I. 18.
Hoc regnum dea gentibus esse
Si qua fata sinant iam tum tenditque fouetque.
Commentators generally explain this passage as if the infinitive esse depended on tendit, comparing Aen. II. 220, Ille simul manibus tendit divellere nodos. It is however scarcely necessary to point out that there is a wide difference between ille tendit diuellere and dea tendit hoc esse. Servius says, figurate dixit, non enim iam regnum fouet, sed tendit et fouet ut regnum ésse possit, et bene tendit tanquam contra uerum. For uerum, which is clearly corrupt, Venerem, uetitum and fatum have been proposed, all of which are unsatisfactory in sense and somewhat wide of the Mss. I would suggest uirum, of which uerum is a constant corruption, supposing the meaning to be, holds out, as a mother holds out her baby to her husband, cf. Aen. II. 674 paruomque patri tendebat Iulum. Then si qua possit esse will mean, in the hope that it may be, as Servius says, ut regnum esse possit.

Petronius 43. Aetatem bene ferebat, niger tanquam coruus. Noui hominem olim oliorum et adhuc salax erat. Mr Ellis's suggestion olorium I cannot believe to be right, as it seems to be contradicted by the niger tanquam coruus immediately above. Mulierosum and molliorem have been proposed and the sense seems to require something of the kind. I would suggest molitorem which is nearer the Mss. cf. Ausonius Epigram, 90.3 molitor tuus.

Plautus Most. 142. Tigna umida haec nutant. So Ussing, the Mss. have putant, Ritschl putent. I would suggest putrent, which is supported by tigna putrefacit, Most. 109. Compare also Nonius 159. 22, where he quotes corpus annis putret from Attius and Pacuvius.

J. H. ONIONS.

THE NUPTIAL NUMBER. PLATO REP. VIII. p. 246.












The context of this passage is to the following effect. "How will our state be shaken," says Socrates, "how will our aristocracy degenerate into a timocracy? Let us get the Muses to answer. They will tell us, with playful pomposity, that all creatures, animal and vegetable, have cyclical periods of fertility and sterility. So has man." (Here follow the words above quoted.) "But our governors, not understanding the number of the human period, will arrange unseasonable weddings, which will produce inferior offspring. The deterioration of the race will lead to divisions among the people and thus the constitution will be overthrown." The original is not less vague than this paraphrase upon the mode in which the period in question affects mankind. It is a cycle which, for all we are told about it, may be completed once or many times in the life of each individual or once in many generations or once in the whole
duration of the human race ${ }^{1}$. In considering therefore the description of the number which represents it, there is little reason to reject this or that interpretation as intrinsically imsrobable. Any translation, which does not violate the ordinary rules of Greek syntax and give to the words unwarranted meanings, is ipso facto impregnable. It is because I think the translations, hitherto suggested, do more or less flagrantly offend in these points ${ }^{2}$, that I propose to offer a new rendering and add one more pamphlet to the immense literature which the passage has already provoked.

The words, which I have cited in Greek at the head of this article, describe a number, or two numbers, in terms which; so early as the time of Cicero (see ad Att. viI. 13. 5), were proverbial for their obscurity. Later writers frequently allude to them as if they understood them, and profess to find in them illustrations of this or that law (e.g. Nicomachus Ger. Introd. Arithm. II. 24.6 and Iamblichus Ad Nicom. Arithm. ed. Tennulius, pp. 115-117), but nobody gives the actual number or numbers or any real clue to the explanation of the whole passage. A tradition, however, remained that Plato was here, in some way, using the numbers 3. 4. 5. which Pythagoras had selected as typical of the sides and hypotenuse of a right-angled triangle, since $3^{2}+4^{2}=5^{2}$ (cf. Eucl. I. 47). Aristides Quintilianus (De Musica III. p. 152), Plutarch (De Isi et Os. c. 56) and Proclus (Comm. in Eucl. I. 47, p. 428, ed. Friedlein) all state this as an acknowledged fact, and this is really the only direct assistance which any ancient writer, except Aristotle, gives us towards interpreting the words. It is observable that in the Pythagorean symbolism 5 represented marriage, being the sum of the first odd and even numbers, (Alex. Aphrod. in Ar. Met. I. $5,985 \mathrm{~b}, 26$ ) and that it is an ordinary canon that the age of the husband should be to that of the wife about $4: 3$.

[^14]${ }^{2}$ Ipse peccavi. In the Academy (No. 522) I proposed the number 3600 , which is desirable enough in itself, but can be got out of the second part of the passage only by a tricky and unscholarly translation of the words ย̇vòs... $\delta v \epsilon$ î̀.

Some such analogy may have occurred to Plato (ef. Legg. vi. 785 в) but the point need not be pressed.

It will be conceded that, of all the people who have read our passage, Aristotle had the best chance of understanding it. And he quotes part of it (Pol. v. 12, 8), I think, as if he did understand it perfectly well. Socrates, he says, gives a reason for the decay of his ideal political constitution, alleging that the



 this explanation as being no more applicable to the decay of one constitution than another, etc. It is plain that Aristotle, when he
 figure, and not a line, and that this figure was sufficiently indicated by the words $\dot{\epsilon} \pi i \tau \rho \iota \tau o s ~ \pi v \theta \mu \eta ̀ \nu \pi \epsilon \mu \pi a ́ \delta \iota \sigma \nu \zeta \nu \gamma \epsilon i{ }^{1}{ }^{1}$. Also, from
 presented a plane figure, and that it gave one number which was to be cubed or three numbers which were to be multiplied together, since a $\sigma \tau \epsilon \rho \epsilon \grave{s}$ ápı $\theta \mu$ ós must contain three factors (Eucl. vir. Def. 17). The latter supposition is the more probable, since one number would hardly be represented in the first instance by a diagram but by a line ( $\mu \hat{\eta} \kappa о \varsigma$ ). Again, $\sigma \tau \epsilon-$ $\rho \epsilon$ ós seems to be equivalent to and explanatory of $\tau \rho i s a v j \xi \eta \theta \epsilon i$ 's (cf. Plato, Rep. vir. 528 в). Lastly, it is noticeable that Aristotle does not quote the first part of the passage in Plato, and we may therefore presume that the second part is capable of independent treatment.

Let us turn now to Plato and to this second part of our quotation, from $\mathfrak{\omega}^{\nu} \dot{\varepsilon} \dot{\epsilon} \pi i \tau \rho \iota \tau o s ~ t o ~ t h e ~ e n d . ~ H e r e ~ P l a t o ~ s p e a k s ~ o f ~ a ~$
 $\tau \eta े \nu \delta$ è $i \sigma o \mu \eta \dot{\prime} \kappa \eta \epsilon \in \nu \tau \hat{\eta}, \pi \rho \circ \mu \eta \eta^{\prime} \kappa \eta \delta_{\epsilon}$. The ordinary rendering ${ }^{2}$ takes éкатò̀ тобаита́кıs to mean $100 \times 100$ : éкатò̀ $\mu$ è̀ ápı $\theta$ -

[^15]Susemihl, Genet. Entw. II. 219 sqq.: Zeller Ph. Gr. ir. ${ }^{2}$ p. 546, Weber, De Numero Platonis, 1862: Rothlauf, Mathem. zu Plato's Zeit. 1867 and Mr D. B. Monro in this Journal Vol. viII. p. 275.
 2700. But, if this be correct, we have two harmonies, explained by three numbers. And these three numbers, moreover, are described by singularly incongruous methods. The Greek arithmetical nomenclature, with its $\mu \dot{\eta} \kappa \eta$, è $\pi i \pi \tau \epsilon \delta o \iota, \tau \epsilon \tau \rho a ́ \gamma \omega \nu o \iota$, $\pi \rho о \mu \dot{\eta} \kappa \epsilon \iota \varsigma$, $\dot{\epsilon} \tau \epsilon \rho о \mu \dot{\eta} \kappa \epsilon \iota \varsigma$ and $\sigma \tau \epsilon \rho \epsilon о \grave{c} \dot{a} \rho \iota \theta \mu \circ \dot{\prime}$, was founded not on mere analogy, but on positive description of customary arithmetical symbols, as anyone may see who will look at Books viI.-x. of Euclid. It seems to me therefore in the highest degree improbable that Plato would have divided any number into a hundred cubes and an oblong of 100 by $48^{2}$ or would have compared any number partly composed of a hundred cubes with another composed of only two factors. Two numbers, so described, would always to a pure mathematician ${ }^{8}$ have been entirely different in kind. Lastly, I believe, no instance can be found in Greek literature in which the sum or product of two numbers only is, without further explanation, described as a $\dot{\alpha} \rho \mu o \nu i a$. If each of the numbers added or multiplied is a áp $\mu$ ovía, so is the sum or product, but in our case there are, ex hypothesi, only
 usage, implies always some relation between not less than three numbers (cf. Nicomachus, Theol. Arith. p. 47). It may mean a proportion, but it can hardly bear this sense in our passage for it is described as $\ddot{\text { íन }} \boldsymbol{i}$ íćcкıs. It may also mean a cube or regu-

[^16]sqq. shows that Plato may very well have prosecuted an inquiry into the approximate rational value of $5 \sqrt{ } 2$ and similar surds.
${ }^{2}$ In such a case the word éxaròv would bear two meanings, viz. 'the number 100 ' and ' 100 inches' (or whatever the unit of length might be).
${ }^{3}$ I say pure mathematician because Heron, who expressly disclaims that title, does add areas to lines (e. g. Geom. 101. 7-9, p. 133, ed. Hultsch.). See Canton's Vorles. über Gesch. der Math. p. 341. It is to be observed that Plato afterwards calls the number $\gamma \in \omega \mu \epsilon \tau \rho \mathrm{c}$ кós, so that he is likely to have been strict in his geometrical nomenclature.
lar figure of three dimensions, and for this sense we have authority as old as Philolaus. Nicomachus (Introd. Ar. II. 26, 2, and 29,1 , pp. 135 and 145 of Hoche's ed.) says that some mathematicians think that harmonic proportion is so-called, $\dot{\alpha} \kappa о \lambda o v i \theta \omega \varsigma ~ \Phi \iota \lambda o \lambda \alpha \dot{\alpha} \varphi$, because it accompanies every $\gamma \epsilon \omega \mu \epsilon \tau \rho \iota \kappa \eta$

 passage first cited, he states that the best of ápuoviat is катà $\tau \grave{\nu} \nu \lambda$ é ${ }^{i} \rho ı \theta \mu \dot{\prime} \nu$, because 35 is (among other things) $2^{3}+3^{3}$, and
 a $\rho \mu o v i a$ for the same reason. It is in this sense only, as I think, that a áp ${ }^{2}$ or $i \sigma o \mu \eta^{\prime} \kappa \eta s \mu \dot{\epsilon} \nu, \pi \rho \sigma \mu \eta^{\prime} \kappa \eta s \delta \epsilon^{\prime}$. With the first epithet it means a cube, with the second a parallelepiped ( $\pi \lambda \iota \nu \theta$ is or $\delta o \kappa i$ is according to Theon, ed. Hiller, p. 41 and Nicomachus Introd. Arithm. II. 29, 1 and 2).

Now 48 is $3 \times 4 \times 4$, and is therefore a áp $\rho o \nu i$ ia i $\sigma o \mu \eta \dot{\eta} \kappa \eta$ s $\mu$ èv $\tau \hat{\eta}, \pi \rho o \mu \eta \dot{\eta} \kappa \eta \varsigma \delta \bar{\epsilon}$, that is, square in some faces ${ }^{3}$, and oblong in others ( $\tau \hat{\eta}$ being taken in its ordinary sense). A cube of 3 (27) is a á $\rho \mu о \nu i ́ a ~ ' ̌ \sigma \eta ~ i \sigma a ́ c \iota s$, and these two, I take it, are the apmovià of which Plato speaks. But there is a kind of chiasmus between the four consecutive clauses; $\tau \grave{\eta} \nu \mu \grave{\nu} \nu$ lै $\sigma \eta \nu$ íवáкıs, éкато̀̀ тобаута́кıs ${ }^{4}$ is explained by the fourth clause,
 by $\dot{\epsilon} \kappa a \tau \grave{\partial} \nu \mu \grave{\varepsilon} \nu \ldots \delta v \in i ̂ \nu$ of the third clause. This passage simply refers to "two sorts of rectangular solids, the one cubes, taken

[^17]${ }^{3}$ I am not sure that lбони́күs occurs in the sense of 'square,' but I rely on the analogy of $\dot{\varepsilon} \tau \epsilon \rho о \mu \dot{\eta} \kappa \eta s, \pi \rho о \mu \dot{\eta} \kappa \eta s$. If I am pinned to the meaning " of equal length with," then clearly $3 \times 4 \times 4$ is lбо $\boldsymbol{\eta}^{\prime} \kappa \eta$, i.e. has one factor the same, with $3 \times 3 \times 3$. The word is extremely uncommon.

4 The words є́кaтò̀ тобavт $\dot{\alpha} \kappa เ$, meaning 'taken a hundred times,' are added here because the explanation is a long way off. They are not necessary after the next clause of which the explanstion follows immediately.
a hundred times, the other parallelepipeds, $100 \times 48$, and $100 \times 27$."

The whole number is therefore 7500 , which is $15 \times 20 \times 25$. Here, I think, we have the clue to the meaning of è $\pi i \tau \rho \iota \tau o s$ $\pi v \theta \mu \eta े \nu \quad \pi \epsilon \mu \pi a ́ \delta \iota \quad \sigma v \zeta u \gamma \epsilon i s$ т $\quad i \stackrel{s}{ } \quad a v j \xi \eta \theta \epsilon i ́ s$ and to Aristotle's comment on these words. The most common mathematical use of $\pi v \theta \mu \eta \nu \nu$ is in the sense of 'type,' 'simplest form,' 'lowest terms,' or something analogous to these ${ }^{1}$. Thus, according to Theon (De Musica, c. 29, p. 80 of Hiller's ed.) the ratio 3;4 is the $\pi v \theta \mu \eta \nu$ of the ratio $6: 8,12: 16$, etc. Similarly Apollonius of Perga, for the purpose of his new system of multiplication which Pappus (Bk. II) describes, used to call 7 the $\pi v \theta \mu \eta \nu$ of $70,700,7000$, etc., and 5 of $50,500,5000$, etc. (cf. $\pi v \theta \mu \in \nu \epsilon \hat{\nu} \nu$, $\pi v \theta \mu \in \nu \iota \kappa \omega \bar{s})$. If then we make use of the tradition that Plato's number was in some way founded on the right-angled triangle of which the sides are $3,4,5$, $\dot{\epsilon} \pi i \tau \rho \iota \tau o s ~ \pi v \theta \mu \eta \dot{\nu} \nu$ may very well mean that 'simplest form' of the triangle in which the sides containing the right-angle are $4: 3$. Multiply these by 5 ( $\pi \epsilon \mu \pi a ́ \delta \iota \sigma v \zeta u \gamma \epsilon i \varsigma$ ) and the sides of the triangle are 15, 20, 25, and these numbers multiplied together ( $\tau \rho i s$ àj $\xi \eta \theta \in i s$ or $\sigma \tau \epsilon \rho \epsilon$ ós) give 7500, which lends itself to the two harmonies taken a hundred times, as before explained ${ }^{2}$.
${ }^{1}$ Nicomachus uses $\pi v \theta \mu \eta \nu$ of 'a
term' in a geometrical progression
(ir. 19. 3).
2 The remarks with which I began
this article will, I think, be justified by
the comparison of my interpretation
with Weber's, which has hitherto been
the most approved and is adopted, not
without misgiving, by Zeller, Rothlauf
and Mr D. B. Monro. The last writer
gives an excellent series of references
to ancient mathematicians and some
very proper criticisms on Weber's and
other interpretations. Weber takes the
two ajpuovlac to be 10,000 and 7500 ,
and conceives them to be the sums of
the first and third, second and fourth
terms respectively, in the series 6400 ,
4800, 3600,2700 . These numbers are
obtained in this way. The éritpltos $\pi v \theta \mu \dot{\eta} \nu \pi \epsilon \mu \pi \alpha \dot{\delta} \iota \sigma v \zeta \nu \gamma \epsilon$ is is $(4 \times 5)$ and ( $3 \times 5$ ). These, each multiplied by $3,4,5$ give the two series $60,80,100$ and $45,60,75$. Square the terms of the first series and we get $3600+6400$ $=10,000$. Multiply the terms of the first series by the corresponding terms of the second, and we get $2700+4800=$ 7500. To put it shortly, he treats $\dot{a} \rho \mu o \nu i a$ as if it could mean the sum of two numbers: he takes $\tau \rho l s a v \xi \eta \theta \epsilon i s$ to mean 'multiplied by three numbers' which numbers he chooses arbitrarily, he ignores Aristotle and he inserts an operation which is not described in the second part of the passage at all. Zeller then identifies 10,000 with the $\theta \epsilon i \alpha \pi \epsilon \rho i o \delta o s$ and 7500 with the $\alpha \nu \theta \rho \omega$ -

The word $\dot{\omega} \nu$ with which the second part of the passage begins, shews clearly that there is some connexion between the two parts of the whole. The number in the first part is repeated with a more definite description, or has its analogue or its necessary consequence, in the number of the second part. Unfortunately, for this first part, we have no Aristotle to help us and Plato's words are chosen with the most deliberate intent to puzzle the reader.

Alexander Aphrodisiensis (In Ar. Metaph. p. 56, of Bonitz's ed. 1847, p. 35 of ed. 1837) says that $\delta v \nu a \mu$ év $\eta$ means the hypotenuse, $\delta v v a \sigma \tau \epsilon v o ́ \mu \epsilon v a \iota ~ t h e ~ s i d e s, ~ o f ~ a ~ r i g h t-~$ angled triangle ${ }^{1}$. $a v ̌ \xi \eta \sigma \iota s$ seems to mean 'a multiplication,' like $a ข ้ \xi \eta$ (Rep. viI. 528 B), but it may no doubt mean ' addition,' and in either case à̉ $\bar{\eta} \sigma \epsilon \iota \varsigma ~ \delta v \nu \dot{\mu} \mu \epsilon \nu a i$ тє каì $\delta v \nu a \sigma \tau \epsilon v o ́ \mu \epsilon \nu a \iota$ may mean the hypotenuse and sides multiplied together, or multiplied by some other number or numbers, or added together, or (if we disregard Alexander's statement) multiples which are squares and roots, or additions of squares and roots, or squares and roots multiplied together. A very large field of conjecture is thus opened by the very first words of the passage. $\dot{a} \pi \dot{\sigma} \sigma \tau a \sigma \iota$ in Plato once (Tim. p. 43 D ) means the intervals between the terms of a geometrical progression (cf. also Rep. 587 D) but it is also used with no mathematical application (Phaedr. p. 111 в).
"opot is certainly a very common expression for the terms of a progression or proportion (e. g. Rep. p. 443 D, and Theon or Nicomachus passim) but this word again has generally no special mathematical application. ó $\mu o \iota o \hat{v} \imath^{\prime}, \dot{a} \nu o \mu o \iota o \hat{\nu} \nu, a i ँ \xi \epsilon \iota \nu, \phi \theta_{i}^{\prime}-$ $\nu \in \iota \nu$ are also words which have no regular technical meaning,
$\pi e l a$, although he thinks Aristotle understood the passage very well.
${ }^{1}$ ठovaбтєvó $\mu \in \nu a \iota$ (cf. Proclus in Eucl. p. 8, ed. Friedlein) seems to be intended for a passive participle, of which $\delta v$ $\nu a \mu \epsilon \nu \eta$ represents the active. If this be so, the only intelligible sense to be attached to the words is 'equalled' and 'equalling.' The latter is, of course, a very common and ancient
sense of $\delta$ vvapévŋ. óvivaus in its mathematical meaning of 'square' is not older than Hippocrates of Chios (Eudemi fragm. pp.123-9 ed. Spengel):
 were, in the senses which I attribute to them, ancient names for the hypotenuse and sides or for their squares, we get here an intelligible origin for the meaning of סóvaucs.
but it appears from Iamblichus (ad Nicom. p. 115) that " $\mu$ oto $\dot{a} \rho \iota \theta \mu o i$ are squares and à $\nu_{o ́ \mu o \iota o \iota ~ a r e ~ o b l o n g s ~}{ }^{1}$. We may make, from this, various inferences as to what Plato meant by 'numbers which make like' or 'unlike,' but there was certainly a definite Pythagorean theory that the numbers which produce squares were the odd numbers (e.g. $1+3=4$ : $4+5=9: 9+7=16$, etc.) and that even numbers produced єं $\tau \kappa \rho о \mu \eta_{\kappa}^{\prime} \epsilon \iota \varsigma$ (e.g. $2+4=6=2 \times 3: 6+6=12=4 \times 3$ etc. $)^{2}$. $\dot{\delta} \mu o \iota o \hat{\nu} \nu \tau \epsilon$; and à àouolov̂עtes $\dot{a} \rho \iota \theta \mu o i$ may therefore mean 'odd' and 'even,' but there is no clue whatever to the meaning of aügovtes or $\phi$ Өivovtes. These words should bear some such sense as 'multiplying and dividing,' 'adding and subtracting,' 'greater and less,' but they may be only synonyms
 $\tau \omega \nu$, etc. may depend either on üpous (Rep. p. 443 D ) or on $\pi a ́ \nu \tau a$. It will be seen that the vagueness of the passage, both in the words used and in the syntax, is such that no interpretation of it can claim to be certain. We can say only that that interpretation is to be preferred which (1) gives to $\dot{a} \pi \sigma \sigma \tau \dot{\sigma} \sigma \epsilon \iota \varsigma$ and ópoı senses in which they are known to have been employed by Plato, (2) makes some use of the tradition about the right-angled triangle before-mentioned, (3) finds
 ó $\mu o \iota o v ́ \nu \tau \omega \nu$ etc., and (4) provides some materials for connecting this first part of the whole passage with the second, beginning $\mathscr{\omega}^{\nu}$ є̇ $\pi i \tau \rho \iota \tau о \varsigma, \kappa . \tau . \lambda$.

The fourth of these requisites is generally supplied by assuming that the numbers in the two parts are identical (e.g. Weber, Zeller, Monro). This sometimes leads to very violent interpretations of the second part, as in Schneider's case, who selected $216\left(3^{3}+4^{3}+5^{3}=216=6^{3}\right)^{3}$ as the number of both parts. (See the Preface to the 3rd Vol. of Schneider's Plato, Berlin, 1833, where also all the earlier interpretations are collected and discussed.) It may lead, on the other hand,

[^18][^19](as in Weber's case) to some rough treatment of the first part, especially in the word $\lambda a \beta o \hat{v} \sigma a \iota$, as I shall shew presently. The probability, however, is, I think, that the numbers of the two parts are not identical. Thus Aristotle quotes the second part only: the word $\omega \nu$ implies only that the materials of the second part are contained in the first part: the preciseness of
 imply a new operation with those materials, and lastly $\pi v \theta \mu \eta \nu$, if it is to bear the sense of 'simplest form,' which every commentator gives to it, implies that more complicated forms have preceded it. Hence some writers have recently interpreted the passage on the assumption that there are two numbers in question. Thus MM. Vincent (Journal de l'Institut. Septr. 1839), and Martin (Révue Archéol. xirio Année) select 216 for the first and 864 for the second. M. Dupuis (Le Nombre Géom. de Platon. 2de Interpr. Paris, 1882) chooses 40 and 760,000 . A patent objection to Vincent's interpretation is that the second number is clearly some multiple of 100 , and to Dupuis that it is clearly not more than 17,500 , and one or other of these objections applies to the commentators who, identifying the two numbers, select $1728,8128,729,5040$ (see Schneider's Introd. before cited), or 46,655 (Schleiermacher), or 216,000 (Hultsch). But to such interpreters of the first part as select $50\left(3^{2}+4^{2}+5^{2}\right)^{1}$, or $60(3 \times 4 \times 5)$, or 216 $\left(3^{3}+4^{3}+5^{3}\right)$, or to Weber's series of $6400,4800,3600,2700$, formed by multiples of different powers of $3,4,5$, I can only object that they force the meaning of тétтapas öpous by including, as the fourth 'term' of their series, the sum of the three legitimate "opo, or that they do not attach a proper sense to $\lambda a \beta o v \sigma a \iota$, or that they supply no occasion for the subsequent use of $\pi v \theta \mu \eta \nu$. I ought not, I suppose, to abandon the subject at this point without myself suggesting some interpretation of the first part of the passage. I shall, therefore, give one, though not with anything like the same confidence which I feel about the meaning of the second part.

[^20]The word $\lambda a \beta o v ̂ \sigma a t$, in my opinion, does not mean ' admitting,' or 'capable of,' or 'assuming the form of,' which is the sense attached to it by those commentators (e. g. Weber
 as the description of the whole number, divide this into four appropriate parts. In that sense, I think Plato would have used $\pi a \rho \in \chi$ о́ $\mu \in \nu a \iota$ or some other middle form. I prefer therefore to treat the words $\tau \rho \in i ̂ \varsigma ~ a ́ \pi o \sigma \tau \dot{\sigma} \sigma \epsilon \iota \varsigma ~ \tau e ́ \tau \tau a \rho a s ~ \delta e ̀ ~ " o p o u s ~$ $\lambda a \beta o v \sigma a \iota$ as descriptive of some part of the operation by which the number is found in the first instance.

Now $3 \times 4 \times 5=60: 6 \times 8 \times 10=480: 9 \times 12 \times 15=1620$ : $12 \times 16 \times 20=3840$ : and the sum of these four totals is 6000 , which is $100 \times(3 \times 4 \times 5)^{1}$. In other words, take a right-angled triangle whose sides are $3,4,5$, and multiply the sides together: double them and multiply again: treble them and multiply again: quadruple them and multiply again: the sum total of the four products so produced is a hundred figures of the original pattern ${ }^{2}$. But quintuple the sides and multiply them and the result is a hundred figures of one pattern and a hundred of another, both different from the original. In this way, I think, a valid translation is found for the first part of the passage, and some point is given to the word $\pi \nu \theta \mu \dot{\eta} \nu$ and the selection of $\dot{\epsilon} \kappa a \tau o ́ \nu$ as the number of ápuoviá in the second. The method of procedure also is closely akin to those which Plato elsewhere employs, and deals only with those simple numbers to which we know the Pythagoreans attached so much virtue.

The translation which I propose for the whole passage would run somewhat as follows:-"A divine offspring has a period which is covered by a perfect number ${ }^{3}$, but a human offspring has one in which, taking the simplest case ( $\left.\pi \rho \omega^{\prime} \tau \omega\right)$ ),

[^21][^22]products of the hypotenuse and sides, multiplied, at three intervals, by four terms, odd and even, greater and less, produce a total of figures all similar and rational to one another. But the 4 -by- 3 type of these, when multiplied by 5 and raised to the solid form, lends itself to two rectangular solid arrangements, the one cubes, taken a hundred times, the other parallelepipeds, partly square and partly oblong, viz. 100 of the squares of the rational diagonal of 5 , minus 1 each, or of the irrational, minus 2 , and 100 cubes of 3 . The whole geometrical number $(13,500)$ controls the produce of better or inferior progeny."

If I am.asked seriously to what facts in life these multiples correspond, I hardly know how to make a serious answer. It is not an uncommon observation that respectable families often contain a black sheep. You may marry honest people four times and get an honest offspring, like their parents, but the fifth time they may produce a rascal. A good stock may keep up its character for four generations and break down in the fifth. A man and woman whose ages are respectively $40(=4 \times(1+2+3+4))$ and $30(=3 \times(1+2+3+4))$ are likely to beget the best kind of children. Add 20 to the man's age and 15 to the woman's and the offspring is likely to be inferior. These thoughts or one of them, or something like them may have been passing in Plato's mind and he chose to put them in the form of a mathematical puzzle. He says expressly that the Muses, when they give us this answer, are
 $\lambda o v ̂ \sigma a \iota ~ v \psi \eta \lambda \lambda_{0} \lambda_{o \gamma o v}^{\mu} \epsilon \nu a \iota$. And when Plato is in the mind for a mathematical joke, he is not to be taken too strictly $a u$ pied de la lettre. The singular witticism in Politicus (266 A B) about $\delta i \pi \pi o v s ~ \delta u ́ v a \mu \iota \varsigma$, which is thought worthy $\tau \hat{\omega} \nu \pi \rho o ̀ s ~ \gamma^{\prime} \lambda \omega \tau a$ $\epsilon \cup \dot{\delta} \delta \kappa \iota \mu \eta \sigma \dot{\alpha} \nu \tau \omega \nu$ ä $\nu$, and the remarkable process by which, in Rep. ix. 587 De, the pleasure of the tyrant is found to be to the king's as 1:729, and the gravity with which Socrates

[^23]maintains that this ratio is $\dot{a} \lambda \eta \theta \dot{\eta} s \kappa a i ̀ \pi \rho о \sigma \eta \dot{\eta} \kappa \omega \nu \gamma \in$ Bioıs, as much as nights and days-these instances, which are easily intelligible, should prevent us from endeavouring to find, in the marriage number, any very definite analogy to the laws, or supposed laws, of procreation in the human species. I have looked through Hippocrates and Aristotle without finding any statement which could serve as a basis for the interpretation of Plato's puzzle.

JAMES GOW.

## NOTES UPON THE POETIOS OF ARISTOTLE.





Spengel thought that the text would stand without alteration if only a comma were placed after $\chi \rho \omega \mu \dot{\prime} \nu \eta$, "or using one single kind of metre, and up to the present time it employs metre." An obvious objection to this arrangement is that by expressing himself so Aristotle would be excluding the very class of writings which he wishes to include under the name, the dramatic prose of Sophron and Plato. Again he would be saying that though Epic had as yet been written only in verse it might come in the future to be written in prose, which cannot be his intention. The existence of a lacuna before тvyðávovoa is now very generally admitted, and the prevailing tendency seems to be to fill it up with Bernays' conjecture àvळ́vvuos. Nothing could be more unlike Aristotle's precision than such a sentence as this, "Epic imitates in Prose or in Metre, and in a medley of Metres or in a single Metre, and has as yet no name." First he gives the name and then declares the name does not exist. If Bernays' conjecture is right it leads inevitably to the further emendation of Ueberweg who proposes to strike out the word $\epsilon$ єоттоוía as an interpolation. But then how could Aristotle possibly have omitted the mention of Epic here? Nevertheless Bernays seems to be right to this extent at least that the gap must have contained some explanation of or apology for the way in which the "name" є̇тотоьía is here employed. I would suggest $\omega$ s $\dot{\eta}$
 with that which has hitherto monopolised the name."


 $\dot{v} \pi \epsilon \in \delta \epsilon \iota \xi \in \nu$.

The words bracketed are certainly interpolated. The second ӧть cannot stand, as Paccius, Tyrwhitt and Bonitz perceived. The apparent sense again after this intruder has been thrust out, would surely require $\delta р a \mu a \tau \iota \kappa \grave{\alpha} s ~ \tau a ̀ s ~ \mu \iota \mu \eta \dot{\eta} \epsilon \iota \varsigma$, I say the apparent sense, because in reality the words have surely no sense at all. "As Homer was a consummate poet in noble themes for-he wrote not only well but dramatically." How can Aristotle here have cited the dramatic power of Homer to prove his excellence in noble or Tragic, as opposed to Comic, subjects? The dramatic power is equally applicable to both. The words are merely a marginal note suggested by an untimely recollection of Chapter 23.

 Ó́aт $\rho a$, ä $\lambda \lambda o s ~ \lambda o ́ y o s . ~$

Doucas ingeniously corrected $\epsilon i$ à $\rho \rho^{\prime}$ é $\not \subset \in \iota$ for $\pi a \rho \in ́ \chi \not \subset \iota$ and it was pointed out in the Journal of Philology Vol. V. that the enigmatical крірєтаь $\hat{\eta}$ vaí stands for крìєтаь $\hat{\eta} \kappa \rho i ̀ \nu a \iota$. This might mean either that the scribe found in his ms. крiveтaı and suggested крivaı as a better reading, or that he could decipher only the letters $\kappa \rho \iota \nu$ or perhaps $\kappa \rho \iota \nu \ldots \iota$, and could only guess what the original word had been. In any case the support of the ms. cannot be alleged without qualification for $\kappa \rho i ̂ \nu a \iota$, while крìєтає is manifestly wrong. It would perhaps be over-bold to assert that the infinitive could not be employed here, yet it would be difficult to find a strictly parallel instance. Not one of those quoted by Vahlen in his Note is really in point. But if we might read крivoviь the construction of the passage would be easy and clear. This use of the dative of the participle is sufficiently familiar. Cp. Hdt. vir. 143 e's rov's

 і'бтатаі тотє.

Lastly, some degree of suspicion must rest upon the words

 an interrogative, and the insertion of the substantival infinitive here is certainly peculiar. It is possible that, after $\epsilon i{ }^{\prime}{ }^{\prime} \rho \rho^{\prime}$ є̈ $\chi є \iota$ had been corrupted to $\pi a \rho \epsilon ́ \chi \epsilon \iota$, тò є́ $\pi \iota \sigma \kappa о \pi \epsilon i ้ \nu$ was inserted to supply an object to the verb. Certainly the one mistake would necessitate others; thus in Morel's ms. $\epsilon i \delta^{\prime} \in$ is inserted after $\epsilon^{\imath} \delta \delta \epsilon \sigma \iota \nu$ and in $\mathrm{Q} \epsilon i \delta \epsilon \sigma \iota \nu$ is changed into $\epsilon i \delta o ́ \sigma \iota \nu$, manifestly to bring it into relation with $\pi a \rho \epsilon \in \chi \epsilon$.

 та́ $\mathbf{\nu \tau є \varsigma . ~}$

Surely airía.
Chapter 7. $\sigma v \gamma \chi \epsilon i ̂ \tau a \iota ~ \gamma a ̀ \rho ~ \dot{\eta} \theta \epsilon \omega \rho i ́ a ~ \epsilon ่ \gamma \gamma i ̀ s ~ \tau o ̂ ̂ ~ a ̉ \nu a \iota \sigma \theta \dot{\eta} \tau o v$


The translation of the Summary of Averroes by Hermanus Alemanus in this place runs thus: Est igitur dispositio sicut est dispositio in aspectu alicujus sensibilis: erit namque aspectus talis bone se habens: quando distantia fuerit æqualis inter aspicientem: et aspiciendum non nimis propinquum neque nimis longinquum. The words on which the Arab is here commenting would seem to have been érरùs tov̂ aī $\theta \eta \tau o \hat{v}$ $\gamma \iota \nu \quad \mu$ év $\eta$, and it is evident what a vast improvement this reading would make in the sense of the passage. No tiny creature can be called beautiful because the sight is confused by the necessity of poring over it.

The Arabic text used by Averroes was a translation of a translation. The Syriac version, from which it was made, is probably as old as the eighth or ninth century. We have therefore in the Arab commentator a most interesting, and apparently most promising, source of information, dating back at least 300 years before the oldest existing Greek MS. of the

Poetics. Unfortunately, everything connected with the stage is so foreign to Semitic habits and experience, that Averroes seems to have been wholly unable to understand by far the greater part of the book, which he undertook to explain. Nevertheless in some few passages he comes very close to the Greek text, and one or two of these give us valuable assistance. This will be seen in my next quotation.




 "Aıסov.

Hermanus here gives Carminis itaque laudativi (= Tragedy) quattuor sunt species: quarum tres sunt simplices et sunt illae quae praecesserunt: Una earum est circulatio ( $=\pi \epsilon \rho \iota \pi \epsilon \in-$ $\tau \epsilon \iota a$ ): altera est directio ( $=\dot{a} \nu a \gamma \nu \dot{\rho} \rho \iota \sigma \iota s$ ): tertia passionalis prout dicitur de illis qui sunt in inferno: ibi enim continua est tristitia et maeror inconsolabilis: Et quarta est composita ex istis aut a tribus ipsarum aut ex duabus. It is evident here under what difficulties the Arab laboured in striving to form and convey to his readers an idea of the technical terms of the Greek stage. He does not know what a Tragedy is, and has not the most distant conception of the meaning of $\dot{\nu} \nu a \gamma \nu \omega \dot{\rho} \iota \sigma \iota$ and $\pi \epsilon \rho \iota \pi \epsilon \in \tau \epsilon \iota a$. Hence his account of the four kinds is terribly confused and mistaken, so much so that the Ethic, the general sense of which title would be familiar enough to him, has disappeared altogether. Yet one thing seems clear, that he found the words каì ö $\sigma a$ є่ " "Aioov after 'I ${ }^{\prime} i o v e s$. Jacob Mantinus the author of another translation of the Summary, later in date and corrected by a Greek MS, brings this out still more pointedly: "ut cum sit sermo de iis qui apud inferos sunt ut Ajaces Ixionesque." Now when we consider that the scenes of the Phorkides and the Prometheus were not laid in Hades, while that of the Ixion of Euripides was, as we know from Plutarch (de Aud. Poet. § 4, p. 19 E), we seem almost forced to the conclusion that the suspicion long ago
expressed by Piccolomini，and repeated by Dacier and Twining， is well－grounded and that these four words have，through some accident or other，suffered a violent transposition．

Chapter 19．єí фа⿱亠乂oîto $\mathfrak{\eta} \delta$ ©́a．
We cannot be wrong in writing фaivoıto here．See Goodwin， Greek Moods and Tenses，§ 26．Comp．Demosth．Fals．Leg．
 indeed，xxvi．13，the MSS have ov่к à $\nu$ äтотор $\pi о \circ \eta \dot{\eta} \sigma \iota \tau \epsilon, \epsilon i \mu \eta$
 Bekker corrects $\phi a \nu \epsilon i \sigma \theta \varepsilon$ ．

Chapter 20．oiov $\dot{\epsilon} \nu \tau \hat{\omega} \beta a \delta i \zeta \epsilon \iota K \lambda \epsilon ́ \omega \nu$ ó $K \lambda \epsilon ́ \omega \nu$ ．
What is wanted here is＂the word Kleou，＂$\tau \grave{\prime} \mathrm{K} \lambda \epsilon \in \omega \nu$ ．
Chapter 21．$\tau \grave{a} \pi \sigma \lambda \lambda \grave{a} \tau \hat{\omega} \nu \mu \epsilon \gamma a \lambda \iota \omega \tau \hat{\omega} \nu$ ．
Winstanley＇s conjecture $\mu \mathrm{\epsilon} \gamma \boldsymbol{\lambda} \boldsymbol{\epsilon} \epsilon^{\prime} \omega \nu$ has found favour here． But the solution of the difficulty is probably to be looked for in a different direction．Winstanley tells us that in the margin of one of the mss used by Burgess he found кодд $\eta$－ $\tau о \mu v o \gamma a \lambda \iota \omega \tau \omega \hat{\nu}$ ．This can hardly have been a mere conjec－ ture；the obscurity and palpable wrongness of the word and the fact of its embracing，not only the difficult $\mu \in \gamma a \lambda \iota \omega \tau \omega \nu$ but the apparently easy $\tau \grave{a} \pi o \lambda \lambda \grave{a} \tau \hat{\omega} \nu$ ，combine to shew that it has some kind of authority．It is not unlikely we have here the débris of some sesquipedalian compound made up of the names of three animals of which the mouse and the weasel or cat were two．
 Svo， $\bar{\psi}$ rail $\bar{\xi}$ ．


Doucas corrected vavpaxía for vav́raұos，and since Paccius all editions have given $\Sigma a \lambda a \mu i \nu \ell$ ．It is，however，worth while to notice that $\sum_{a \lambda a \mu i \nu \eta}$ is not a mere transcriber＇s error． The form has a real existence in later Greek；see the au－
thorities cited by Tischendorf on Acts xiii. 5, and Westcott and Hort, New Test., Vol. ir., App. p. 156. Salaminam is the reading of the MSS in Cicero's Tusc. Disp. i. 46; and considering how many new forms were coming into use in Aristotle's time, it should not perhaps be regarded as beyond all question that he used the old classical form here. At any rate, if we expunge $\Sigma a \lambda a \mu i \nu \eta$ why should ov $\theta \epsilon i$ is and $\mu \eta \theta \epsilon i ́ s$ be retained? As regards these forms we have the express testimony of Phrynichus that they were not adopted into literary use till the time of Chrysippus. They are indeed found on monuments of Aristotle's time. Mr Rutherford (New Phry. p. 271), refers to Wecklein, who quotes an inscription given by Rangabe ii. 381 belonging to the archonship of Nausinicus (B.c. 378), in which $\mu \eta \theta \epsilon \nu i$ occurs twice. I have found ovi $\theta \in i$ 's in an inscription ascribed to the year B. C. 336, C. I. A. Vol. II. Pt. I. no. 160, and in the third and second centuries these forms begin to occur pretty frequently; see ibid. nos. 444, 445, 465,467 . But the inscriptions were not carved by scholars, and the statement of Phrynichus is explicit and circumstantial. We can scarcely avoid the conclusion that though these forms might be in colloquial use in Aristotle's time, they were not employed by Aristotle.

Chapter 20. "̋ $\lambda \omega \varsigma$ sè $\tau o ̀ ~ a ́ \delta u ́ v a \tau o \nu ~ \mu e ̀ v ~ \pi \rho o ̀ s ~ \tau \grave{\nu} \nu \pi o i ́ \eta \sigma \iota \nu$ $\hat{\eta} \pi \rho o ̀ s ~ \tau o ̀ ~ \beta e ́ \lambda \tau \iota o \nu ~ \eta ̀ ~ \pi \rho o ̀ s ~ \tau \eta ̀ \nu ~ \delta o ́ \xi a \nu ~ \delta \epsilon \hat{\imath ̂ ~ a ̉ \nu a ́ \gamma \epsilon t \nu . ~ \pi \rho o ́ s ~ \tau \epsilon ~}$






In their commentaries on this most difficult and obscure passage both Spengel and Vahlen are agreed as to the existence of a lacuna before the words toovíovs eival. I may therefore take this for granted, and will endeavour to demonstrate that there is a second and even more serious gap in the text after the words $\pi \rho o{ }^{\prime}$ ä $\phi a \sigma \iota$.

Vahlen's explanation of the passage as a whole I must say, with all the respect due to so weighty an authority, I find
myself unable to accept. Few will be found to agree with him in taking the first $\pi \rho o ̀ s ~ \tau \eta ̀ \nu ~ \pi o i \eta \sigma \iota \nu ~ w i t h ~ \tau o ̀ ~ a ́ \delta v ́ v a \tau o \nu . ~$ If Aristotle meant "that which is impossible in the point of
 áov́vatov. This, the natural order of the Greek, would have been rendered absolutely necessary here by the risk of misconception. Again, the immediate repetition of the words $\pi \rho o ́ s ~ \tau \epsilon ~ \gamma \grave{a} \rho \tau \grave{\eta} \nu \pi o i \eta \sigma \iota \nu$ make it quite clear that Poetry is here one of the three standards of appeal. Lastly, what does "impossible in the point of view of Poetry" mean? A thing is impossible when it contradicts a law of nature, as in the instance given it is impossible for a horse to move forwards both his right legs at once. The áovivatov, to quote the words of the earlier part of the chapter, is that which cannot be brought under the category of things oix $\boldsymbol{\eta} \nu \hat{\eta}$ 解 $\sigma \tau$. But there is no page of the Poetics which does not bear testimony to Vahlen's merits, and in filling up the first lacuna with the words кai $\epsilon i$ a $\dot{\delta} \dot{\prime} \nu a \tau o \nu$ he has given us what, if not exactly, is certainly substantially correct. $\pi \rho o ̀ s ~ \delta e ̀ ~ \tau o ̀ ~ \beta e ́ \lambda \tau \iota o v ~ \epsilon i ~ a ́ d o ́ v ́-~$ varov would give more regularity of structure, but this perhaps is not a consideration to be insisted upon.

Vahlen is also right no doubt in making the consideration of a new émıíıך $\mu a$ begin with the words $\pi \rho o ̀ s ~ a ̈ ~ \phi a \sigma \iota ~$ $\tau \ddot{d} \lambda o \gamma a$, at any rate with the last of these words. The $\dot{a} \delta \dot{v} v^{-}$ varov and the ä入oyov are clearly distinguished just below, where the $\dot{\epsilon} \pi \iota \tau \iota \mu \eta \dot{\mu} a \tau a$ are summed up as five in number. In the earlier part of the chapter indeed they are not so distinctly kept apart. The fact seems to be that they differ in degree rather than in kind, as the Impossible and the Absurd, and have a tendency to run into one another. Thus in the beginning of the chapter it is impossible for a horse to trot in any other way than that ordained by nature, or for a hind to have antlers, or for the Greeks to have behaved as they did, according to Homer, behave during the pursuit of Hector by Achilles, and it is "perhaps not true" that the gods are what poets make them out to be. Of these in the stricter terminology of the end of the chapter the first two would seem to be ádóvata, the last two äخoya. The treat-
ment of the two classes of $\dot{\epsilon} \pi \iota \tau \iota \mu \dot{\eta} \mu a \tau a$ is therefore in the main the same，yet Aristotle has felt it better to keep them distinct at any rate at the close of his observations，where it was desirable to leave as clear an impression as possible upon the mind of his readers．There was a further reason for this in the fact that while three defences are equally applicable in either case，there is a fourth for the Absurd，inasmuch as Absurdities are not always Absurd．The laws which ordinarily regulate human action do sometimes fail to operate．

What Aristotle says then is apparently this，＂And generally the charge of Impossibility may be met by an appeal to Poetic Effect，or to the Better（the Ideal），or to Opinion．For as regards Poetic Effect，Impossibility which commands assent （ $\pi \iota \theta a \nu o ́ \nu$ here is practically equivalent to $\epsilon \in \kappa \pi \lambda \eta \kappa \tau \iota \kappa \omega^{\prime} \tau \epsilon \rho \circ \nu$ in the earlier part of the chapter）is preferable to Possibility which does not．And as regards the Better，if it is not pos－ sible for such men as Zeuxis painted to exist yet it is better， for the artist should surpass his model．And as regards what men say（ $=$ Opinion）－．＂

Here there is a most manifest difficulty．Only one thing could possibly follow，and that one thing is not to be found in the text．The defence as regards what men say is to argue that if the thing is not as the Poet has described it， yet he has described it as men think it to be and as they say that it is．Aristotle is here only summing up what he has already stated in other language．The instance given of this particular objection was drawn from poetical descriptions of the Gods，＂The Gods are not what you make them ；＂and the Poet＇s reply is，＂I describe them as men make them．＂ Observe further that in the existing text there is no reference but the obscurest for the word oütc．＂And by reference to what men say we may defend Absurdities in this way．＂－In what way？

Now let us suppose a lacuna to exist here after $\pi \rho o{ }^{\circ}{ }^{\circ}$ ä фa⿱⺌兀 and fill it up in some way like this，$\pi \rho o े s$ ä фaбıv ö $\tau \iota$
 what men say，we may rejoin，such is the current opinion． And similarly Absurdities we may defend in this way（in the
same way as alleged Impossibilities), and we may further rejoin that sometimes they are not absurd."

Aristotle uses $\delta \iota o ́ \tau \iota ~ i n ~ a ~ c a u s a l ~ s e n s e ~ n o t ~ u n f r e q u e n t l y, ~$ though Bonitz in his valuable Index does not refer to an instance. Compare Politics iii. p. 1283 b 24, p. 1287 b 12. But there is still the difficulty of supplying a verb. Some have proposed to carry on $\kappa \rho \in i \tau \tau \omega \nu$ ध $\epsilon \sigma \tau i$ from the previous clause, which is perhaps barely possible. Vahlen would insert

 "We have before remarked that." The reference is to chapters 5 and 24. The palæographical difference between ë $\pi \epsilon \epsilon \tau a$ and $\epsilon ้ \rho \eta \tau a \iota$ is not great.
C. BIGG.

## INDIAN FOLKLORE NOTES FROM THE PALI JÁTAKAS and the kathá sarit ságara.

Dr Reinhold Koehler, in his notes on Gonzenbach's Sicilianische Märchen, compares No. 47 in that collection with a story quoted by the late Professor Benfey, on page 394 of the 1st volume of his Panchatantra, from the Tibetan collection called the Dsanglun, translated into German by J. A. Schmidt, Petersburg, $1843^{1}$. It appears to me that this story is found in its Indian form in the Pali Jatakas, being No. 257 in the edition of Dr Fausböll, Vol. II, p. 297. At any rate, the resemblance between the story, as it is told in the Játakas, and the Sicilian tale will be found to be very striking. The Pali story may be considered to be an amalgamation of two typical tales. The first illustrates the remarkably Oriental way in which the model young Oriental monarch is so frequently made to display his capacity for judicial and administrative business. The second is, to borrow Dr Köhler's words, " one of that large class, in which the hero is, in the course of his journey, entrusted with certain questions, the answers to which he is expected to discover when he reaches his destination." A wellknown instance of this class of story is Grimm's, No. 29, Der Teufel mit den drei goldenen Haaren.

I proceed to give an analysis and a partial translation of the Pali story.

Once on a time the Buddha was born in Banáras as the son of the reigning monarch named Jarásandha, and on account of the purity and polish of his face, which resembled a silver

[^24]looking-glass, was called Prince Mirror-face. When his father died, his ministers were of opinion that Prince Mirror-face was too young to take upon himself the duties of a king. In order to test him, they dressed up a monkey in three successive disguises ${ }^{1}$, and on his detecting the cheat in each case, they pronounced him a sage, and eminently fit to govern.

Now it happened that the prince's father had employed a minister named Gámaṇichaṇ̣a. As he is called indifferently Gámaṇichaṇđ̣a, Chaṇ̣agámaṇi, Gámaṇi, and Chaṇ̣̣a, I shall use throughout this paper the last form of the name, as being the shortest. He, being an old man, and seeing the prince surrounded by ministers of his own age, determined to become a cultivator, and took up his abode in a village three yojanas from the capital. However, he was in want of bullocks for ploughing. "One day, the god ${ }^{2}$ having rained, he borrowed two bullocks from a friend, used them all day for ploughing, fed them with hay, and then went to the owner's house to return them. At that moment the owner of the bullocks was sitting in the middle of the house with his wife, eating rice. The bullocks, knowing the house, entered it; as they entered, the owner held up his plate, and his wife removed it. Chaṇạa's mind was full of the thought, ' Will they, I wonder, invite me to take some rice?' and so he left the house without formally returning the bullocks to their owner. During the night, some thieves broke into the cow-pen and stole the bullocks. In the morning the owner went to the cow-pen and saw that they were gone. Though he was well aware that they had been carried off by thieves, he made up his mind that he would hold Chanḍa responsible for them, as they had been lent to him ; so he went to him and said, 'Give me back my cows.'-' Why they went into your house.'-'Did you return them me ?'-'I did not formally return them.' - 'Well then, here is a king's messenger for you.' Now among those people it was the custom to take up a pebble or a potsherd, and to say, 'here is a king's messenger for you,' and if a man did not obey this summons, they got the king to have him arrested; so the moment he
${ }^{1}$ In the Pali Játakas monkeys often try to pass themselves off as men.
${ }^{2}$ Or "the cloud,"
Journal of Philoloyy. voL. xis.
heard the word 'messenger' he started off. And as he was going along with his accuser, towards the king's court, he reached a village where a friend of his lived, and so he said to his companion, 'Dear me! I am much exhausted; I will go into the village, and get some food; please, wait here till I return to you.' So he entered his friend's house, but his friend was not at home. When his friend's wife saw him, she said, 'Sir, there is no food ready cooked; wait a moment; I will cook some at once and give it you.' But while she was hurrying up the steps into the rice-granary, she fell to the ground. She was seven months gone with child, and the accident brought on a miscarriage. At that moment the master of the house returned, and seeing Chaṇ̣a, said to him, 'You have struck my wife, and brought on a miscarriage ; here is a king's messenger for you,' and thus took him off as a prisoner. And so the two men went on their way with Chanda between them. And at the entrance of a village there was a groom who could not turn back his horse, but the horse would go with them. The groom, seeing Chaṇḍa, said, 'Uncle Chaṇ̣a, do hit this horse with something or other, and turn it back.' Chaṇ̣a picked up a stone, and threw it at the horse. The stone struck the horse's foot, and broke it short off like the bottom of the stem of a castor-oil plant. Then the groom said, 'You have broken my horse's foot; here is a king's messenger for you;' and laid hold of him. 'Then Chanḍa, finding that he was being led off by three men, said to himself, 'These people will denounce me to the king, and I shall not be able to pay the value even of the bullocks, much less the fine for bringing about a miscarriage, and how shall I ever be able to pay for the horse? I had better die.' Going along, with these thoughts in his mind, he saw on his way, in a wood, near the road, a hill, with a precipice on one side of it. In the shade of the hill, two basket-makers, father and son, were weaving a mat. Chanḍa said, 'I wish to answer a call of nature; wait here a moment till I return,' went up the hill, flung himself from the steep side, and fell on the back of the elder basket-maker, who was at once killed by the blow. Chaṇda got up, and went off. The younger basket-maker said, 'You ruffian, you are the
murderer of my father, here is a king's messenger for you, and laying hold of his hand went out of the thicket with him, and when they asked what it meant, said 'The ruffian has murdered my father.' Then the four put Chanda in their midst, and went off, guarding him carefully. But when they came to the gate of another village, the headman of the village, seeing Chanḍa, said to him, 'Where are you going, Uncle Chaṇ̣a ?' He answered, 'To see the king.' Then the headman of the village said, 'You will no doubt see the king. I want to send him a case for decision. Will you take it ?'' Yes, I will certainly take it.' - 'Well, I used to be handsome, rich, illustrious, and healthy; but now I am poor and a leper ; ask the king the reason of this; he is a sage, and will tell you, and you must report his answer to me.' Chanḍa said, 'I will do so.' Then, as they went on, at the gate of another village an étaípa saw him, and said, 'Uncle Chaṇ̣a, where are you going ?' He said, 'To see the king.' She said, 'The king is a sage; take him a case for decision from me,' and then continued, 'I used formerly to make a great deal of money, but now I cannot get enough even to provide myself with betel. Nobody comes to visit me. Ask the king the reason of this, and tell me what he says.' Then further on, at the gate of another village, a young married woman, seeing him, similarly said to him, 'I cannot live in my husband's house, nor in my father's house; please, ask the king the reason, and bring me word.' Then, further on, a snake, living in an ant-hill near the high-road, saw him, and said, 'Chanḍa, where are you going ?' ' To see the king,' was the answer. 'The snake said, 'The king is a sage, take a case for decision from me. When I go out in search of food in the morning, my stomach is empty, and my body thin ; nevertheless, when I come out of the ant-hill my bulk fills the hole, and it is with difficulty that I manage to drag myself out, but when, after foraging, I come back in the evening with my hunger appeased, and my body distended, I enter my hole in a moment, without touching the walls of it; ask the king the reason of this, and tell me what he says.' Then, further on, a deer saw him, and after asking him the same question as the others, said, 'I cannot eat grass anywhere
but at the foot of this tree ; ask the king the reason of this.' Further on still a partridge saw him, and said, 'When I sit on a certain ant-hill, I can utter a pleasing note, but when I sit in other places, I cannot; ask the king the reason of this.' Then, further on, a tree-nymph, seeing him, said, 'Chaṇ̣a, where are you going?' 'To the king,' was the answer. The tree-nymph said, 'The king is a sage; I used to be treated with the utmost respect, but now I never get so much as a handful of leaves offered to me; ask him the reason of this.' Further on still, a king of the Nágas saw him, and after asking him the same question as the others, said to him, 'Truly, the king is a sage ; now, the water in this lake used to be clear as crystal ; at present it is turbid, and covered with scum; ask the king the reason of this.' Then, further on, some hermits, living in a garden near the city, saw him, and after questioning him in the same way as the others, said to him, ' The king is a sage : formerly the fruits in this garden were sweet; now they are insipid and nasty ; ask the king the reason of this.' Further on, near the gate of the city, some Bráhman students, in a hall, said to him, 'Where are you going, Chaṇḍa ?' He answered, 'To the king.' They said, 'Then take a case for decision from us. Formerly every passage became clear to us as soon as we learnt it, but now a passage will not stick in our minds any more than water in a leaky pitcher; we do not know it, and it becomes dark : ask the king the reason of this.' Chanda then went into the king's presence with these fourteen ${ }^{1}$ cases for decision. The king was sitting on the seat of judgment."

The king is very glad to see Chaṇda, and, of course, does substantial justice, delivering Chaṇ̣a from his accusers by some extraordinary decisions of the patriarchal type. One indeed is specially reprobated in the Kathá Sarit Ságara (Vol. II of my translation, p. 181). They might have served as precedents for Portia's decision in the Merchant of Venice, and Professor Benfey traces a connexion between the plot of that play, and

[^25]the Tibetan tale of which this Játaka is probably an older version.

To return to the questions. "Chaṇda, delighted at having been victorious in his law-suit, said to the king, 'Your Majesty, certain persons have sent you some cases for decision, may I refer them to you?' The king replied, 'Say on, Chanḍa.' Then Chanḍa referred the cases one after another, in the inverse order, beginning with that of the Bráhman students. The king answered them in succession. When he heard the first case he said, 'Formerly in the place where they live there was a crowing cock, which knew the time: they rose up at its summons, learnt their holy texts, and the dawn rose on them, while they were repeating them. The consequence was that they did not keep forgetting all they learned; but now they have, where they live, a cock that crows at unseasonable hours. It either crows very early, long before it is light, or very late. If it crows too early, they are awakened by the noise that it makes, and learn their texts, and then, being overcome with sleep, lie down without repeating them; whereas, if it crows too late, they are awakened by the sound, but get no time for repetition, so they do not know what they have learned.' When he heard the second case, he said, 'Formerly those hermits lived the lives of true Buddhist ascetics, and were diligently engaged in the preparations for ecstatic meditation ${ }^{1}$, but now they have abandoned the lives of true ascetics, and being engaged in unlawful occupations they leave for their personal attendants the fruits that grow in the garden, and earn their livelihood by means of unlawful practices utterly opposed to begging: for this reason the fruits in their garden are not sweet; but if they will, with one accord, again, as before, devote themselves to the duties of true ascetics, the fruits will once more become sweet. Those hermits do not understand the duties of learned men in kings' courts ; tell them to restrict themselves to the duties of ascetics.' When he heard the third knotty point, he said, 'Those Nága kings are always quarrelling with one another; this is what has made the water muddy,

[^26]but if they live on good terms with one another, as before, it will once more become clear.' When he heard the fourth case, he said, 'That tree-nymph used formerly to protect men who found their way into the wood, therefore she used to receive offerings of various kinds; but now she does not protect them, therefore she gets no offerings ; if she once more protects them as before, she will derive great advantage from it; she appears not to be aware that there are such things in the world as kings ${ }^{1}$; so tell her to protect the men that find their way into the forest where she is.'

When he heard the fifth case, he said, 'There is a large pot of treasure under the ant-hill on which the partridge is sitting, when he utters such a pleasing note ${ }^{2}$; dig it up, and take it away.'

When he heard the sixth, he said, 'There is a large honeycomb in the upper part of the tree at the root of which alone the deer finds it can eat grass: the fact is, the deer is attracted by the blades of grass that are smeared with honey, and cannot eat any others: take away that honeycomb; send the best of the honey to me, and eat the rest yourself.'

When he heard the seventh, he said, 'There is a large pot of treasure in the ant-hill in which that snake lives, he remains there guarding $\mathrm{it}^{3}$. And when he goes out to forage, owing to his avarice, his body clings to the hole, but when he has found food, out of love for his treasure, he enters rapidly and eagerly without touching the sides of his hole. You may dig up that treasure and take it away.'

When he heard the eighth he said, 'That young married woman has a paramour in the village that lies between her husband's house and that of her parents: she calls him to mind, and out of love for him she finds that she cannot endure to remain in her husband's house, so she says that she will go and see her parents; and so she stays some days with her lover,

[^27]and then does really go to her parents' house, but after she has been there some time, she says that she will return to her husband's house, and again visits her lover. Now let her know that there are such things in the world as kings, and tell her that she must live in her husband's house, and if she will not, let her know that I, the king, will have her seized and put to death ; she had better not go on in this foolish way.'

When the king heard the ninth, he explained that the troubles of the $\dot{\varepsilon} \tau a i \rho a$ were due to her own shortcomings.

When he heard the tenth, he said, 'That headman used formerly to decide cases with equal justice; that made him generally beloved and popular, and men, being pleased with him, gave him many presents, so he was handsome, rich, and illustrious, but now he is always taking bribes and deciding cases unjustly, so he is poor and miserable, and afflicted with leprosy; if he once more decides cases justly, he will be as he was before. He too appears not to be aware that there are such things as kings ; tell him to decide his cases justly.'"

The following is a brief analysis of the story in Gonzenbach's Sicilianische Märchen to which I would compare the above.

A pious youth gives all that he has to the poor, and then appeals to the Crucifix for recompense. He is referred to a richer Crucifix in Rome. On his way thither, he stays with a Prior who tells him that his monks, though ordinarily wellbehaved, are in the habit of giving one another bloody coxcombs after dinner, and promises him a hundred ounces, if he will bring back from Rome the true explanation of this mysterious phenomenon. He spends the next evening with a rich merchant who promises him the same sum, if he will obtain in Rome the explanation of the fact that he is unable to marry one of his three daughters. The next night he stays with a cultivator, who tells him that he has a splendid orchard that used to produce magnificent fruit, but that of late years the trees have all become barren.

The pious youth refers these questions in inverse order as in the Pali form of the tale.

The answer to the third, which he puts first, is that the cul-
tivator, out of avarice, has built a wall round his orchard, and has been punished by his trees becoming barren. He has only to pull it down, and they will bear again as before. The pious youth is commissioned to inform the merchant that, if his daughters will only go to church simply dressed, instead of bedizening themselves with finery, they will quickly obtain husbands. The explanation of the Prior's difficulty is that he has for a cook the Devil, who enchants the food placed before the monks.

The late Professor Benfey was of opinion that the Tibetan tale, of which the Pali tale just analysed is probably an older form, was brought to Europe by the conquering Mongols. That many such tales were brought seems to be generally admitted. I have myself seen the wide-spread tale of the "Three good Counsels," No. 81 in Gonzenbach's Sicilianische Märchen, among some stories translated from the Tibetan by the Head master of the Bhootea School, Darjeeling.

I proceed to point out a very curious parallel between the Folklore of Northern Europe and the Játakas.

In the 51st Játaka (Fausböll's edition, Vol. I, p. 261, and ff.) a virtuous king and his ministers are buried up to their necks in the earth. At midnight some jackals come to eat them. When the principal jackal came near the king, the latter put out his tongue, and the jackal laid hold of it with his teeth. Thereupon the king caught hold of the jackal's jaws with his own and dragged the creature towards him. That terrified the jackal so that he uttered a terrific yell of distress, and thereupon the other jackals fled. However the principal jackal, in his struggles to get free, loosened the earth round the king so that the king got his hands free, lifted himself out of the earth, and then set his companions at liberty.

In the Volsunga-Saga (Hagen's Helden-Sagen, Vol. iri, p. 23), Sigmund and his brothers are placed in the stocks, and an old she-wolf, who is supposed to be Siggeir's mother in disguise, comes out of the wood every night, and eats one, until Sigmund alone remains. Signy has Sigmund's face smeared with honey. The she-wolf proceeds first to lick off the honey, and Sigmund catches her tongue with his teeth. The she-wolf, in her
struggles, sets him free, but he does not let her go until her tongue is torn out by the roots.

If this is a purely accidental coincidence, it is a very remarkable one.

But it seems quite possible that some stories may have been communicated by the Greeks, who ruled in Bactria and part of India, to their Buddhist subjects.

For instance the story of Hippokleides (Herodotus vi, 130) is found in the Játaka book. At any rate it closely resembles the story of the "Dancing Peacock," whose indecent style of dancing lost him the daughter of the Golden Goose ${ }^{1}$-a fact alluded to in a verse in the Panchatantra. To quote Rhys Davids' translation-
" Then the Royal Golden Goose was shocked. And he said ' This fellow has neither modesty in his heart, nor decency in his outward behaviour. I shall not give my daughter to him. He has broken loose from all sense of shame.' And he uttered this verse to all the assembly-
'Pleasant is your cry, brilliant is your back, Almost like the opal in its colour is your neck, The feathers in your tail reach about a fathom's length, But to such a dancer I can give no daughter, sir, of mine.'
Then the king, in the midst of the assembly, bestowed his daughter on a young goose, his nephew."

A still more curious parallel between Herodotus and the Játaka book is furnished by the story of Intaphernes (Herodotus III, 118, 119). This is, as I pointed out in the Indian Antiquary, to be compared with the Ucchanga Játaka, No. 67.

In the introduction to this Játaka, a woman comes to the king of Kosala, and begs for the life of her brother, her husband, and her son. On the king consenting to spare the life of one of the three, she chooses her brother. The king asks the reason. She says, "King, if I live, I can get a husband, and I can get a son, but as my parents are dead, it is impossible for me to get a brother; spare my brother's life." The king generously sets all three at liberty.

[^28]In the Kathá Sarit Ságara, Taranga 112, Śl. 89 and ff. there is a curious parallel to the story of Ocresia as related by Ovid (Fasti vi, 627 and ff.). The Indian Servius Tullius ${ }^{1}$, who is a young Chaṇdála, a member of a very low caste, falls in love with a princess, and seeing no hope of winning her, goes at night to a place where corpses are burnt, with the intention of committing suicide.
"And after bathing he made a pyre, and lighting the flame thus prayed to it, ' O thou purifying Fire, soul of the Universe, may that princess be my wife hereafter in a future birth, in virtue of this offering up of myself as a sacrifice unto thee!' When he had said this, he prepared to fling himself into the fire, but the Fire-god, pleased with him, appeared to him, and said, 'Do not act rashly; the princess shall be thy wife, for thou art not a Chanḍála by birth, and what thou art, I will tell thee ; listen.

There is in this city a noble Bráhman of the name of Kapila Sarman. In his fire-chamber I dwell, a present god. One day his maiden daughter came near me, and smitten with her beauty, I made her my wife. And thou, my son, wast immediately born to her, and out of shame she flung thee away in the open street. There thou wast found by some Chaṇdálas and reared on goat's milk. So thou art my son, born to me by a Bráhman lady. Therefore thou canst not be deemed impure, being my son, and thou shalt obtain for a wife that princess Kurangi.' "

Some may prefer to consider the above resemblances due to the tales being fragments of a common Aryan tradition, but the following extracts from the Kathá Sarit Ságara will lend support to the theory that a great deal of our European Folklore is of Buddhist origin.

A certain Marubhúti in Taranga 108 is in great trouble,

[^29][^30]and bent, as heroes of Indian tales are apt to be, on committing suicide, when he comes to a hermitage where there is an ascetic with matted hair, who comforts him. While he was staying there, some heavenly nymphs came to bathe in the river. The hermit told him to go and steal the clothes of one of them ${ }^{1}$. The clothes were only restored on condition that the nymph gave Marubháti some information about the prince his master that he was very desirous of obtaining. The nymph subsequently married the ascetic, and Marubháti acquired by a very repulsive rite the power of spitting gold ${ }^{2}$.

The story of the stolen robe is repeated in Taranga 121, Śl. 108-111.

To return to Taranga 108, which is peculiarly rich in folklore, we find here a remarkable instance of the mysterious import of the number three in respect of the power of witches. The hero of the tale Nágasvámin is telling the story of his adventures. I will let him speak for himself.
"I went into that city (Vakrolaka) to beg, and in one house the mistress gave me with my alms a red lotus. I took it, and went on to another house, and there the mistress said to me, when she saw me, 'Alas! a witch has got possession of you. See! she has given you a man's hand, which she has passed off on you for a red lotus.' When I heard that, I looked myself,


#### Abstract

${ }^{1}$ Cp. Hagen's Helden-Sagen, Vol. rr, pp. 341, 342. Here Hagen steals the clothes of some mermaids who were bathing in the Danube: In this way he induces the elder of them to prophesy the fate of himself and his companions at the court of Attila. In the Russian story of Vasilissa the Wise (Ralston's Russian Folk-Tales, p. 126) the hero steals Vasilissa's shift (see Ralston's remarks on p. 120). We find the incident of stealing the robes of bathing nymphs in Prym und Socin's Syrische Märchen, p. 116; in Waldau's Böhmische Märchen, p. 250; in Weckenstedt's Wendische Märchen, p. 121; Gonzenbach's Sicilianische Märchen, Part I, p. 31. (See Dr Köhler's notes.)


The subject of Swan-maidens has been exhaustively treated by Baring-Gould in his "Curious Myths of the Middle Ages."
${ }^{2}$ This idea is found in the Mahábhárata. In this poem Sṛinjaya has a son named Suvarnashthívin. Some robbers treat him as the goose that laid the golden eggs was treated. (Lévêque, Les Mythes et Légendes de l'Inde, pp. 289-294.) Dr Köhler has collected many European parallels in his note on 33 and 34 of Gonzenbach's Sicilianische Märchen. I can add to them No. 36 in Coelho's Contos Portuguezes, where pearls drop from the heroine's mouth.
and lo! it was no lotus but a human hand. I flung it away, and fell at her feet and said, 'Mother, devise some expedient for me that I may live.' When she heard this, she said, 'Go ! in a village of the name of Karabha, three yojanas distant from this place, there is a Bráhman of the name of Devarakshita. He has in his possession a splendid brown cow, an incarnation of Surabhi; she will protect you during this night, if you repair to her for refuge.'

When she said this, I fled full of fear, and reached, at the close of that day, the house of that Bráhman in the village of Karabha. When I had entered, I beheld that brown cow, and I worshipped her and said, 'Being terrified, goddess, I have fled to thee for protection.' And just then, night having set in, that witch came there through the air with other witches, threatening me, longing for my flesh and blood. When the brown cow saw that, she placed me between her hoofs, and defended me, fighting against the witches all the livelong night. In the morning they went away, and the cow said to me with an articulate voice, ' My son, I shall not be able to protect you the next night. So go on further ; at a distance of five yojanas from this place there is a mighty Pásupata ascetic, dwelling in a temple of Śiva in a forest. He possesses supernatural knowledge, and he will protect you for this one night, if you take refuge with him.'

When I heard that, I bowed before her, and set out from that place, and I soon reached that Bhútisiva, and took refuge with him. And at night those very same witches came there also in the very same way. Then that Bhátisiva put me in the inner apartment of his house, and taking up a position at the door, trident in hand, kept off the witches. Next morning Bhútisiva, having conquered them, gave me food and said to me, 'Bráhman, I shall not be able to protect you any longer, but in a village named Sandhyávása, at a distance of ten yojanas from this place, there is a Bráhman named Vasumati ; go to him, and if you manage to get through this third night, you will escape altogether.'

When he said this to me, I bowed before him, and set out from that place. But, on account of the length of the journey
that I had to make, the sun set before I had reached my destination. And when night had set in, the witches pursued after me and caught me. And they seized me, and went off with me through the air, much pleased. But thereupon some other witches of great power flew past them. And suddenly there arose between the two parties a desperate fight. And in the confusion I escaped from their hands, and fell to the ground in a very desolate part of the country."

In this wild story the hero has to endure the assaults of the witches on three successive nights. So, in the Russian story of the Headless Princess (Ralston's Russian Folk-Tales, p. 271), the priest's son has to read the psalter over the dead princess three nights running. He is hardest pressed the third night, and on each occasion at daybreak the "devilry vanished". In the same way in the Soldier's Midnight Watch (ibid. p. 274) the soldier has three nights of increasing severity. In Southey's ballad of the Old Woman of Berkeley, founded, as we are informed in the notes, on a tale originally told by William of Malmesbury, who had it from an eye-witness, we find that the assaults go on increasing in severity, and on the third night the corpse is carried away.

I will conclude this paper with a brief analysis of the last tale in the Kathá Sarit Ságara, which closely resembles the tale of Sorfarina in Gonzenbach's Sicilianische Märchen, and may possibly be the source of the plot of Shakespeare's All's Well that Ends Well.

In this story a Bráhman from Ujjayiní, out of spite, marries and deserts a girl in Pátaliputra who had ridiculed him, and she promises that a son of his by her shall bring him back a captive. She goes to Ujjayiní, and employs an artifice similar to that in Shakespeare's play, passing herself off as an évaípa. When her son is twelve years old, he enquires about his father, and learning the truth, sets out for Ujjayiní to fetch him. He finds his father playing dice, wins with ease from all the gamblers, and then gives them back what they had lost to him. In the night he steals the bedstead from under his father. Next day his father finds him engaged in selling it in the market. The son says, "You can only get it back by telling a wonderful story." Then the father agrees to tell an enigmatical
story. If the son admits that it is true, guessing the riddle, he is to keep the bedstead, and if not, he is to lose the bedstead, and own himself a bastard.

The son guesses the riddle, and then the son in his turn relates an enigmatical story to the father, stipulating that, if he denies its truth, not being able to understand it, he is to become his son's slave, but that if he admits its truth, giving the true explanation of it, he shall recover his bedstead.

The story, or riddle, is as follows: "There was once born on the earth a boy, who, the moment he was born, made the earth tremble, and when grown up, set his foot in another world."

The father says-"It is false, there is not a word of truth in it." But the son explains it of the god Vishṇu aud carries his father off as a captive to Pátaliputra.

The story of Sorfarina is a very close parallel to the Indian story. A schoolmaster's daughter teaches the school during her father's absence, and gives the prince a box on the ear. He marries her, and as she will not express her regret for what she had done, but threatens to repeat the castigation, he throws her into a well and sets out on his travels. She, of course, follows him. He then has three children by her, one in Rome, one in Naples, and one in Genoa, and on each occasion (for she was connected with the fairies) finds her on his return at the bottom of the well as saucy as ever. On her persistently refusing to apologize, he at length proposes to marry another wife. But Sorfarina appears at court with her three children, and gives him another box on the ear before the whole company. He pretends to be reconciled, but she, not trusting him, places in the bedchamber an image of sugar and honey. As this doll will not apologize, the king strikes off its head, and then draws the weapon through his mouth to clean it. The sweetness of the supposed Sorfarina's blood makes such an impression on him, that he repents of what he has done and is about to commit suicide. However Sorfarina springs out from under the bed, where she had concealed herself; mutual apologies are made, a reconciliation takes place, and they live happily together ever afterwards.

C. H. TAWNEY.

## LUCRETIUS' ARGUMENT FOR FREE-WILL.

1. Quare in seminibus quoque idem fateare necessest, esse aliam praeter plagas et pondera causam motibus, unde haec est nobis innata potestas, de nilo quoniam fieri nil posse videmus.
II. 284-7.
"Wherefore in the case of atoms too ${ }^{1}$ you must admit the same, namely that besides blows and weights there is another cause for (their) movements ${ }^{2}$, whence this power of free action has been begotten in us, since we see that nothing can come from nothing."

In these lines Lucretius sums up his reasoning on the most characteristic and weighty point of his master's system. The whole passage (11. 251-293) is most closely reasoned. Not a word is thrown away.-When we come to this sentence however, we pause and for a time are bewildered. Has not Lucretius told us that the atoms have two motions, a perpendicular downward motion and a slight swerving from the perpendicular but for which they would never have come into contact, This swerving produces collisions among the atoms,

[^31]the most consistent with Lucretius' argument. He is reasoning from men to the atoms and applies his famous axiom ex nihilo nihil in a very bold and forcible way:-' If men can move at will, then the atoms which they come from must be able to move at will too.'
or " blows"-plagae. He has proved that blows could not have been but for declination. How then does he say that in addition to weight and blows, which latter can only be caused by declination, we must admit the existence of declination? Is Lucretius unmindful or inconsistent? For does not this passage imply that Lucretius believed in the existence of plagae before declination comes into play? Not by any means, we think. But the commentators certainly do not assist us to master the thought of this passage. In the first place Cicero (referring possibly, his language leads us to think, to this very passage which he may have read, and, if so, certainly misunderstood) has contrived to paraphrase the subject-matter of it in such a way as peculiarly to mislead any one who compares this passage of Lucretius with Cicero's words in De Fato. He says: "Epicurus declinatione atomi vitari fati necessitatem putat: itaque tertius quidam motus oritur extra pondus et plagam quum declinat atomus intervallo minimo" (De Fato x). Cicero here states the doctrine of Epicureanism in a singularly careless and inexact way, and his unqualified mode of applying the phrase "a third kind of motion" seems to have misled all later commentators. In his note on the passage Mr Munro makes no reference to the difficulty, but in his abstract of ll. 251-293 he gives the argument thus-" While the weight then of atoms enables them sometimes to withstand the external force of blows, it is only this declination of atoms at quite uncertain times and places which gives the mind its freedom of action," and again on l. 288 "Lucretius too, like Cicero, assigns the freedom of the will as the chief proof of the necessity of this third motion." Again M. Guyau (La Morale d'Epicure, p. 77) commenting on the passage says: "There exist then, according to Epicurus (and the testimony of Cicero here confirms that of Lucretius) three causes of motion each profounder and more inward than the other; blows which are at the same time exterior and fatal (fatal), weight which is interior but appears still fatal, and finally Free-Will which is at the same time interior and free." And (p. 78, note) "Cicero [in the passage above quoted] is entirely in agreement with Lucretius."

Lucretius' reasoning becomes at once clear when we see that in this passage he is speaking only with reference to the human soul. He here assumes the existence of the world, as originally caused by Declination, and discusses the freedom of the will as a question entirely apart. He passes suddenly from the outer world governed by necessity in the form of natural laws (the consequence of pondus and plagae) to the soul of man. Lucretius is here insisting on the freedom of the human will amid the vast mechanism of nature which surrounds it. Man could not be free unless there exist in all atoms and therefore in the atoms of his soul also, a principle apart from the pondus and plagae which govern the world without. This power of the soul-atoms to decline at will exists also in all atoms, but in the inorganic world he conceives it to be nullified. In the world of nature Epicurus knows of only two ${ }^{1}$ causes of motion : first, Gravity causing a perpendicular, and secondly, Declination causing a swerving motion which produces plagae or "collisions." It is plagae alone which could correctly be called a third motion. Strictly speaking Cicero's phrase "a third kind of motion" (as applied by him and followed by all subsequent writers) is misleading. Free-Will exists in all atoms. In the soul-atoms it is active and can originate motion, but in the atoms composing dead matter, it is potential only, and can never be "a cause of motion." As was pointed out in a previous article, Epicurus seems to have assumed that the power of Declination, though still existing in the atoms, practically disappears after these atoms have combined to form matter. Various counteracting causes tend to nullify it. Besides, Free-Will is proportionally a far feebler power in gross matter formed of coarse and rough atoms (which are also heavier and harder to move) than it is in the soul which is composed of exceedingly fine and smooth atoms. Thus Free-Will exists in far less intensity in gross matter than in the soul and is far more easily held in check.

Epicurus speaks of no third cause of motion in the outer world. It is only for the mind, amid the necessity of nature

[^32]which is two-fold, that a third cause of motion exists, namely the Free-Will of the soul-atoms. This important paragraph can be understood aright only when we realise that in it Lucretius sharply distinguishes between the world of nature which is absolutely governed by necessity, that is to say by natural law, and the mind of man.

We have always found a difficulty in this passage, as ordinarily explained, which we cannot think entirely of our own creation.
2. It is not easy to grasp Lucretius' reasoning throughout this paragraph and not a few writers appear to have misunderstood it. In his admirable chapter on 'The Philosophy of Lucretius,' Professor Sellar observes that according to Lucretius creation is the result not of any Divine working, "but of certain processes extending through infinite time, by means of which the atoms have at length been able to combine and work together in accordance with their ultimate conditions. The conception of these ultimate conditions and of their relations to one another involves some more vital agency than that of blind chance or an iron fatalism (II. 254). The foedera naturai are opposed to the foedera fati. The idea of law in Nature, as understood by Lucretius, is not merely that of invariable sequence or concomitance of phenomena. It implies at least the further idea of a 'secreta facultas ${ }^{1}$ ' in the original

[^33]This quotation is translated as follows in the note. "But it is necessary that the atoms, in the act of creation, should exercise some secret, invisible faculty." Putting aside the fact that secreta facultas (a phrase occurring only once in the poem at 1. 173), cannot possibly mean a "secret faculty"

[^34]elements" (p. 335). The most careful study of all the doctrines of Lucretius' system and their bearing on each other shews us no ground for admitting any opposition between foedera fati and foedera naturai. Lucretius, it is true, does not believe in Fate, so far as men are concerned. In the moral world he asserts that there is no such thing. At the same time 'Fate' or 'Necessity' is a name occasionally given, as we have seen ${ }^{1}$, both by Epicurus and Lucretius to the order of Nature resulting from natural laws. The foedera fati (a mere synonym for fatum) and the foedera naturai are never really opposed to each other by Lucretius. Such a conception is altogether foreign to him.

Again Mr Alfred Benn in an able article on 'Epicurus and Lucretius' in the Westminster Review (April, 1882), insists repeatedly that Epicurus has no title to the credit of asserting the reign of Law. The Stoics, he says, have more claim to this honour, and in their physics "they came nearer than Lucretius to the stand-point of modern science." "Epicurus expressly refused to accept such a doctrine" (the universality of law in nature), he says. The Reviewer brings little evidence to support this remarkable statement. Probably it is based in part on a misconception of Epicurus' doctrine of atomic Declination. Referring to the latter, he says, "Apparently neither Epicurus nor his disciples saw that in discarding the invariable sequence of phenomena, they annulled to the same extent the possibility of human foresight and the adaptation of means to ends" (p. 323). The writer, possibly under the influence of M. Guyau, assumes that the consequence of Free-Will existing in the atoms must be a power of spontaneous movement in all material substances which must interfere with the regular order of nature. But, as we saw, Epicurus held that FreeWill, though active in the atoms, is nullified when these combine in matter. Thus it did not, according to Epicurus' conception of it, at all interfere with Law. Again he says, "Lucretius

[^35][^36]expressly tells us (II. 255, ex infinito ne causam causa sequatur) that the law of causation is broken through by the clinamen." The writer here fails to see that Lucretius draws a sharp distinction between the world of nature, subject to law, and the human mind which is free. So far as nature (that is, the method of the world's ongoings) is concerned, without taking into account the agency of man, Lucretius holds that causam causa sequitur, "cause does follow cause." The truth is that Lucretius had the firmest grasp of the fact of Law. At the same time he holds that the mind of man is not subject to the foedera naturae. Free-Will is a libera potestas. But perhaps Mr Benn holds that a belief in Free-Will is not consistent with a belief in Laws of Nature. This would help us to understand his assertion that Epicurus did not to any extent believe in Law. Again he says (p. 333), that " when Lucretius speaks of foedera naturae, he means not what we understand by laws of nature "..." but rather the limiting possibilities of existence,"-that in fact Lucretius grasped merely the negative side of natural order. A less fair criticism than this could hardly be made. The majestas cognita rerum which so inspired Lucretius was something more than 'negative' knowledge.
3. At ll. 284-7 Lucretius, applying his axiom ex nihilo nihil, draws the final conclusion-a bold enough one too-of his close-reasoned argument. In addition to "blows" and "weights" there must be in all atoms, and particularly in the atoms forming the soul, another cause of movement, namely the power to decline at will. This is necessary since, if the soul-atoms have not this power while the soul has it, we violate the first principle ex nihilo nihil. Lueretius reasons thus: "I cannot account for Free-Will appearing in human beings, the highest product of atomic evolution, unless it were there from the first. If men have Free-Will, then Matter which they came from must have Free-Will too, since nothing can come from nothing."

Lucretius' reasoning is cogent enough. We see that he is not merely daring but also logical in assigning Will to Matter. That which is in the effect must also be in the cause, therefore, if Free-Will be in man, it must also exist in the
atoms of which he is composed. A human creature endowed with Free-Will cannot come from atoms which do not possess volition. From Lucretius' stand-point this is a logical necessity.

A theory substantially the same as Lucretius' but more subtle has been stated in our own time. We refer to Professor Clifford's doctrine of "Mind-Stuff," which runs closely parallel, though on a somewhat different plane, with that of Atomic Declination. The two doctrines illuminate each other. Briefly stated Professor Clifford's theory is as follows. Along with every fact of consciousness in our mind there goes some disturbance of nerve-matter. Whenever the ganglion in the brain is disturbed because certain pieces of grey matter there have arranged themselves in the figure of a square, the consciousness of a square is produced in my mind. Thus there are two classes of facts which always run parallel, "physical facts and mental facts." There exist far lower and less complex forms of feeling than such as make up human consciousness. "We are obliged to assume, in order to save continuity in our belief, that along with every motion of matter, whether organic or inorganic, there is some fact which corresponds to the mental fact in ourselves. The mental fact in ourselves is an exceedingly complex thing; so also our brain is an exceedingly complex thing. We may assume that the quasi-mental fact which corresponds and which goes along with the motion of every particle of matter is of such inconceivable simplicity, as compared with our own mental fact, with our consciousness, as the motion of a molecule of matter is of inconceivable simplicity when compared with the motion in our brain." According to Professor Clifford our consciousness is a very complex thing indeed. No single feeling of ours is a unit. Every feeling of mine is a most complex structure, built up from a great many different elementary feelings which are grouped together in various ways, just as the action of my brain is made up of a great many elementary actions in different parts of it, grouped together in the same ways. Thus each elementary feeling corresponds to a special, comparatively simple, change of nerve-matter. It is a popular error to suppose that a feeling cannot exist by itself without forming part of some
consciousness. If then we go back along the line from the organic to the inorganic, and if "according to the complexity of the organism is the complexity of the consciousness," where are we to stop? Where does the breach of continuity take place? Where does some degree of feeling cease to accompany the motion of matter? There is only one way out of the difficulty. "We have no choice but to admit that every motion of matter is simultaneous with some ejective fact or event [i.e. elementary feeling] which might be part of a consciousness." These elements of feeling, of which our simplest ordinary feeling is a complex, Professor Clifford calls Mind-Stuff. "A moving molecule of inorganic matter does not possess mind or consciousness, but it possesses a small piece of mind-stuff ${ }^{1}$."

Of course Professor Clifford's theory does not by any means explain the origin of Consciousness. "Every mental picture," says Clifford, "is made up of exceedingly simple mental facts, so simple that I feel them only in groups." For one thing, why should mere complexity produce consciousness, if a single elementary feeling does not produce consciousness? If every mole-
${ }^{1}$ It is worth while to point out that this very notable theory of Professor Clifford's was substantially anticipated by an ardent modern disciple of Epicurus, who published his great work on Epicurean science and ethics 200 years ago, Peter Gassendi. According to Gassendi there is a gradual but imperceptible increase of sensation from minerals and plants up to complete human consciousness. "Nature," he says, "is not accustomed to pass from one extreme to another except through intermediate stages. Thus, for example, the fruits of trees become sweet instead of bitter, fragrant from scentless, yellow from green, by a gradation so imperceptible that at the beginning nothing is discerned of that quality which is to be and at the end generally nothing of that which was at the beginning, so that we may thus understand that unconscious matter becomes
conscious by an exactly similar gradation, which certainly it is not within human power to trace" (Epicuri Philosophia, Leyden, 1675, Vol. I. p. 270). Thus Gassendi recognises in minerals (specially so in the magnet) and also in plants a "foreshadowing of consciousness" (adumbratio sensus). Again, speaking of the "seminal molecules" from which all organic forms are developed, he says, "it cannot absolutely be said that conscious things come from non-conscious, but rather from particles which, though they do not actually possess consciousness, nevertheless actually are or do contain the rudiments of consciousness (principia sensus)." Are not these "rudiments of consciousness" contained in Gassendi's molecules much the same as Clifford's simple elementary feelings or Mind-Stuff?
cule of my body possesses some degree of sentiency, does this account for my conviction of personality? Yet the theory, however insufficient, is instructive. The materialist feels that it is a hopeless task to explain the origin of consciousness or of Freewill out of dead atoms without some break in the continuity of development, some new entrance of Energy into the field. His only escape from the difficulty is this:-the atoms are not "utterly dead" but contain in a faint and weak form the faculties of consciousness and mind which are found in the highest product of Evolution, man. Thus Professor Clifford, in order to explain the evolution of Mind from atoms, asserts that every atom of matter corresponds to an atom of Mind-Stuff, that is of something analogous to Mind. He thus builds up Mind out of a multitude of mind-atoms, that is to say of elementary feelings which can exist by themselves as "individuals," simplicitate, as much as can the Lucretian atoms, but which are almost as small in comparison with the consciousness of any one human being as Lucretius' atoms are in comparison with a human body. Lucretius again who believes in Free-will, can only explain it by assigning Free-will to the atoms. The reasoning of both, starting from a similar stand-point, is substantially the same, and the two theories of "Mind-Stuff" and of Atomic Declination deserve to be placed side by side. Both are based upon the same principle,
> unde haec est nobis innata potestas
> de nilo quoniam fieri nil posse videmus,

and apply it with equal boldness. Both moreover show to us Materialism confessing its own weakness to account, unaided, for the origin of Mind.

JOHN MASSON.

## ON A METRICAL PRACTICE IN GREEK TRAGEDY ${ }^{1}$.

There is a point in the metrical practice of the Greek Tragedians, which has not received the attention to which it is entitled as an aid both to criticism and to the appreciation of their art. The rules which we can tabulate do not of course pretend to state exhaustively the injunctions and prohibitions observed by the native ear and in some degree appreciable by modern observation. But there is still a precept unformulated, which, though not a true canon, has such a regular and extensive influence as to require an explicit recognition. The common rules for elision, in Greek and other verse, take account only of the elided syllable. A rule established on this basis is for the Greek Tragedians very far from complete; and it is proposed to give here a more accurate view of the remarkable principles which govern the elision of dissyllabic words having the penultimate syllable short.

Before stating the facts it will be useful to call to mind the relation between words of this quantity and the common metre of tragedy, the iambic senarius. It is obvious that for this metre no restriction could be more inconvenient than

[^37]authority of a text. The fragments are peculiarly open to the suspicion of such disturbance; and if on these questions their testimony disagreed with that of the extant plays, it would be to that extent impeachable. It seemed, therefore, more logical not to cite it in proof.
one limiting the free elision of words having this form. The effect of such a restriction must be in the senarius of Aeschylus, and we might almost add of Sophokles, to confine the word, except when followed by a double consonant, to the last part of the verse, for the true tribrach, that is, a tribrach which cannot be reduced to an iambus by the consonantal pronunciation of a vowel (synizesis), is almost unknown in Aeschylus and even in Sophokles unfrequent. On the other hand, if the word be elided, it has six places open to it, the thesis in the six feet. A priori therefore we should expect elision to be far more frequent than non-elision: not indeed six times as frequent, for there are several conditions which curtail the freedom even of the elided form, besides the necessity of finding an initial vowel to follow it. Thus a word standing first in its clause, such as iva, cannot occupy the third thesis without producing an unfrequent and not very pleasing pause,

Again, when an elided dissyllable stands in the fourth thesis, it must, if the line is to have the normal cæsura, be preceded by a monosyllable. In the fifth thesis it introduces a cretic caesura, with its attendant disadvantages, while in the sixth it is subject to still more obvious practical limitations. The following examples from Sophokles of an elided $\mu$ é $\gamma a$ will exhibit the working of these conditions better than a detailed discussion-









But with every allowance for restrictions merely metrical, it is clear that elision will prevail. What the exact proportion
is in words which can be elided at pleasure, such as $\% \delta \varepsilon$, тó $\delta \epsilon$, $\tau \dot{d} \delta \epsilon$, it does not seem worth while to ascertain, but a preponderance of elision over non-elision will be found throughout the whole class of the words having this form which, in the general practice of Aeschylus and Sophokles, are subject to elision at all. Under this head come the pronouns $\% \delta \varepsilon$, tó $\delta \epsilon$, $\tau a ́ \delta \epsilon, \tau \iota \nu a, \tau i v a$, the present imperatives $\lambda \in ́ \gamma \epsilon, \phi \in ́ \rho \epsilon, \ddot{a}^{\gamma} \gamma$, etc.,
 iva, "ó $\phi \rho a$, the particle ápa, the numerals $\delta$ écкa and $\delta \dot{v} o$, and in fact all 'parts of speech' except substantives, adjectives, the pro-
 aorist imperatives ( $\mu \dot{a} \theta \epsilon, \lambda a ́ \beta \epsilon$, etc.) may probably be included upon the analogy of the present imperatives; the balance of examples in Aeschylus is against elision-two cases only in seven (Prom. 706, Eum. 657)-but the total number is too small to furnish evidence of a separate treatment, and they are subject to elision both in Euripides (which would not be conclusive), and in Sophokles.

But if, bearing these a priori considerations in mind, we pass to the treatment of substantives, adjectives, etc., we shall find a striking contrast. The general rules respecting these are the same, with slight modifications which will appear as we proceed, for Aeschylus and for Sophokles, and may be stated thus-

1. A dissyllabic substantive or adjective having the penultimate short may be elided, if both the following conditions are fulfilled, viz. if
(a) it commences a verse, and also
$(\beta)$ has a strong emphasis.
2. A vocative of this form (e.g. $\xi^{\prime} \varphi \boldsymbol{v} \epsilon$ ), may be elided, and therefore generally is elided, when it is preceded by the interjection $\omega^{\text {, }}$ but not otherwise.
3. Except under the conditions stated in (1) and (2) such substantives and adjectives are not elided.
4. The adverbs in - $\boldsymbol{a}$ ( ${ }^{\circ} \mu a$, $\delta^{\prime} \chi \chi a$, etc̣.) are elided in certain
familiar combinations, but otherwise follow the rules for substantives ${ }^{1}$.
 except in certain familiar combinatiôns.

The cases of $\mu \epsilon ́ \gamma a$ and of the pronoun $\dot{\epsilon} \mu \epsilon ́$ will be separately considered hereafter. We may add that
6. $\pi \alpha \dot{\rho} \rho a$ (for $\pi a ́ \rho \epsilon \sigma \tau \iota$ ) is not elided.

The reasons for separating Euripides from his predecessors will appear in the remarks which will be made in conclusion upon his usage in this matter. We may say, here, however, that he follows the same principles, though with more variation, and Euripidean illustrations will be cited when convenient.

It will be seen presently and may perhaps be believed beforehand that these facts are not fully recognized either in the critical treatment of the tragic texts or in the imitative compositions which represent the consciousness of scholars. In a published volume of translations containing several hundred lines of iambic verse, I read many pages without finding a single instance of a 'short' dissyllabic substantive unelided, while I found without difficulty five or six cases of $\phi \rho \in ́ v \nu^{\prime}$ for $\phi \rho \in ́ v a, \chi \theta^{\circ} \nu^{\prime}$ for $\chi \theta^{\circ} \dot{v} v a$, and the like. In short, these substantives were made subject to the obvious rule of convenience, and elided as freely as ${ }^{\epsilon} \tau \iota$ or $\tau 6 \delta \delta$. We will now see how far this practice accords with that of the native models. I will premise that although I cannot guarantee the absolute accuracy of observations extending over upwards of twenty-two thousand lines, I have made a complete study of twenty plays for the express purpose of this paper, and believe that my statements are fairly trustworthy. The positive part of the evidence may be stated briefly. In the extant plays of Aeschylus occur the following words which fall within the above rule ${ }^{2}$.

[^38]it is further uncertain whether most of the phrases in which elision of $\mu a ́ \lambda a$ occurs were not (some certainly were) familiar combinations.

[^39] о้та, $\pi \lambda а ́ к а, ~ \pi \lambda є ́ a, ~ \pi o ́ \delta a, ~ \pi \tau \alpha ́ к а, ~ \sigma \tau о ́ \mu а, ~ \tau є ́ к \nu а, ~ \tau \rho i ́ \chi a, ~ ф i ̀ \lambda a, ~$ $\phi i \lambda \epsilon, \phi \lambda \frac{1}{\gamma} a$, ф $\rho \in ́ v a, \chi \epsilon ́ \rho a$, $\chi$ Өóva, ${ }^{\prime} \mu a$, $\delta i ́ \chi a, \pi a ́ \rho a$.

The examples of these used without elision number collectively upwards of one hundred and twenty.

Sophokles uses most of the above and also the following-



The examples of these used without elision number collectively upwards of two hundred and ten. It is scarcely necessary to confirm these totals by a page of references. The Indices will supply a ready means of verification.

Of elisions after the first syllable of the verse with strong emphasis (Rule 1) the following are examples; from the nature of the case they are not numerous, but they are sufficient to show a principle.

Soph. O. T. 1180.
(Oedipus is making enquiries of the servant who should have exposed him, when an infant, but spared him and delivered him instead to the man by whom he was conveyed to the house of Polybos.)





Here the emphasis signifies the strange disappointment of the benevolent intention, by which an act of humanity procured misery to the object of it and resulted not in à $\gamma a \theta \dot{a}$ but in какà $\mu$ éyıтta. A similar antithesis is marked in the same way in Soph. O. C. 796,

Similarly in O. C. $48 \delta i \chi a$ is elided in the first thesis when it forms part of an emphasized phrase.

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ả\lambda\lambda' оv`\delta' '́\muо\ell то\iota тоv`\xiаv\iota\sigmaтáva\iota \pió\lambda\epsilon\omega\varsigma
\deltaí\chi` ध้\sigma\tau\iota 0á\rho\sigmaos,\pi\rhoí\nu \gamma` å\nu \epsiloṅ\nu\delta\epsiloni\xi`\omega \tauí \delta\rho\omega\hat{.}
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The prominent notion of these lines, individual action without public authority, is expressed by the stress upon $\bar{\epsilon} \mu o i . .$. $\pi o ́ \lambda \epsilon \omega s$ סíxa. So also $\check{i} \sigma a$ is elided in O. T. 409, 544 (and perhaps also in Aesch. Cho. 94) when the point lies in the claim of a just equality-

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\epsilonỉ \kappaaì \tauvpa\nuv\epsilonîS \epsiloṅ\xĭ\iota\sigma\omega\tau\epsilońo\nu \tauò \gammao\imatĥ\nu
\imathै\sigma':à\nu\tau\iota\lambda\epsiloń\xia\iota.
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\imath'\sigma' à\nu\tauáкои\sigmaо\nu.
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In Aesch. Cho. l. c. the reading $\ddot{\imath}^{\prime} \sigma^{\prime}$ is conjectural for $\dot{\epsilon} \sigma \tau^{\prime}$ -
ทे тои̂то фа́бкш тойтоs, wis עó $\mu$ оs $\beta$ ротоîs,

but $\tilde{\epsilon}^{\prime} \sigma \theta \lambda^{\prime}$, the conjecture of Elmsley, appears to be better justified by the context. We shall presently see that this use is, as might be expected, frequent in the case of $\epsilon \mu \epsilon$, which has always some emphasis and generally a strong emphasis. Other instances may be found in Euripides, e.g.

Phoen. 890 (Teiresias is about to disclose to Kreon that the salvation of the city demands the sacrifice of his son Menoikeus)
 $\mu \hat{l}$ ' $\stackrel{\text { ë }}{ } \sigma \tau \iota \nu$ ä $\lambda \lambda \eta \mu \eta \chi a \nu \eta े ~ \sigma \omega \tau \eta \rho i a s$.
where $\mu i{ }^{\prime}$ a signifies one and one only. Cf. Eur. Hel. $815 \mu i{ }^{\prime \prime}$ ' $\epsilon \sigma \tau \iota \nu$ $\dot{\epsilon} \lambda \pi i \varsigma, \eta{ }_{\eta} \mu \delta \delta \nu \eta \quad \sigma \omega \theta \epsilon i \hat{\mu} \epsilon \nu$ ü $\nu$.

Rule 2 is exemplified chiefly in the vocatives $\xi \in \in \mathcal{\varepsilon} \in$ and $\tau \in ́ \kappa \nu a$. We find




 $\kappa . т . \lambda$.

ib. 492, 834, El. 662, 671, 797, etc., etc.
But on the other hand,


 $\tau a ̉ \lambda \eta \theta$ ès єime.


Phil. 557, 575, etc., etc.
And again,
 $\kappa . \tau . \lambda$.

 $\kappa . т . \lambda .$, etc., etc.

But on the other hand,

 etc.

In Soph. Phil. 827,

it will be observed that the vocative is elided when the penultimate is long but not elided where it is short. Trochaic substantives, it is needless to say, are elided freely.

We will now turn to the negative side of the evidence and examine the real or apparent exceptions. I have noticed the following-

Aesch. P. V. 139 тov̂ $\pi \epsilon \rho i ̀ \pi a ̂ \sigma a \nu ~ є i \lambda \iota \sigma \sigma o \mu \epsilon ́ \nu o v ~$

（So the MSS．Hermann mâ $\sigma a \nu \theta^{\prime}$ ei $\left.\lambda \iota \sigma \sigma o \mu e ́ v o v\right) . ~$


Sept． 628 סoрíто⿱亠乂а ка́к’ є̀ктрє́ттоутєऽ $\gamma$ âs є̇тьнó入ovs．

Ag． 907
$\mu \eta ̀ \chi a ́ \mu a \iota ~ \tau \iota \theta \epsilon i \stackrel{s}{ }$


ib． 971 ＇̈т८ $\mu \circ \iota \gamma \lambda \hat{\omega} \sigma \sigma a \nu \kappa a \grave{\iota} \sigma \pi o ́ \mu \prime$＇є่ $\pi \omega \pi \hat{a}$ ．
 $\gamma \in \nu o v$ ．


 $\tau \epsilon \lambda \epsilon i ̂ \nu$ ．


El． 633 є่ติ，$\kappa \in \lambda \epsilon v ́ \omega, \theta \hat{v} \epsilon, \mu \eta \delta^{\prime}$＇่̇ $\pi a \iota \tau \iota \hat{\omega}$


ib． 664 ．．．．．．òs $\chi$ Өóv＇Oitalav iठeî̀ к．т．$\lambda$ ．

I have some confidence that this list is almost if not com－ pletely exhaustive for the extant plays of the two elder tra－ gedians．The balance，then，stands thus ${ }^{1}$－

Cases of non－elision 330 （at least）．
Cases of elision ．．．．．． 17 （about，say for safety 30）．
If now we compare these figures with the average exhibited by words elided freely，in which as has been said the propor－

[^40]tion is decidedly in favour of elision, it will be evident that we have, in these substantives, adjectives, etc., no casual divergence, but a principle, and a very powerful principle, since it could contend so successfully against the strongest prompting of convenience. The instinct which forbade elision in this class was plainly imperious; and where it is or appears to be neglected, we are impelled to seek a countervailing cause to explain the irregularity, or in the alternative to scrutinise with some attention the proof of its existence. At the same time we must carefully observe that the rule, general as it was, was certainly not absolute, and that we cannot expect fully to understand the qualifications of it. The occurrence of an exception, therefore, by no means raises the strong adverse presumption which lies, for example, against a breach of the cretic pause. It is merely a very rare phenomenon, and, as such, invites us to scrutinise the evidence and to seek the explanation for $i t$. The remarks here made upon such cases are to be taken as attempts in this direction and not, for the most part, as positive conclusions.

Now upon examining the above catalogue of exceptions it will at once appear that some of them at least are quite untrustworthy. In Aesch. Sept. 782 and Soph. Phil. 1137 the corrections какà $\tau \in ́ \lambda \epsilon \sigma \epsilon \nu$, кака̀ $\mu \eta$ бато are obvious (cf. Cho. 604). Again in Aesch. Sept. 628 the only thing certain is that the line is in some way incorrect. In the corresponding strophe the MSS. reading is

$565 \mu \epsilon \gamma a ́ \lambda a \operatorname{\mu \epsilon \gamma а\lambda \eta \gamma ó\rho \omega \nu } \kappa \lambda v \dot{\omega} \omega$
ả้oбi$i \omega \nu$ ä $\nu \delta \rho \omega \nu \kappa . \tau . \lambda$.

565-6 corresponds or should correspond to 628-29,

> Soрíтоуа ка́к’ є̇ктре́тоутєs үа̂s
> є่ $\pi \iota \mu o ́ \lambda o u s ~ к . \tau . \lambda . ~$

Apart from the metre, the sense offers difficulties in both places and all editors present emendations either in one or in both. As evidence upon a doubtful point they are therefore useless, and we can only add the elision of какà to the other grounds of suspicion.

Upon Phil. 423, again,
ovitos $\gamma \dot{a} \rho \tau \alpha \dot{\gamma} \gamma$

the scholia exhibit the strange comment $\gamma \rho a ́ \phi \varepsilon \kappa \dot{\beta} \xi_{\epsilon \kappa \eta} \rho v \xi_{\xi} \epsilon$. However this note should itself be read, or whatever it may have meant, it does not tend to quiet the doubts suggested by the baldness of the word какаे itself; nor is it irrelevant to observe that this verse is in the immediate neighbourhood of the absurd

of which I believe no satisfactory correction has been proposed. It is not improbable that the whole passage has suffered from some local accident. The joint authority of these four examples will scarcely convince us that какà was not subject to the rules under discussion when we find that it occurs without elision in the two poets upwards of fifty times.

Four of the exceptions infringe the general rule as to the elision of vocatives-Soph. O. T. 957, O. C. $824,877,1206$. If our tastes in the matter of sound were all alike, I should ask with some confidence whether
is likely to be the verse of a man with an ear. It is at all events to be noticed that the context equally admits

If the tragedians were indifferent to the elision $\xi^{\prime} \nu^{\prime}$ ', why did they take so much pains to avoid it? We may surmise, and shall presently find reason to believe, that there was something in the circumstances or form of the sentence, whether we can detect it or not, which justified the variation to the instinct of the poet ${ }^{1}$. Such a 'something' is not always beyond the perception even of a foreigner and a modern, as may be seen in one at least of the above examples, Soph. O. T. 1250,



$$
{ }^{1} \text { See note on } \mathrm{p} .152 .
$$

Instinct declares at once in favour of this-but why? Deferring for the moment the answer to this question, we will pass by way of contrast to Aesch. P.V.339,

$\delta \omega ́ \sigma \epsilon \iota \nu \Delta l^{\prime}$, $\omega \sigma \tau \epsilon \tau \hat{\nu} \nu \delta \epsilon \sigma^{\prime} \epsilon ่ \kappa \lambda \hat{v} \sigma a \iota \pi o ́ \nu \omega \nu$.
The ill effect of the curtailed appellation here should be apparent to any one who has read the Greeik Tragedians with his ears. But it may be seen from the context that the appellation itself is unnecessary, not to say out of place. Zeus is the subject of the whole dialogue between Prometheus and Okeanos and is mentioned immediately before without name by Prometheus (332),

```
\kappaaì \nuv̂v єैa\sigmao\nu, \mu\eta\deltaé \sigmao\iota \muє\lambda\eta\sigmaáт\omega'
\piá\nu\tau\omega\varsigma \gammaà\rho ov` \pi\epsiloni\sigma\sigma\epsilon\varsigma \nul\nu` ov̉ \gammaà\rho \epsilonvi\pi\iota0\eta'今s.
```

To this the words of Okeanos directly refer, and no one else but Zeus has been mentioned in the interval. We should therefore be warranted, on the assumption that 339 is a genuine verse of Aeschylus, in suspecting a trivial corruption from
$\delta \dot{\omega} \sigma \epsilon \iota \nu \nu \iota \nu \check{\omega} \sigma \tau \epsilon \tau \omega \hat{\nu} \delta \epsilon \sigma^{\prime} \epsilon \epsilon \kappa \lambda \hat{v} \sigma a \iota \pi o ́ v \omega \nu$.
It must be noted, however, that the whole of the line except the words $\delta \omega \sigma \epsilon \iota \nu \Delta i^{\prime}$, required to complete the sense of the previous verse, is closely copied from 326 ,

## 

The repetition is weak, and if this were a play of Euripides, we might almost affirm that we had in 339 one of those stopgaps which abound in the Euripidean MSS. (Med. 943 is a good specimen) patched up from fragments of the context and inserted to 'explain' a sentence really left unfinished for dramatic effect. The passage would then run


ПР. $\tau \grave{a} \mu \grave{\epsilon} \nu \sigma^{\prime}$ є่ $\pi a \iota \nu \hat{\omega}$ кov̉ $\delta a \mu \hat{\eta} \lambda \eta \eta^{\prime} \xi \omega \pi о \tau \epsilon^{*}$


The offer of Okeanos has been urged already once, and the interruption well suits the decisive manner of this second rejection. Whether it suits the style of Aeschylus, or can be confirmed by Aeschylean evidence, I am not so sure, but in any case the elision of $\Delta i a$ is here uncertified.

As the result, then, of this first scrutiny we find that of the seventeen examples cited above, six are so far uncertain as to be scarcely ponderable, viz. Aesch. P. V. 339, Sept. 628, 782, Soph. O. T. 957, Phil. 433, 1137. Of the remaining eleven, which are at least prima facie unimpeachable, the majority admits of reasonable explanation. But for the further examination of these we require a fresh instrument.

The general rule against these elisions cannot of course give us a measure of the comparative probability of different exceptions to it. For this purpose we require to know what is much more difficult of ascertainment, the cause of the rule. Upon such a point it is necessary for a modern student to speak with the utmost caution, but we are not without some indications. These must naturally be sought in what may be called the regular exceptions falling under rules 1 and 2. From these we see that either (1) emphatic position both in the sentence and in the verse or (2) the close connexion of the substantive with a word having no independent meaning ( $\omega$ before a vocative) were held grounds sufficient to dispense with the ordinary prohibition. We should infer, therefore, that the rule depended in some way upon the brevity of such forms as ка́к' or $\chi \chi^{\prime \prime} \nu^{\prime}$, as they would have been pronounced in the thesis of the five last feet, which did not seem to afford space enough, if we may so say, for the proportions of the word. Or, to put the same thing in another way, elision after a short penultimate is permitted in
because the emphasis and consequent pause upon the syllable
 $\omega$. $\phi$ ' $\lambda$ ', because in these cases the 'word' for rhythmical purposes is not тéкла but $\dot{\oplus} \tau$ t́ккva, etc. and therefore obeys the ordinary rule as to a dactyl. We might therefore expect
to find that casual exceptions to the rule would resemble these cardinal exceptions; and we might look for occasional elision either (1) with emphasis in the third or the fifth thesis, or (2) where the elided word is very closely bound up with other words, so that the phrase may be regarded as for rhythmical purposes indivisible. Of the first sort I have noticed no example among substantives or adjectives ${ }^{1}$, and this is not surprising, for a little consideration will shew that the analogy is not really satisfying. We may compose, by way of illustration, variations upon Eur. Hipp. 327,
writing either
or again
which have elision with emphasis in the third and fifth thesis respectively. The reader will probably agree that neither rhythm is worthy of imitation. No such practical objection prevents the occasional occurrence of the second class of exception, elision in a closely connected phrase, and we have, as I think, a good instance of it in Soph. O. T. 1250,

It would be a strange ear indeed that would find any fault in the rhythm of this. But if the reader should allow that the effect of the elided $\tau$ éкva in this fine verse is altogether different from that of the elided $\Delta i a^{\text {in }}$

$$
\delta \omega \dot{\sigma} \epsilon \iota \nu \Delta \grave{l}^{\prime}, \ddot{\omega} \sigma \tau \epsilon \tau \hat{\omega} \nu \delta \epsilon \sigma^{\prime} \notin \kappa \lambda \hat{v} \sigma a \iota \pi o ́ \nu \omega \nu,
$$

and will consider in what the difference lies, he will perhaps also accept the explanation, that by the antithesis of $\mathfrak{\epsilon} \xi \dot{a} \nu \delta \rho o{ }^{\prime} s$
 off as each an undivided whole, more especially the latter, the form of which is so far determined beforehand, that if тध́кva were not followed by $\epsilon_{\kappa}^{\kappa} \tau \epsilon \in \kappa \nu \omega \nu$ the ear would be sensible of

[^41]the disappointment; for rhythmical purposes, therefore, as we
 ultimate subdivision, and $\tau \in \kappa \kappa \nu$ ' is not felt to be unduly brief simply because it produces no separate impression at all. Rhythmical rules are observed for the very purpose of being broken on occasions like this.

More light will be thrown upon the subject by the uses of $\dot{\epsilon} \mu \dot{\epsilon}$. That $\dot{\epsilon} \mu \dot{\epsilon}$, a word emphatic by nature and terminating with an inflexion should, in the matter of elision, follow $\chi$ Oóva, $\phi \lambda o ́ \gamma a, \pi i ́ \delta a$, rather than ${ }^{\circ} \delta \epsilon$, тó $\delta \epsilon$, $\tau a ́ \delta \epsilon$, is to be expected. According to the rules, two places in the iambic senarius are open to it, the beginning and the end, and, as a fact, these are its positions in a very large majority of cases. I have counted in Sophokles alone 45 instances of $\epsilon \in \epsilon$ not elided, chiefly in iambic verse, and they are numerous also in Aeschylus. Again we have examples of Rule 1 in
Soph. Phil. 623 ё $\mu$ ' єis 'A $\chi a \iota o v ̀ s ~ \check{\omega} \mu \rho \sigma \epsilon \nu \pi \epsilon i \sigma a s ~ \sigma \tau \epsilon \lambda \epsilon i ̂ \nu ;$

| ib. 629 | тòv \aєpriov |
| :---: | :---: |
|  |  $\delta \in i \hat{\xi} a \iota, \kappa . \tau . \lambda$. |
| ib. 984 |  <br>  |

where, as will be seen from the context, the pronoun is even more than commonly emphatic. To the same influence which has produced Rule 2 may be ascribed the elision of the phrase cis é $\mu$ é, not so far as I have noticed in Aeschylus or Sophokles, but in Euripides regularly, e.g.


##  

So also $\dot{\epsilon} \mu \epsilon$ more than once suffers double elision in the phrase
 Of the contrary instances in our texts (which in Sophokles are certainly under ten; those which I have observed are noticed
here) some are obvious errors, the unemphatic $\mu \epsilon$ being admitted both by sense and metre and often required : such are

(so Dindorf with the MSS., but Hermann, Paley and others rightly $\epsilon^{\wedge}\left(\theta \in \mu^{\prime}\right.$ ' $\left.\epsilon^{\prime} \delta \in ́ \xi \omega\right)$,

So in Soph. Phil. 1016
 $a ̈ \gamma \epsilon \iota \nu$
the emphasis on ${ }_{\epsilon} \mu \dot{\epsilon}$ perverts the sense, for there is no comparison between the treatment of the speaker and that of other persons, but a parallel between the former and the present behaviour of the person addressed. We should probably read $\kappa a i ̀ \nu \hat{v} \nu \delta \epsilon \in \mu \prime$ ' $\delta \dot{v} \sigma \tau \eta \nu \in \kappa . \tau . \lambda .$, the кai $\nu \hat{v} \nu$ having the same force as av̉ in 1007,
oǐ à̉ $\mu^{\prime}$ vin $\hat{\eta} \lambda \theta \epsilon \epsilon$, ős $\mu^{\prime}$ є̀ $\theta \eta \rho a ́ \sigma \omega ~ \lambda a \beta \omega ̀ \nu \kappa . \tau . \lambda$.
And again in Soph. O. T. 441
OI. $\omega$ м $\pi a ́ \nu \tau ’$ ä $\gamma a \nu$ aìvıктà кà $\sigma a \phi \hat{\eta} \lambda \in ́ \gamma \epsilon \iota s$.


we should read, not less for sense and syntax than for metre,

There are, however, exceptions not so questionable. Thus we find

Soph. O. T. 462
$\kappa a ̂ ̀ \nu \lambda a ́ \beta \eta, ~ \epsilon ̇ \psi \in v \sigma \mu \in ́ v o \nu$,



 $\hat{\eta} \sigma^{\prime}$ Є่s $\tau a ̀ ~ \sigma a v \tau o v ̂ ~ \mu a ̂ \lambda \lambda o \nu ~ \epsilon ่ \nu ~ \tau ب ̣ ̂ ~ \nu v ̂ \nu ~ \lambda o ́ \gamma \varphi ; ~$



To the first of these examples the emphatic form is unnecessary, in the third it is scarcely right, and the authority of both is therefore not very good ${ }^{1}$. In the last we have an instance of elision with emphasis in the fifth thesis, noted already as a possible extension by analogy from Rule 1. It is not beautiful and we cannot regret that it is rare. The $\pi \rho o ̀ s ~ " \check{\epsilon} \mu$ ' of Trach. 469 may perhaps be classed with the $\boldsymbol{\epsilon i s}$ ${ }^{\epsilon} \epsilon$ ' allowed by Euripides. More interesting, however, than these mere licenses are the cases from O.C. 646,800 , for in these, taken in connexion with some others, we may perhaps discern a principle. If we consider the pronunciation, for instance, of this from the Aias (1291)




or again of O. C. 800

$$
\epsilon \not \epsilon \mu^{\prime} \text { '่s } \tau \grave{a} \sigma \grave{a}
$$

$\hat{\eta} \sigma^{\prime}$ és $\tau \grave{\alpha} \sigma a \nu \tau o \hat{v} \mu a ̂ \lambda \lambda o v$,
we find this difficulty. The difference between the emphatic $\sigma \epsilon$ and the unemphatic $\sigma \epsilon$ was indicated first by the change (of tone or whatever it was) represented by the accentuation, and also, as the whole phenomena of the language tend to prove, by the modern way of stress. How can either of these have been made perceptible in a monosyllable whose only vowel is lost by elision? It is important, therefore, to observe that in these examples the elision of $\sigma \frac{\grave{c}}{}$ is an elision only to the eye and not to the ear. As far as the sound is concerned, it is as easy to give the pronoun its full and emphatic form in $\epsilon \mu \epsilon \sigma \tau a \sigma a$



[^42] would offend against graphic symmetry, but that does not affect the question of sound. So in O. C. 646 the apparently irregular elision is in reality no elision at all, and this applies also to Eur. Med. 749 where the same 'graphic' elision occurs before the same verb

I had intended to treat here in full the elision of $\sigma \dot{\epsilon}, \sigma \dot{\alpha}$, and $\tau \dot{\alpha} \sigma \dot{a}$, but as these do not strictly fall within the subject, and there is still much to be said, they shall be postponed to another occasion.

If now we return to our list of elided substantives, and consider them in the light of the above, we shall see that among those which have sufficient authority there are differences in the degree of their irregularity. In Soph. Phil. 664, as in O. T. 1250, the elision may at once pass unchallenged-
$\mu o ́ v o s ~ \delta e ́ \delta \omega \kappa a s$, ôs $\chi$ Өóv’ Oitaià iठєîv,
òs $\pi a \tau \in ́ \rho a ~ \pi \rho \epsilon ́ \sigma \beta v \nu$, òs фỉ̃ous к.т.入.
$\chi$ Өóv' Oiraiav is here treated as rhythmically indivisible, a treatment which suits both the meaning of the words and the form of the whole period. Three of the remaining cases have a strong resemblance to each other, and must be considered together.


 $\psi a v ́ \sigma \omega, \phi \iota \lambda \eta \dot{\sigma} \omega$ т' $\epsilon i$ Ө'́ $\mu \iota \varsigma ~ \tau o ̀ ~ \sigma o ̀ \nu ~ \kappa \alpha ́ \rho a . ~$
$E l .633 \stackrel{\ominus}{\epsilon} \omega, \kappa \in \lambda \epsilon v ่ \omega, \theta \hat{v} \epsilon, \mu \eta \delta^{\prime}$ є่ $\pi a \iota \tau \iota \hat{\omega}$


Considering the extreme rarity of these elisions, it is probably something more than an accident that two should be

[^43]in the same place of the verse before the same form ${ }^{*} \nu a \xi$, though why this should have any effect I am unable to see ${ }^{1}$. In the resemblance of the first and third in the above trio there is more instruction. It will be noticed that in each case there is a strong emphasis upon the preceding possessives $\tau o v{ }^{\prime} \mu \grave{\nu}$ and ròv oòp-Set not to ground thy foot, the foot of Troy's conqueror-Blame not my lips, for I have done, and we may well suppose that it was this which commended the elisions. Emphasis is relative, and what is lost by curtailment to the substantives is gained by the possessive adjectives, which here carry the substantives as mere appendages. This explanation might appear inconsistent with what has been said upon Rule 1, but is not so. In the cases under Rule 1, it is not the elision which gives the emphasis,-it would naturally have the opposite effect,-but it is the emphasis which, by increasing the weight of the penultimate syllable, makes the elision permissible. In the three remaining passages (see the list, p. 142), two in anapæsts (Aesch. P.V. 139, Eum. 971) and one in iambics (Aesch. Eum. 901), I see no speciality of rhythm, and should register them in this respect simply as irregularities, subject only to the general doubt which in the condition of our MSS. must attach to any phenomenon observed to be highly exceptional ${ }^{2}$. But in the iambic passage there are circumstances which justify further enquiry. The scene is the reconciliation of Athena and the Eumenides, and the context runs thus:-






#### Abstract

${ }^{1}$ I may perhaps add that, as a fact, I feel nothing harsh in this elision, the reason being, if I do not mistake, the slight importance of the substantive $\chi^{\ddagger} \rho a$ when combined, as here, with an adjective ( $\delta \epsilon \xi \iota d \nu$ ) which could stand without it. It will be observed that this explanation applies also to Soph.


## Phil. 664.

${ }^{2}$ Neither P. V. 138-9 nor Aesch. Eum. 971-2 are given in the MSS. without any flaw. The corrections usually adopted are extremely slight, but a small error on the surface is often the sign of a deeper disturbance.







The metrical irregularity of 901 is not more remarkable than its meaning. The context requires that катà $\chi \theta^{\prime} \nu^{\prime}{ }^{\prime}$ ov̉ $\sigma a$ should mean dwelling in the land; the correct translation is being about the land, or over the land. Further there is no proper connexion between 901 and 902 . Surely something is required to bridge the transition from the confession of the Eumenides that their anger is passing, to the question, what then dost thou bid me chant over this land? This want of connexion would alone suffice to raise suspicion. I will not waste time in trying to estimate the exact weight which should be attached to it, but will simply point out that all objections might be removed at once by a minute alteration,



(KATAICONOYC for KATAX@ONOYC). Athena has been offended (see 827 and compare 970) at the obstinacy of the Eumenides in resisting her propitiations, and she now consults the dignity of herself and her city by suggesting that if they mean to be friends, they should earn the reconcilement by converting their threats into blessings. Win, therefore, she says, with a good spell those whom thou art to make thy friends. To which they appropriately answer What incantation then dost thou bid me chant over this land? кatád $\delta \iota \iota$ is a term of witchery and signifies to chant a good spell; see Eur. Iph. T. 1337


 à $\nu \in ́ \mu \varphi$ oi Máyoı: the last citation proves the association of the
word with spells to bind the forces and elements of nature, such as the Eumenides are here invited to pronounce and subsequently do pronounce in favour of the land, the city, and the people of Attica (Eum. 903 foll. 916 foll.). With a personal object кatád $\delta \epsilon \nu \nu$ signifies to soothe or charm by a spell. The examples of this construction cited in the Lexicon s. v. are not classical, but it is completely warranted by the analogous use of кatє-

 misread the first part of the unfamiliar KATAICON as the preposition кaтá or кaтai, after which nothing could well be made of the rest but what the MSS. actually give us.

But whatever may be our conclusions respecting the irregular elisions of this kind presented to us in the MSS., one thing is clear, we must not increase the number of them by conjecture. If we cannot determine with completeness the conditions which justified the license where it actually occurs, still less can we prove that those conditions are satisfied by an invention of our own. Commentators have not always observed this consideration, and I have noticed one or two proposals which should be reconsidered from this point of view.
 T. Miller has suggested the reading érci $\delta \grave{\text { è }} \theta \epsilon \rho \mu \grave{\nu}$ ov̉ $\sigma \tau a ́ \gamma$ ' $\bar{\epsilon} \nu \pi \epsilon ́ \delta \omega \beta \beta a \hat{\omega}$; (see Mr A. Sidgwick's edition ad loc.). No verse with such a rhythm as this occurs in Aeschylus. If the poet used the accusative of $\sigma \tau \dot{\alpha} \xi$, he placed it, we may be tolerably sure, as he places other words of the kind, at the end of the senarius. Whether the conjectural verse has anything in its movement to condone for the breach of a law, each will judge for himself. In Aesch. Supp. 895 Mr Paley's later


 ruins as the MSS. here preserve. There is more interesting material in Aesch. Cho. 854




Here the reading commonly received is Elmsley's

Others prefer

and in support of this it may be said that this is the regular position of $\grave{a} \nu$ in a sentence following ov̌roc. But the lengthening of the $a$ is very unsatisfactory, and I would suggest as better than either

Seeing minds, 'tis said, cannot be cheated. The plural фpévas and the use of the second person (for the indefinite one) are both appropriate to a proverbial sentiment ( $\tau \circ \iota$ ), and may be illustrated by Soph. Ai. 154
$\tau \omega ิ \nu \gamma \grave{a} \rho \mu \in \gamma a ́ \lambda \omega \nu$ $\psi v \chi \hat{\omega} \nu$ ieis
ov̉火 àv á $\mu a ́ \rho \tau o \iota s$.

The MSS. version arose, I should guess, from a bungling attempt to incorporate the $\dot{a} \nu$, omitted by accident in some previous copy and added in the margin at the end of the verse. In Soph. Phil. 201 є $v \sigma \tau о \mu$ ' é $\chi$, the scholiast proposes, wrongly


There are a few words whose peculiarities need a separate treatment. $\mu^{\prime} \gamma a$ is both an adjective and an adverb. The elision of the adverb where it immediately precedes the word which it qualifies might always be justified on general principles by the close connexion of the two. It is so elided in Aeschylus twice:
P. V. 647 ฝ̉ $\mu$ é $\gamma^{\prime}$ єv้ $\delta a \iota \mu o \nu \kappa o ́ \rho \eta . ~$

$\mu \epsilon ́ \gamma{ }^{\prime}$ єv$\delta a i \mu \omega \nu$ is almost as truly one word as $\epsilon \dot{\prime} \delta a \iota \mu o \nu \epsilon \sigma \tau a ́ \tau \eta$. The adjective is elided by Aeschylus twice with the justification described in Rule 1,

$$
\begin{aligned}
& \text { Ag. } 1102 \text { тĺ tóde } \nu \text { éov ă } \chi o s \text { [ } \mu \text { é } \gamma \text { ] ] }
\end{aligned}
$$

 and once at least irregularly:

Considering the convenience of free elision it might be expected that where it once obtained it would quickly encroach ${ }^{2}$, and the example set by the elisions of the adverb appears to have produced this effect upon the adjective, for in Sophokles we have, beside more numerous cases without elision, the following elided:

2. ib. 424
3. $i b .1088$
ib. 1122
5. ib. 1125

Ant. 479
ib. 837 ...... $\mu$ '́ $\gamma^{\text {áкойбal. }}$
8. O.T. 638
O. C. 647
ib. 1746 $\mu \epsilon ́ \gamma ’$ ă $\rho a \pi \epsilon ́ \lambda a \gamma o s$ є่ $\lambda a \chi \epsilon ́ \tau \eta \nu \tau \iota$.
El. 830
12. ib. 1305

It will be seen that the second, third, fifth, eighth, twelfth and thirteenth of these are irregular, that is about one fifth of the cases in which the word occurs, a small proportion, but sufficient to shew a yielding to the pressure of convenience.

Why the adverbs ä $\mu a$, $\delta i ́ \chi a$, etc., should, as stated in Rule

[^44]4, be treated like substantives, and classed for the purpose of elision with $\chi$ Өóva and кака́, it is not easy to say; but the fact is beyond dispute. $\check{\alpha} \mu a$ occurs in the two elder tragedians together upwards of twenty times. It is elided in

(but this is justified by the position and emphasis), and also once in combination with ëторą,
 and twice in combination with the dative of avitós,

Soph. Phil. $983 \quad \vec{a} \lambda \lambda a ̀$ кaì $\sigma$ è $\delta \in \hat{\imath}$

ib. 1026 є̈ $\pi \lambda \epsilon \iota \varsigma ~ a ̈ \mu ’ ~ a u ̀ \tau o i ̂ s . ~$
The elision before $\stackrel{\epsilon}{\epsilon} \pi о \mu a t$ is admitted by Euripides even in a play of which the metrical treatment is notoriously severe, and which exemplifies perfectly the rules deduced in this paper,

and that before aìzòs several times e.g. Phoen. 174. Similarly we have in Euripides three times the elision "״ $\mu$ ' ${ }^{\prime}$ 'үóрєиє каї к.т. $\lambda$. while he was speaking, etc. (Phoen. 1177, Bacch. 1080, El. 788). These elisions are similar to the elision of $\dot{\epsilon} \mu \dot{\epsilon}$ in the phrases $\boldsymbol{\epsilon}$ is $\dot{\epsilon} \mu \grave{\epsilon}$, ändov $\hat{\eta} \hat{\epsilon} \mu \hat{\epsilon}$, and have doubtless a similar origin. By
 "̈ $\mu$ ’ $\eta \boldsymbol{\eta} \gamma \dot{\rho} \rho \in \boldsymbol{\varepsilon}$ coalesced into indivisible wholes, so that á $\mu a$ being no longer felt as an independent word, the curtailment of it ceased to offend. I have noticed two elisions of $\ddot{\alpha} \mu a$ introduced into the text of Aeschylus by conjecture-Suppl. 991 кai $\tau a \hat{v} \theta^{\prime}$ á $\mu^{\prime}$ ' є่ $\gamma \gamma \rho a ́ \psi a \sigma \theta \epsilon$, Hermann, for the MSS. каì тav̂тa $\mu \grave{\nu} \nu \gamma \rho a ́-$
 The second is metrically justifiable, though, as I think, erroneous $^{2}$; the first would be doubtful in metre, even if it were otherwise desirable. If any change is required (as to which see the

[^45]commentators) I should prefer кal тav̂тá $\mu \circ \iota \gamma \rho a ́ \psi \epsilon \sigma \theta \epsilon$. The case of $\delta i \chi \chi$ is very similar; the word occurs in the two poets twenty times, and is elided twice. In Soph. O. C. 48 (above cited) the elision is justified by position and emphasis ; not so, however, in Soph. Ai. 236
$$
\tau \grave{d} \delta e ̀ ~ \pi \lambda \epsilon v \rho о \kappa о \pi \hat{\omega} \nu \delta \delta^{\prime} \chi \text { ' à } \nu \epsilon \rho \rho \eta \prime \gamma \nu v .
$$

In Euripides we have (I depend here upon the Index) Hec: 119
$\delta_{o ́ \xi a}^{\prime} \delta^{\prime} \dot{\epsilon} \chi \omega^{\prime} \rho \epsilon \iota ~ \delta i ́ \chi ’ ~$
$\sigma \tau \rho a \tau \grave{\nu} \nu$ ai ' $\mathrm{E} \lambda \lambda \eta \eta^{\prime} \nu \omega \nu \bar{\eta} \nu$.

Beside these I would place the one elision of $\theta a \mu a ́$ in Sophokles (Aeschylus does not apparently use the word; Sophokles has it without elision three times) El. 1144

It will be observed that in all these three the elision takes place before a preposition commencing with $a$, and therefore may be what in the case of $\epsilon \mu$ ' we have termed 'graphic'; it is therefore likely that it was so, and that the pronunciation would be more nearly represented by $\delta i ́ \chi a \nu \epsilon \rho \rho \eta \eta^{\prime} \nu v, \delta i \chi a \nu$ ' $E \lambda \lambda \eta{ }^{2} \nu \omega \nu$, $\theta a \mu \grave{a} \mu \phi \dot{i} \sigma o \iota$, the vowel serving to the ear for both words. We must note, however, that in the only example of $\theta a \mu \dot{\alpha}$ cited by the Index to Euripides (Iph. T. 6) we have an elision which cannot be 'graphic,' and is not justified by phrase-connexion or otherwise,
 av้paıs é $\lambda i \sigma \sigma \omega \nu$ кvavéà ä $\lambda a \quad \sigma \tau \rho \in ́ \phi \epsilon \iota$.

The usage of Euripides in these elisions is, as will presently be seen, somewhat less regular than that of the other two tragedians, and his prologues in particular are notorious for irregularities of all kinds, not only of metre but of syntax, whether from carelessness of composition, or much more probably from interpolation and other injury. The adverb $\sigma \phi$ ó $\delta \rho a$ occurs in tragedy too rarely to establish any rule or tendency respecting
it; it is not elided in Soph. El. 1053, but elided in Soph. Ai. 150

We have no proof that $\sigma \phi o ́ \delta \rho^{\prime} i \mu \epsilon i \rho \epsilon \iota \nu$ was a set phrase, but on the other hand no reason for thinking that it was not. $\sigma$ áda is almost always elided, because it rarely occurs except in the familiar combinations $\sigma a ́ \phi ’$ oí $a$, $\sigma a ́ \phi ’$ l" $\sigma \theta \iota$, $\sigma a ́ \phi ’$ cióćval, etc. In the same way rá $\chi a$ is elided frequently in $\tau a ́ \chi$ ’ $\hat{a} \nu, \tau a ́ \chi$,
 Ai. 334 we have


The emphasis upon rá $\chi a$ here (Tekmessa desires to rouse the sailors to interfere by urging the near danger of a catastrophe) would justify the elision according to the usual practice. Elision occurs also in Eum. 730


and in Ag .1172

The last is notoriously corrupt, and the true text may not have had the word $\tau$ á $\chi a$ at all, though it is retained in the latest and best attempt at a restoration,

In Eum. 730 the correction
would remove other difficulties besides the elision. It is far
 winning thy suit, which is the sense in which it appears to be taken. It should rather mean not having decision of the suit, i.e. not being arbiter of it (cf. Eur. Or. 1545 тé̀ ${ }^{2}$ os é $\chi \in \iota$ סaí $\mu \omega \nu$

 out of the question here, as the position of the participial clause
between $\tau a ́ \chi a$ and $\dot{\epsilon} \mu \epsilon \hat{\imath}$ clearly shows that the participle is contemporaneous with the verb. The confusion of $\chi$ and $y$ occurs several times in the Aeschylean MSS., and may easily have led by false correction to the received reading in this passage.

With respect to $\begin{gathered}e \\ \nu \\ a \\ \text { and } \\ \mu i a \\ \text { a }\end{gathered}$ not, I think, elided either in Aeschylus or in Sophokles, occurring in the two together thirteen times. It is elided several times in Euripides, and one or two of the instances appear to be purely arbitrary, e.g. Tro. 660

> каíтoı $\lambda e ́ \gamma o v \sigma \iota \nu ~ \omega i s ~ \mu i ' ~ \epsilon \grave{v} \phi \rho o ́ v \eta ~ \chi a \lambda a ̂$ $\tau o ̀ ~ \delta v \sigma \mu \epsilon \nu \epsilon ̀ s ~ \gamma v \nu a \iota \kappa o ́ s . ~$

Of êva there are in Aeschylus and Sophokles only two certain elisions, both in the phrase $\epsilon i \mathcal{S}$ àvíp or $\dot{a} \nu \eta \dot{\eta} \rho \epsilon i s$,
 тауєî̀

Both forms of the elision occur several times in Euripides. In Soph. O. T. 62 we read

 $\psi \nu \chi \eta ̀ ~ \pi o ́ \lambda \iota \nu ~ \tau \epsilon ~ \kappa a ̉ \mu \grave{~ \kappa ~ \kappa a ̀ ~} \sigma^{\prime}$ ó $\mu о \hat{v} \sigma \tau \epsilon ́ \nu \epsilon \ell$.

If this is correct, it is an example of the rare elision with emphasis in the fifth thesis, which we have noticed before in é $\mu$ é. But the many peculiarities of these lines-the dubious
 кov̀ס'́v' ä̀ $\lambda \lambda o \nu$, the abrupt substitution of the singular $\sigma$ è for the plural ( $\dot{v} \mu \epsilon \hat{\imath})$ ) of the rest of the speech, the elision of $\sigma \grave{\epsilon}$ where it should be emphatic, etc.-may raise a doubt whether all three are not an interpolation.

трíta occurs in Soph. O. T. 283 and is elided,

The treatment of $\% \sigma a$ in Sophokles is particularly instructive.

At first sight elision seems to be quite unrestricted. In senarii the balance stands thus-
${ }^{\circ} \sigma \sigma a$ (not elided) occurs four times at least-Ant. 688, 712, O. T. 1228, Trach. 580.
" ${ }^{\circ} \sigma$ ' (for " $\sigma \sigma a$ elided) occurs fifteen times at least-Ant. 684, O. T. 77, 1122, 1285, O. C. 53, 74, 1582, 1634, El. 896, Trach. 664, 1150, Phil. 64, 362, 1072, 1224.

But of these fifteen examples thirteen are made up as
 six in " ${ }^{\prime} \sigma^{\prime} \hat{a} \nu$, that is, they occur in what we may safely affirm to have been familiar and fixed combinations, and to this class
 of the scales is thus reversed, and there remain as evidence of free elision some four or five cases at most-0. T. 1298 тáv $\boldsymbol{\tau} \omega \nu$

 exceptions had any special justification to the poet we are not in a position to say, but that the elision, speaking generally, was not arbitrary is clear enough. I have not noticed an example of the word in Aeschylus, nor is any cited in the Index, but it may be presumed that his rule would have been the same. He has tó $\sigma a$ in Pers. 786

## 

In Soph. Ai. 277 we have elision of $\delta i$ is $\boldsymbol{\tau} \dot{\sigma} \sigma a$,

This would of course by no means prove the elision of tó⿱㇒日, and it seems probable that the practice was the same for all the three adjectives of quantity.

It remains to consider the point hitherto postponed, how far the practice of Aeschylus and Sophokles in the matter we have been considering is followed also by Euripides. To examine the statistics of the later dramatist with the same fulness as the earlier would double the length of this paper, a result as little desirable to the reader as to the writer. It will
be sufficient to indicate summarily the result, which is, that the general rules are still the same, but the exceptions are rather more numerous in proportion and, as far as I can judge, more arbitrary. The seventeen hundred and fifty lines of the Phoenissae contain nearly as many clear violations as the fourteen plays of Aeschylus and Sophokles together. Thus we have
 ібо́тทร ёта $\epsilon$.
ib. 1191





ib. 1454 ä $\mu \phi \omega \delta^{\prime}$ ä $\mu^{\prime}$ є́ $\xi \in ́ \pi \nu \in v \sigma a \nu ~ a ̈ \theta \lambda \iota o \nu ~ \beta i ́ o \nu . ~$
ib. 1465 oi $\delta^{\prime}$ eis $8 \pi \pi \lambda^{\prime} \eta{ }^{\eta} \sigma \sigma o \nu$.



This list does not include the elisions of $\epsilon$ 's $\dot{\epsilon} \mu \dot{\epsilon}$, which must be called in Euripides regular. The examples in the same play which support the rules number about sixty, again not including the elisions of $\epsilon i \varsigma \epsilon \in \mu \dot{\epsilon}$. In the Hippolytos the proportion is much the same. Against nearly forty examples pro we find the following contra,


ib. 847 є̋ $р \eta \mu о s$ оікоя каі̀ тє́кข’ о’рфауєย́єтає.

(Note the close resemblance of the last to Phoen. 1285.)
Hipp. 327 falls and has been cited under Rule 1; one more exception appears in Hipp. 450



##  ov̉ $\pi a ́ \nu \tau \epsilon \varsigma$ モ̇ $\sigma \mu$ èv oi катà $\chi$ Өóv' ${ }^{\prime}$ ěкүovol,

but I should hardly care myself to cite the last two lines, which spoil with their prosaic specification the climax of mávza $\delta^{\circ} \epsilon^{\epsilon} \kappa$
 the most notorious commonplaces of later Greek literature, and has, I suspect, been thrust in here without permission. We may observe by the way that the lines, by whomsoever written, exhibit a correct use of the phrase калà $\chi$ Өóva (оі катà $\chi$ Өóva $=$ literally those over earth), which may be usefully contrasted with the supposed use of the same in Aesch. Eum. 901. The proportion of irregularities in the Hippolytos and Phoenissae will be found, I believe, fairly representative. In the Alkestis where the total of instances pro and contra is unusually small, the proportion of exceptions is rather higher, in the Bacchae it is much lower. In the Medea, which is perhaps in merely technical finish the most perfect of extant Greek tragedies, there is, I believe, no exception at all. In Med. 1411 the editors or most of them (including myself) have followed the MSS. of the Vatican family ( $\mathrm{S}^{\prime}$ ) in reading

But the MSS. of the other family (S), the Laurentian and Palatine, have preserved the correct reading тє́кла ктєіраб" àтокн$\lambda v \in \epsilon$ ss. In Med. 1254 the MSS. have
which corresponds exactly to the antistrophic

## $\pi \epsilon \tau \rho a ̂ \nu \quad \grave{\xi} \xi \in \omega \tau a ́ \tau a \nu$ è $\sigma \beta 0 \lambda a ́ \nu$.

But the correspondence of dochmiac strophae is not by syllables but by feet, as this very chorus signally proves, and we should probably restore the form $\chi \in i \rho a$, which is of course elided freely. Between these two the MSS. vary incessantly; see e.g. the same chorus 1285 , where as observed in my note, the choice is indifferent ${ }^{1}$.

[^46]As a point of curiosity, we may note that the Auctor Rhesi is a very purist in these matters. Not only, if my observation is accurate, does he preserve without fail the full forms of $\chi \in ́ \rho a$, $\tau \rho i ́ \chi a, \phi \lambda o ́ \gamma a, \pi o ́ \delta a, \chi$ Өóva, $\sigma \tau o ́ \mu a, \phi i \lambda a, \sigma \tau a \theta \mu a ́, \pi v \rho a ́, ~ \kappa а \kappa a ́, ~$ $\mu \epsilon ́ \sigma a, \tau a ̀ ~ \sigma a ́, \tau \in ́ \kappa \nu a$, ěva, $\mu i a, \pi a ́ p a(\pi a ́ p \in \sigma \tau \iota)$, סí $\chi a$ : but he extends the same protection to $\mu \dot{\partial} \lambda \epsilon(226)$, $i \delta \epsilon(383)$ and $\kappa \lambda i \epsilon$ (384). In 685 an elision of $\psi \theta \iota$ is introduced by some editors on conjecture ; the true reading is uncertain. The adverb $\mu$ é $\gamma a$
 open to doubt, though the best MSS. give, by a common sort of error, $\mu \epsilon \gamma a \lambda a v \chi o v ̂ \nu \tau a s$, with an anapaest in the fourth foot. At 821, where Hektor, on learning the disaster of his Thracian allies, threatens the chorus of soldiers with punishment for having quitted their watch, they give (in the MSS.) the nonsensical reply

```
821 \mué\gammaas \epsiloṅ\muò̀ \muє́\gammaа\varsigma, ఱ \pio\lambda\iotaov̂\chiov к\rhoáтos,
    то́т` " а`' є้\muодо\nu, ӧтє \sigmaо\iota
    ä\gamma\gammaє\lambdaos }\mp@subsup{\eta}{\lambda}{\prime}0ov,\dot{a}\mu\phi\grave{\imath
    \nuav\sigmai \lambdaó\chio\nu \piv\rhoai0\epsilon\epsilon\nu}\mp@subsup{}{}{2}
```

 ${ }_{\epsilon} \mu \rho \boldsymbol{\lambda} \epsilon \nu$, ${ }^{\prime \prime} \tau \epsilon \kappa$ к.т.д., and the elision of the adjective would be justified by its position according to the Aeschylean principles. But the total change in 822 is great, and unnecessary, for I think we may restore more closely and better,

$$
\begin{aligned}
& \mu \epsilon \tau a ́ ~ \sigma \epsilon \mu \eta े ~ \mu \epsilon \tau a ́ ~ \sigma ', ~ ఱ ̉ ~ \pi o \lambda \iota o u ̂ \chi o \nu ~ к \rho a ́ т о \varsigma, ~
\end{aligned}
$$

Then perchance $I$ came not to summon thee, sovereign, to summon thee, etc. They appeal (by an ironical question) to Hektor's knowledge of the circumstances which called them from their ordinary duty; the apology thus accords exactly with the opening of the play: see especially 17,23 , and 49

$$
\begin{aligned}
& { }^{1} \text { The passage is apparently not strophic. }
\end{aligned}
$$

The adjective $\mu$ '́ $\gamma a$ occurs in 198 not elided, and the adverb in 69. In the last line of the preceding citation the MSS. give
 is required by the corresponding metre of 32 . The author might have justified $\epsilon i s$ é $\epsilon$ ' abundantly from Euripides, but it is not clear that he would have thought the authority sufficient ${ }^{1}$.

How far the irregularities of Euripides are mere irregularities, or how far they have special justifications or exhibit the working of subtler principles, cannot be shown without unduly protracting our enquiry. Such incompleteness as necessity or inadvertence may leave in the statement of detail will not affect the general truth of the principles which were laid down for investigation.

## A. W. VERRALL.

[^47]
## IBIS 539.

Conditor ut tardae laesus cognomine Myrrhae orbis in innumeris inueniare locis.

Except that the codices vary between 'conditor' and 'cognitor',' tardae' and 'tardus', this is the MS reading: modern editors however, Merkel Riese and Ellis, adopt the conjecture of Leopardus 'conditor ut tardae, Blaesus cognomine, Cyrae', that is, may you be a wanderer on the face of the earth as Battus the stammerer was in the years before he founded Cyrene. Such a curse strikes me as strangely tame amidst the wounds mutilation and violent death which the context imprecates; and I feel ton another objection : the meaning of the pentameter is surely fixed by trist. III 928 'atque ita diuellit diuulsaque membra per agros Dissipat in multis inuenienda locis', and this our passage must refer to some one who perished by being torn in pieces.

I propose then to interpret the text above given as follows : may you be torn in pieces like the author of the Zmyrna that was nine years in writing, brought to grief by his cognomen of Cinna. True, Virgil's words ecl. Ix 36 suffice to show that C. Heluius Cinna the poet of the Zmyrna or Myrrha ' nonam post denique messem Quam coepta est nonamque edita post hiemem' some years outlived his namesake the tribune murdered in 709/44 by mistake for the conspirator L. Cornelius Cinna. Still I think the plain sense of the words is that which I give them. Whether Ovid dreamt that the tribune and the poet were one, or whether he was humouring a popular fancy, or whether these lines are not Ovid's, let others say.

A. E. HOUSMAN.

## THE JOURNAL

## OF

## PHILOLOGY.

## ON THE NUBES OF ARISTOPHANES ${ }^{1}$.

 Plat. Rep. 607 в.

Of this 'ancient feud' the Nubes is not the only instance afforded by the poets of the Old Comedy.

Cratinus composed his Пауóтта॰ in ridicule of the Ionic philosopher Hippo, Schol. Nub. 96. From this, we are told, Aristophanes borrowed his $\pi \nu \iota \gamma \epsilon \cup{ }^{\prime}$, Nub. ibid. In the Пavóттаı we are informed that Hippo was attacked for $\dot{a} \sigma \dot{\epsilon} \beta \in \iota a$ as Socr. in the Nub. Of this play nine fragments have been collected by Meineke, Com. Gr. II. i. p. 102.

Eupolis in his Kó入aкes attacks the Sophists, who were great 'diners-out' and guests of the wealthy and noble. Diogenes Laertius favours us with three bitter lines from this play:
$\pi \epsilon \rho \grave{\tau} \tau \hat{\omega} \nu \mu \epsilon \tau \epsilon \omega \dot{\rho} \omega \nu, \tau a ̀$ ठ̀̀ $\chi a \mu a ́ \theta \in \nu$ є̇ $\sigma \theta i \epsilon \epsilon$.
> ${ }^{1}$ To these general remarks I have appended a few adversaria, chiefly relating to the criticism of the text. One chief motive for publishing these latter was the desire to remind English scholars of the important textual ser-
vices rendered to Aristophanes by their countrymen, especially by Bentley; services which are perhaps better appreciated by the Dutch and some German critics than by our own students.

Protagoras，it may be observed，was not more a meteoro－ sophist than Socrates：but as a $\sigma \circ \phi \iota \sigma \pi \eta^{\prime}$ s he is made to suffer for the sins committed by others of the fraternity．The case is parallel to that of the Aristophanic Socrates．

In other dramas，the names of which are not recorded， Eupolis inveighs against Socrates；as in the following passage， preserved in a corrupt state by Olympiodorus in Phaedon．，but restored by Hermann and Meineke，
 ôs тä̀ $\lambda \lambda a \mu^{\mu} \boldsymbol{\nu} \boldsymbol{\pi} \pi \epsilon \phi \rho o ́ \nu \tau \iota \kappa \epsilon \nu$ ，


In another fragm．it is probably Socr．who is addressed：

The play may have had the same＇motive＇as the Nubes－ an old gentleman placing his hopeful son under the tuition of the＇sophist．＇The word áסo入é $\sigma \chi \eta s$ and its cognates were applied especially to the physicists real or supposed．It was adopted by Plato in a spirit of defiance for his long－drawn dialectical discussions．

Ameipsias，another of the old Comici，seems to have been better informed or less unscrupulous than his brethren．In Diog．Laert．II． 928 the following lines－from a parabasis of the Kóvyos－are preserved：





The Kóvvos took its name from a $\kappa \iota \theta a \rho \iota \sigma \tau \eta \dot{s}$ supposed to have taught Socrates．The chorus consisted of фоо⿱亠乂⿰丿㇇⺀⿺乀乛⿱二小， caricatured Sophists．The poet however seems to make excep－ tion in favour of Socrates，at least as regards his moral character， to which the passage quoted bears a noble testimony．

From all this it is evident that whatever may have been his personal relations with Socrates，Aristophanes was butfollowing
a tradition of the Comic stage in making him the object of his satire. Bp Thirlwall, in a masterly excursus to his History of Greece ${ }^{1}$, has argued the case between Socrates and his traducer with his wonted power. The treatise is apparently so exhaustive that it may seem presumptuous to attempt any additional illustration. But there are one or two considerations affecting the ethics of the question which still deserve to be noted.

In the first place, no doubt can now exist that the Comic Poet either knew next to nothing of the peculiarities of his victim's way of thinking and teaching, or that, knowing, he has deliberately misrepresented them. This dilemma has been acknowledged by the Bishop, who has successfully defended this common-sense view of the case, against the sophistries of certain German paradox-mongers ${ }^{2}$, including the redoubtable Hegel. If I may venture an opinion, I incline to think that Aristophanes, though we cannot claim for him the merit of scrupulousness in dealing with the contemporary celebrities, yet in this instance probably erred from ignorance rather than deliberation. He has in fact made Socrates everything that he was not-a greedy self-seeking sophist, a speculator on matters too high for mortals, an atheist who believed only in a rude form of evolution, \&c., whereas he had to do with the most disinterested of the teachers of his day, a poor man content with his poverty, a despiser of "natural science," and perhaps the only Greek thinker of his time to whom we can unhesitatingly apply the title of Theist. On the other hand, Aristophanes has seized and utilized all the external peculiarities of Socrates-his gait, his habit of falling into a brown study, his $\dot{a} \nu v \pi \sigma \delta \eta \sigma i a$, \&c. All this points to the conclusion that the poet knew him only as he was known to every cobbler in the city, as a somewhat dirty, very ill-dressed and thoroughly eccentric character. Noscitur, he may have thought, a sociis: and among his companions were professors of the omne scibile like Hippias, and at an earlier period such "meteorosophists" as Archelaus and Anaxagoras.

The passage from Plato prefixed to these remarks points in

[^48]the right direction. It is futile to enquire whether Aristophanes bore any special dislike to Socrates, whom at the time of the representation of the second Nubes ( 422 b.c.) he may not personally have known. Socrates however was a philosopher, and that, it seems to me, explains-I do not of course say justifiesthe dislike of Aristophanes, who, with a recklessness of which his colleagues Cratinus and Eupolis had set the example, makes Socrates the representative of a class to the majority of whose members he was strongly contrasted both in point of character and opinions. The leading motive of all three was doubtless a strong class-prejudice. It is difficult for us to realize the virulence of this class-feeling in Athens. Even among those who would be styled Sophists by the general public, there was great heartburning between the dialecticians or "Eristics" and those who called themselves Rhetors. Of this we have ample evidence in several of the speeches or rather pamphlets of the vain and irritable Isocrates, whose writings give us an insight, which otherwise would have been lacking, into the literary history of the time. It is not ton much to say that every class of intellectual workers in Athens despised and vilified every other. The phrase $\delta \iota a \phi \theta \epsilon i \rho \epsilon \iota \nu$ tov̀s $\nu$ 白ous was in the mouths of all alike, but it meant different things according to the different tastes or prejudices of those who employed it. Thus the practical politicians regarded as $\delta \iota \epsilon \phi \theta a \rho \mu \epsilon ́ v o \iota$ all those who after a certain time of life continued the studies of their youth in any branch of literature or philosophy ${ }^{1}$. The rhetors, who prepared young men for public life, were angry with the speculatists, and jealous of the interest in moral or metaphysical questions which such men as Socrates and his followers excited in the minds of the more thoughtful youth. From a passage in the Ranae quoted presently we see that Aristopbanes, and doubtless his brother Comic poets, hated the same class, because they led away intelligent youth from poetry and the theatre, and as they thought spoilt the productions of those who continued to "teach choruses." From their own point of view, much is to be said in excuse for this feeling.

[^49] So read by Bentl. on Schol. Nub. 360.

Plato, for instance, was a born poet spoilt by philosophy. The scraps of moral and physical speculation recurring in the dramas of Euripides, though quite in harmony with the prevailing taste of the literary circles, were an offence to those who were untouched by the "modern culture." To speak as if the charge against the фроעтוनтai meant that they corrupted the "morals" of youth is obviously a mistake, if we understand by "morals" personal conduct. Such an attempt would have been, to say the least, uncalled-for, and unless the young men of the time are greatly belied, even difficult of accomplishment. But "spoilt" in many cases the youths doubtless were for the recognized professions, and for raising themselves in the world: and the compensatory advantages of the $\theta \epsilon \omega \rho \eta \tau \iota \kappa o ̀ s$ קios were unintelligible to rhetor, comedian, advocate and politician alike.

At the same time, whatever may be the explanation, it does not amount to a justification of the measureless scurrility and the vile slanders of which Aristophanes in this play has made Socrates the object. All that we can infer is, that the hypothesis of personal spite or hostility is uncalled-for. When the Ranae was acted (b.c. 405) the poet seems to have improved his acquaintance with the Socratic methods of instruction.


 ф $о$ оvô̂vтos ảvóós. v. 1489 sqq. ${ }^{1}$

This is comparatively harmless satire, compared with the tone adopted in the earlier play; and if we remember that poetry did really decline as philosophy grew and flourished, it was excusable, in an onlooker, to mistake the cum hoc for the propter hoc. That Aristophanes took no part in bringing Socrates before the courts seems certain. That task was performed by a very inferior poet, and was probably as repugnant to Aristophanes' feelings as philosophy itself. The line Nub. 1466


[^50]even if we reject as fanciful the conjecture that it may have been inserted by the poet after the death of Socrates ${ }^{1}$.

What were the feelings of Plato towards the former traducer of his master it is hard to say. We should not at once infer from his introduction in the Symposium, written probably after the death of Aristophanes ${ }^{2}$, that a friendship existed between the two, or that Plato wished to shew his gratitude to the poet for his abstention from the proceedings which cost Socrates his life. The truth is that we can in very few cases trace Plato's motives in the selection of the persons introduced into his dialogues. Dramatic effect would be sufficient to account for the choice of speakers in the dialogue now in question, and it is perhaps futile to seek any other motive ${ }^{3}$.
1.1. $\tau \grave{o} \chi \rho \hat{\eta} \mu a \tau \hat{\omega} \nu \nu v \kappa \tau \hat{\omega} \nu$ '̌ $\sigma o \nu]$ The Comm. illustrate the periphrasis abundantly. For $\chi \rho \hat{\imath} \mu a$ is sometimes substituted $\pi \rho a \hat{\gamma} \mu a$ as in Alexides Comicus, Пaрáбıtos fr. II. (Meineke vol. III. p. 268),

$$
\pi \rho a ̂ \gamma \mu a \delta^{\prime} \text { è } \sigma \tau i ́ \mu o \iota ~ \mu e ́ \gamma a
$$


So Heniochus (ibid. p. 562) $\chi$ ápıєv ois $\gamma \iota \gamma \nu \omega ́ \sigma \kappa \epsilon \tau a \iota ~ T o ̀ ~ \pi \rho \rho a ̂ \gamma-~$ $\mu a$ тov̂ $\Pi a v \dot{\sigma} \omega \omega \nu$ s, = that fellow Pauson.
2. àmépavtov] Porson read ảmépatov. Hesych. ảmépazoı, áópıбтol, тé̉os $\mu \grave{\eta}$ é $\chi$ оvтєs. On the quantity of the penult of this word Phrynichus ap. Bekk. Anecd. p. 22 àтє́fatov• є̇ктє́-

[^51]the epigram, perhaps doubtfully, attributed to him:

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Ai Xápı\tau\epsilons \tau\epsiloń\mu\epsilonvbs \tau\iota \lambdaa\beta\epsilonî\nu ö\pi\epsilon\rho oư\chil \(\pi \in \sigma \in\) ìtal
```



The Rabelaistic speech put in his mouth in the Symposium is not unworthy of his comic powers. There may however be some malice in the words of Alcibiades, ärєєpos кal ávó ${ }^{\prime}$ тos a $\nu \theta \rho \omega \pi o s \pi a ̂ s a ̂ ̀ \nu \tau \omega \hat{\nu} \lambda o d \gamma \omega \nu \kappa a \tau a \gamma \epsilon \lambda \alpha \dot{\sigma} \epsilon \epsilon \epsilon$, p. 221 є.
 probably infer that $\dot{a} \pi$ éparov was the strict Attic form，and replace it with Porson and the Scholiast，q．v．

10．$\sigma \iota \sigma$ v́paıs］Tzetzes ad Lycophr． 634 б८ov́pa тò ध̂к
 used earlier（as by Porphyry）for fur．Qu．as to its connexion with the Eng．gown，asserted by Prof．Sophocles in his＂Glos－ sary of later Greek，\＆c．＂Prof．Skeat makes gown a Celtic word．
 каі̀ єіка́ठє．So Stallb．

23．＇ő $\tau$＇є̇ $\pi \rho \iota a ́ \mu \eta \nu$ тòv коттатіа⿱亠乂］Some codd．have $\xi v \nu \eta ̂ \kappa a$
 $\kappa о \pi \pi а т i ́ a \nu$ ．This however would make $\grave{\epsilon} \pi \rho \iota a ́ \mu \eta \nu$ an imper－ fect instead of an aorist，which may hardly be．
 seum Criticum v．I．p． 478 remarks on the somewhat harsh tribrach，＂We suspect that an Athenian ear would hardly have tolerated $\phi i \lambda o \nu$ or any similar（i．e．unelided）word＂in this and the passage quoted from the Vespae 69 ovivos фu入áттєıl $\tau \grave{\nu}$ $\pi a \tau \in ́ \rho ’$＇̇ $\pi \in ́ \tau a \xi \in \nu \hat{\varphi} \nu$ ．Compare Enger in Lysistr．Proll．p．xxvii．

35．èvє $\chi \nu \rho a ́ \sigma a \sigma \theta a i ́ ~ \phi a \sigma \iota \nu] ~ T h e ~ S c h o l . ~ r e a d ~ e ̀ v e \chi v \rho a ́ \sigma \epsilon-~$ $\sigma \theta a \iota$ ，interpreting thus，$\grave{\varepsilon} \bar{\varepsilon} \chi \chi \nu \rho a \pi a \rho^{\prime} \epsilon \in \mu o \hat{v} \lambda \eta \dot{\eta} \psi \in \sigma \theta a i ́ \phi u \sigma \iota \nu$ ．Cf．
 reading seems to be $\kappa a ̂ \nu ~ \phi \iota \lambda \hat{\eta} \sigma a \iota$ ．On the use of the aor．infin． without $a \partial \nu$ ，for a future，which many German critics maintain， see Cobet＇s Novae Lectt．p．246．In this place the future ought certainly to be restored．
 （Walsh）in the bedclothes is biting me．＂From this it would appear that the demarch（a title still in use in modern Greece） had the power of distraining the goods of defaulters．See Mitchell＇s note in his edition of the Nubes ibique laudata． Demarchs in the metaphorical sense indicated in the text，are but too common in Greece at the present day．
 For Coesyra see the Schol．She was the mother of Megacles the Alcmaeonid，and both Pericles and Alcibiades were Alc－ maeonids．Hence the conjecture or rather assertion of Süvern
that Alcibiades is concealed beneath the mask of Pheidippidesa notion which contains thus much of truth, that the poet intended to reflect on the manners of the Athenian Eupatridae. Koıoúpas occurs in Ach. 614.
50. $\dot{\epsilon} \rho i \omega \nu \pi \epsilon \rho \iota o v \sigma i a s]$ "Superabundance of wool" is the usual explanation. We read of ' épi' oívvт $\quad \rho \frac{1}{a}$ in Acharn. 1176. Has $\pi \epsilon \rho ı o v \sigma i a$ ever the sense of $\pi \epsilon \rho i \tau \tau \omega \mu a$, dregs, refuse, excrement, \&c.? ámovoía in late Greek is used for the scoriae or refuse of metals. Compare Lysistr. 574.
 queri videretur, cum re vera uxoris libidinem conquereretur," Teuffel. Originally $\sigma \pi a \theta \hat{a} \nu$ means to ply the $\sigma \pi \alpha^{\prime} \theta \eta$ in
 $\chi \in \rho o ́ s, \sigma \pi \alpha \dot{\theta} \eta \eta \varsigma \tau \epsilon \pi \lambda \eta \gamma a ́ s . . . S e n e c a$ Epist. 90 (p. 408 ed. Gronov.) subtemen spatha coire cogatur et jungi. The verb does not occur elsewhere in Aristoph. but the Schol. on Ran. 429 has
 doubt borrowing the word from a Comic poet. In Lucian de luctu, p. 930, it is used as here for bodily exhaustion produced by sensual excess. This seems on the whole the best explanation of a rather obscure passage.
58. $\delta \iota a ̀ \tau i ́ \delta \eta ̂ \tau a \kappa \lambda a v ́ \sigma o \mu a \iota]$ Bentl. reads $\delta \iota a \tau i$ $\delta \grave{\eta} \kappa \epsilon \kappa \lambda a v \dot{v}-$ oouat, quoting verse 1438. But the received reading seems better.
 тò $\tau o \hat{v} \pi$. with Cobet, or $\delta^{\prime}$ àmò $\tau o \hat{v} \pi$. with Meineke.
 like your ancestor Megacles." See Pindar's seventh Pythian, composed in honour of "Megacles the Athenian," and his victory $\tau \epsilon \theta \rho i \not \pi \pi \omega$. Schol. Plat. Bkk. p. 402 छvбтis $\tau \rho a \gamma \iota \kappa o ̀ \nu$ év $\delta \nu \mu a$. Plutarch Moral. p. 348 f mentions among articles of tragic costume $\xi v \sigma \tau i \delta a s$ á $\lambda o v \rho \gamma o v{ }^{\prime} s . ~ S e e ~ f u r t h e r ~ M e i n e k e ~ C o m . ~ G r . ~$ ed. maj., Tom. II. p. 169. $\xi_{v \sigma \tau i s}$ so called from the fineness of its texture.
 mountain in the N. E. of Attica (Leake Athens and Attica II. p. 6), hence used of any $\pi \epsilon \tau \rho \omega \dot{\delta} \eta$ каì airißoтa $\chi \omega \rho i a$, which as a fact abound in Greece. Comp. Acharn. 261.

75．$\phi \rho \circ \nu \tau i \zeta \omega \nu$ ó $\delta o \hat{v}]$ Some editors punctuate after $\dot{\delta} \delta o \hat{v}$ ， others couple ódov̂ with $\dot{a} \tau \rho a \pi \dot{\partial} \nu$. See Meineke，Vindiciae Aristoph．p．70，who takes refuge in the conjecture that perhaps a line had slipped out of the text，＂cujus haec fuerit sententia

 me．I should punctuate after $\phi \rho о \nu \tau i \zeta \omega \nu$ ：＂After cogitating all night I discovered one way of procedure of marvellous promise．＂

84．$\mu \eta^{\prime} \mu o i{ }^{\prime} \gamma$ ］See infra，v． 433.
90．каi $\tau \iota \pi \epsilon i ́ \sigma \epsilon \iota]$ Perhaps we should read $\kappa a ̊ \tau a \pi \epsilon i \sigma \epsilon \iota$ ；
94．фоогтıбтท́pıov］Plat．Sympos． 220 с $\Sigma \omega \kappa \rho a ́ \tau \eta \varsigma ~ є ̇ \xi ~$ $\dot{\epsilon} \omega \theta \iota \nu o \hat{\nu} \phi \rho о \nu \tau i \zeta \omega \nu \tau \iota \stackrel{\text { ë }}{\sigma} \tau \eta \kappa \epsilon$.

97．$\dot{\eta} \mu \epsilon \hat{\iota} \varsigma \delta^{\prime}$ ä $\nu \theta$ ракєs］＂and that we are the coals there－ in，＂vulg．ä̀ ${ }^{2} \rho а к є \varsigma$.

102．ả入a⿳⺈óvas］nearly equiv．to our＂charlatans，＂－pom－ pous impostors．On the quality of an $\dot{a} \lambda \dot{a} \zeta \omega \nu$ see Aristotle Eth．Nic．Iv．7．See also Eupolis Com．as quoted above．

103．àvvтoסウ́тovs］Plat．Symp． 174 A； 200 в．
104．како $\delta a i \mu \omega \nu$ ］Ibid． 173 D Apollodorus is made to


107．$\sigma \chi a \sigma \alpha ́ \mu \epsilon \nu o s ~ \tau \eta े \nu ~ i \pi \pi \iota \kappa \check{\prime} \nu]$＂lay down your stud，＂ ＂give up your horsey ways．＂J．Poll．II． 215 $\sigma \chi a ́ \sigma a \iota ~ a i \mu a$ тò $\lambda \hat{v} \sigma a \iota ~ \phi \lambda \epsilon ́ \beta a$ ，Plato Com．ap．Meineke p． 626 кaì $\tau a ̀ s$
 haughty airs and your sour looks．＂
 $\delta^{\prime}$ o＇$\rho \nu \varepsilon \iota \varsigma-a$ dogma refuted by this passage and by Mnesi－
 （Meineke III．578），\＆c．See Lobeck Phryn． 459.

120．тò $\chi р \hat{\omega} \mu a$ ठаакєкขаьб $\mu$ évos］Meineke gives тò $\sigma \hat{\omega} \mu a$ ． But see Eur．Cycl． $487 \lambda a \mu \pi \rho a ̀ \nu$ ö $\downarrow \iota \nu$ ঠıакраї $\epsilon \iota$ ，which justifies $\chi \rho \bar{\omega} \mu a$ in the text．

131．$\sigma \tau \rho a \gamma \gamma \epsilon$ v́o $\mu a \iota$ ］hesitate，stick fast：Hesych．$\sigma \tau \rho$ ．
 бєv́o $\mu$ а ；

135．Cumberland thus translates：
．．．．．．You have marred
The ripe conception of my pregnant brain，

And brought on a miscarriage．St．O the pity！
Pardon my ignorance，I＇m country－bred
And from afield am come．
Aristophanes here betrays a certain acquaintance with a favourite image of Socrates，the midwife of other men＇s minds， and professor of $\mu$ аєєvтıк ${ }^{\prime}$ ．See Plat．Theaet．161，Polit． 268 в．

145．廿ú入入av ómóбovs］This problem，or one next of kin to it，has been solved，it appears，by modern science．The leap of the flea is 200 times its length．See a curious extract from Kirby and Spence＇s Entomology in Walsh＇s Translation．

151．$\psi v \gamma \epsilon i \sigma \eta]$ The Attic form is $\psi v \chi \epsilon i \sigma \eta$ ，Plat．Phaedr．

 тоขิ «ฑроิ．



179．Өоıцáтьov］Hermann＇s conj．Өvرátıov is now gene－ rally accepted．No himation had been mentioned to which the article might apply．See Teuffel in vv．ll．$\theta v \mu$ ．$=$ a meat－ offering－a whole or more probably part of a victim，or possibly mere ${ }^{\circ} \lambda \phi \iota \tau a$ ．Socrates was attached to his threadbare hima－ tion，and was not likely to filch another．

181．＂After that，why should we spend our wonder on a Thales？＂See Plautus Captiv．2．2．21，

Thalem talento non emam Milesium，
Nam ad sapientiam hujus ille nimius nugator fuit．



213．$\pi a \rho \epsilon \tau \alpha \dot{\theta} \eta \eta$ ］Plat．Euthyd． 303 в $\gamma \in \lambda \omega ิ \nu \tau \epsilon$ ò $\lambda i ́ \gamma o v$ $\pi а \rho \epsilon \tau a ́ \theta \eta \sigma a \nu$ ．Xen．Mem．III．13． 6 тарєтáӨך цакрàv ó óò $\pi о \rho є v \theta \epsilon i ́ s$.

214．$\pi o \hat{v}$＇$\sigma \tau \iota \nu ;] \pi o \hat{v}$＇$\sigma \theta$＇is preferable．
 oiц $\omega^{\prime} \xi \epsilon \sigma \theta^{\prime}$ ä $\rho a . \quad \nu \grave{\eta} \quad \Delta i a$ can hardly be used as a negative．So Cobet，and Holden in ed． 2.

218．крє $\mu a ́ \theta \rho a s]$ Suid．крє $\mu a ́ \theta \rho a \quad \mu \epsilon \tau \epsilon ́ \omega \rho o ́ v ~ \tau \iota ~ \kappa а т а-~$
 identifies крєна́ $\sigma \tau \rho a$ with $\pi$ étєvpov and so the Schol. in loc.


230. Compare Theophrastus de Sensu $39 \Delta$ ıoүév $\eta$ s (ó






Herwerden suggests ö $\nu \tau \omega \varsigma$ for $\dot{o} \rho \theta \hat{\omega} \varsigma$, which is a mere repetition of $\sigma a \phi \hat{\alpha} s$. This is better than Meineke's suggestion ${ }^{\prime \prime} \tau \tau$ ' $\dot{\epsilon} \sigma \tau i \nu ; \Sigma$. $\dot{o} \rho \gamma \hat{\omega} \nu \eta{ }^{\prime} \Delta i^{\prime} \kappa . \tau . \lambda$. referring to Aves 462.
 for трímoঠa. See Demosth. de Cor. p. 313 § 323 ảvıбтàs ámò тov̂ каӨap $\mu o \hat{~ \tau o v ̀ s ~ \tau \epsilon \lambda o v \mu e ́ v o v s . ~}$
 ö $\lambda \frac{1}{}$.
263. є̇такои́єьข] So the Ravenna and Venet. Vulg. $\dot{v} \pi a$ кov́ $\epsilon \nu$, which would make Strepsiades the deity prayed to.
272. $\dot{a} \rho \dot{v} \epsilon \sigma \theta \epsilon$ ] Bentley $\dot{a} \rho \dot{\prime} \tau \epsilon \sigma \theta \epsilon$, which is the true form. B. also changes the order, reading eï $\tau^{\prime}$ äpa N $\epsilon i$ ìov $\chi \rho v \sigma a i ̂ s$ $\pi \rho \circ \chi \circ a i ̂ s$ ví. à $\rho \dot{\tau} \tau \epsilon \sigma \theta \epsilon \pi \rho o ́ \chi \circ \iota \sigma \iota \nu$.
 perhaps better. Mus. Crit. II. p. 435. Another conj. of his,
 тoו. The Epistola ad Kusterum in which these conjectures are found, is worth study.
281. àфорю́ $\mu \epsilon \theta a]$ "espy far off." The use of $\dot{\alpha} \pi \grave{o}$ is the same in $\dot{\alpha} \pi о \sigma \kappa о \pi о \hat{v} \mu \epsilon \nu$ Eur. Hec. 939, $\pi o ́ \lambda \iota \nu \dot{a} \pi о \sigma \kappa о \pi о \hat{v} \sigma a$, seeing afar off.
295. Vulg. oủ $\mu \grave{\eta} \sigma \kappa \omega$ ' $\psi \eta s$ ] Read with Meineke $\sigma \kappa \omega \dot{\psi} \psi \in \iota$ and $\pi o \iota \eta$ ' $\sigma \iota \varsigma: \sigma \kappa \omega^{\prime} \psi \epsilon \iota \varsigma$, the reading of Bekker, is a manifest
 diphthongs in question are perpetually confounded.
 そoveíav.
318. $\pi \epsilon \rho i \lambda \epsilon \xi \iota \nu]$ Schol. $\pi \epsilon \rho \iota \tau \tau o \lambda o \gamma i a \nu, \pi \epsilon \rho i \phi \rho a \sigma \iota \nu$, literally "circumlocution." Comp. Plat. Phaedr. 267 в äтєєра $\mu \not{ }_{\prime}^{\kappa} \eta$ $\pi \epsilon \rho \grave{\imath} \pi a ́ \nu \tau \omega \nu \dot{a} \nu \epsilon \hat{v} \rho o \nu$, sc. Gorgias et Tisias.

 'fencing' perhaps represents the meaning, unless the metaphor be nautical, and derived from $\pi \rho \rho^{\mu} \mu \nu a \nu$ кроv́єıv. In that case $\kappa \rho .=$ 'backing out,' also a useful process. Comp. Equit. 1375
$\kappa а т а \lambda \eta \pi \tau \iota \kappa o ́ s ~ \tau ’ ~ a ̆ \rho \iota \sigma \tau a ~ \tau o v ̂ ~ \theta o \rho v ß \eta \tau \iota \kappa o \hat{v}$,
where see the Schol. This passage and that in the text are intended to ridicule the jargon of the rhetorical schools.
 $\mu \hat{\nu} \nu \kappa a \pi \nu o v ́ s$.
 makes war in so many dialogues, and of which Zeno of Elea was the parent, is here described. $\gamma \nu \omega \mu \mu \delta^{\prime} \omega \gamma \gamma \nu . \nu \dot{v} \xi a \sigma^{\prime}$. In Plat. Phaedr. 267 в $\gamma \nu \omega \mu o \lambda o \gamma i a$ is mentioned among the rhetorical devices of Polus.
 ỏ $\phi \theta a \lambda \mu o i ̂ s ~ \mu \epsilon \gamma a ́ \lambda a s ~ \omega ́ s ~ к о \lambda о \kappa v ́ \nu \tau а s ं ~ \lambda \eta ́ \mu \eta ~ \delta e ̀ ~ \tau o ̀ ~ \pi \epsilon \pi \eta \gamma o ̀ s ~ \delta a ́-~$


329. Vulg. $\left.\eta^{\prime} \delta \epsilon \iota \varsigma\right]$ Read $\eta \neq \eta \eta \sigma \theta^{\prime}$ as in Eccles. 551.
336. єit' à́pías] Kock suggests єita $\delta i$ ' av̀pas.
342. où $\gamma \dot{\alpha} \rho \dot{\epsilon} \kappa \in \in \hat{\nu} \nu a \iota]$ He says this pointing to the real clouds floating overhead.
346. Comp. Shaksp. Hamlet III. 2. H. Do you see that cloud that's almost in shape like a camel? Pol. By the mass and 'tis like a camel indeed, \&c. So Antony and Cleop. Iv. 12 :

Sometime we see a cloud that's dragonish, A vapour sometime like a bear or lion, \&c.

Add Swift, Tale of a Tub, Dedication [p. 44, Scott's ed.], quoted by Porson. Dobree in his Addenda to Porson in Aristoph. further quotes a similar passage from Jeremy Taylor (Worthy Communicant, p. 8).
365. رóvà єiбi $\theta \epsilon a i$ i] forte $\theta \epsilon o i$, Bentl., who is probably right.
 $\pi<\iota \epsilon \hat{\imath}$, which is not unlikely to be the true reading.
390. áт $\left.\rho^{\prime} \mu a \varsigma ~ \pi \rho \hat{\omega} \tau o \nu\right]$ "Porsonus me monuit legendum
 $\kappa a ̈ \pi \epsilon \iota \tau a ~ \pi a \pi a \pi \pi a \dot{\xi} \xi$." Dobree. This seems to be the right reading, the vulg. being pointless.
398. каі т $\hat{\omega}$ к.т.д.] Porson, according to Dobree, legen-
 $\kappa \in \sigma \epsilon \lambda \eta^{\prime} \nu 0 v$, alleging a passage in the Placita Philosophorum каì


 get rid of the somewhat disagreeable repetition of $\pi \hat{\omega} s$. If we reject the conj. as too bold, we may read for $\pi \hat{\omega} s$ oú $\chi^{i}$, $\epsilon i \tau^{\prime}$ ov่ $\chi i$, which is perhaps better than Dindorf's $\delta \hat{\eta} \tau^{\prime}$ ov่ $\chi i$ i.

404-7. Comp. Lucret. vi. 124, seqq.
409. ó $\pi \tau \omega \bar{\omega} \nu$ रaftépa] "As I was cooking a haggis for my kinsmen, lo! I forgot to lance it." The use of кả $\boldsymbol{\tau} a$ after a participle is familiar. See the reff. in Teuffel.
412. This passage down to 417 is thus given by Diog. Laert.

 $\delta \iota a ́ \xi \in \iota \varsigma)$





Of these variants $\delta \Delta \dot{a} \xi \in \iota \varsigma, \epsilon \hat{i} \gamma \dot{a} \rho$, and the indicative for the hypothetical particles, ov้ $\tau \epsilon$ for $\mu \eta \dot{\eta} \tau$, are improvements. Meineke adopts also ápí $\sigma \tau \omega \nu$, which is no improvement in my opinion.
423. $\theta \epsilon o ̀ \nu ~ o v ́ \delta e ́ v a] ~ B e n t l . ~ r e a d s ~ \theta \epsilon o ̀ \nu ~ o v ̉ ~ \delta ́ ́ v, ~ r i g h t l y ~ I ~$ think.
433. $\mu \eta \eta_{0 i} \gamma \epsilon$ ] Supply $\epsilon i \eta$ as in $84 \epsilon i \pi \eta \hat{\eta} s$.
438. $\nu \hat{v} \nu$ oủv $\chi \rho \eta \dot{\sigma} \theta \omega \nu$ ] Meineke ejects $\chi \rho \eta \dot{\eta} \sigma \omega \omega \nu$, reading $\nu \hat{\nu} \nu$ ov้̉ $\dot{a} \tau \epsilon \chi \nu \omega \hat{s}$ ö $\tau \iota$ ßov́ $\lambda o \nu \tau a \iota$. $\dot{a} \tau \epsilon \chi \nu \hat{\omega}$ s follows $\chi \rho \eta \dot{\sigma} \theta \omega \nu$ in several mss. Kock deals more boldly with the passage:

$$
\begin{aligned}
& \nu \hat{\nu} \nu \text { ov̉v } \chi \rho \eta \dot{\sigma} \theta \theta \nu \text { тoúт } \varphi \text { भ’ a่ } \tau \epsilon \chi \nu \omega ิ s
\end{aligned}
$$

$$
\begin{aligned}
& \pi a \rho \in ́ \chi \omega \nu \tau \cup ́ \pi \tau \epsilon \iota \nu \kappa . \tau . \lambda .
\end{aligned}
$$


442. Read with Bentley áбкóv $\tau \in \delta$ '́́pєı $\nu$. The edd. vary between $\delta \epsilon i \rho \epsilon \iota \nu$ and $\delta a i \rho \epsilon \iota \nu$. The same ambiguity exists in the readings of Aves 365 тaîє $\delta$ èı $\iota \rho \epsilon$. Suidas, $\delta a i \rho \in \iota \nu$ тú $\pi \tau \epsilon \iota \nu$,
 off my skin, and make of it a wineskin." The Ionic form $\delta \in i$ i$\rho \varepsilon \iota \nu$ is not admissible here.
 great scholar of his day ${ }^{1}$ who knew how to scan, substituted $\mu a \tau$ -тvo入o८Хós-a lick-platter, a gourmet ( $\mu a \tau \tau v \prime \eta=\pi a ̂ \nu ~ \pi o \lambda v \tau \epsilon \lambda e ̀ s$ є́ $\delta \in \sigma \mu a)$. The unmeaning and unmetrical $\mu a \tau \tau o \lambda o c \chi o ́ s$ is retained by Teuff. and (provisionally) by Meineke, who puts his trust in Jul. Pollux, according to whom the word is a Macedonian (Athenaeus xiv. 662 says a Thessalian) invention. Bentley of course knew the passage in Pollux, but wisely, as I think, disregarded his statement. Yet Dobree tells us that "De Bentleii emendatione non liquebat Porsono, si memini." It is to be hoped that Dobree's memory for once failed him. Why indeed should not a Thessalian word have come into use with the Old as it certainly did with the New, and, as I infer from a clause in Athen. 1. l., with the Middle Comic Poets, as Antiphanes? No other compound of $\lambda \in i \chi \omega$ is conceivable here. There are but two such compounds in all.
 in this periodical proposed émóqroual, which I now see was adopted by Porson (ap. Dobr.). The passage is so quoted in
 compound usual in such cases, generally but by no means always,

[^52]when the sight is painful (see my note on Plato Gorg. p. 473 c ). The dactylic metre in this passage is preserved by the change. vv. 486-7 ${ }^{\text {é } \nu є \sigma \tau \iota ~ к . т . \lambda . ~ a r e ~ b a n i s h e d ~ f r o m ~ t h e ~ t e x t ~ b y ~ M e i n e k e . ~}$ They interrupt the course of questioning by introducing irrelevant matter, docility not being proportionate to the power of speaking, but if anything, the reverse.
489. The vulg. $\pi \rho \circ \beta \dot{a} \lambda \lambda \omega \mu a \iota$ is evidently wrong. $\pi \rho o-$ $\beta a \dot{\lambda} \omega \sigma o \iota$ is suggested by Hirschig, inf. 757, for which Meineke gives $\pi \rho o \beta a ́ \lambda \lambda \omega \sigma o \iota$, not so well. $\pi \rho o \beta a ́ \lambda \lambda \epsilon \tau \epsilon$ was the wellknown challenge of Protagoras, not $\pi \rho o \beta a ́ \lambda \lambda \epsilon \sigma \theta \epsilon$. Teuffel, possibly from prejudice against "Holländer," speaks sniffingly of Hirschig's all but certain, as a merely "specious" emendation.
 anno 1769). "B. I suppose, Sir, he has thought superficially, and seized the first notions that occurred to his mind. J. Why then, Sir, still he is like a dog, that snatches the piece next to him. Did you never observe that dogs have not the power of comparing? A dog will take a small bit of meat as readily as a large, when both are before him."
 Greece, II. p. 123 sq.
廿íov $\delta \in u ́ t \epsilon \rho o s ~ \overleftrightarrow{~} \phi \theta \eta$.
 $\dot{\epsilon} \pi \iota \delta \epsilon i \kappa \nu v \sigma \theta a \iota \dot{\eta} \delta \dot{v}$ '́ $\sigma \tau \iota \nu$. ois $=\pi a \rho$ ' ois or $\pi \rho o ̀ s ~ o u ̈ s . ~$
 1846, p. 154, conj. є่ $\pi \eta^{\prime} \delta \eta \sigma \in \nu$ єis ' $\Upsilon$.
558. ä $\lambda \lambda \frac{\iota}{} \tau^{\prime} \eta ้ \delta \eta$ ] Read ä $\lambda \lambda o \iota$.
562. єis $\tau a ̀ s$ ©̈ $\rho a s \tau a ̀ s$ érépas] Eur. Iph. Aul. 121 eis $\tau \grave{s}$ s
 time you will be thought well-advised," i.e. you will pass for men of sense with posterity.
661. See Dobree's Adversaria in loc. recording the opinion of Bentley that two lines had fallen out where Streps. is asked for a list of feminine nouns, in which he included $\dot{a} \lambda \epsilon \kappa \tau \rho v ́ \omega \nu$. There seems no other possible explanation of the question of Socrates 662. The Attic word for 'hen' is öpvıs-but the Schol.
speaks of $\dot{a} \lambda \epsilon \kappa \tau \rho v o \nu i \delta \epsilon s$ ，which seems to have been the common word in later Greek．


ib．$\left.\tau i ' s a ̀ \nu \delta \eta \hat{\eta} \tau^{\prime} \epsilon ่ \pi \iota \beta a ́ \lambda o \iota . ..\right]$＂Would that some inmate of these fleeces might inspire me with a plan for fleecing my credi－ tors．＂

742．$\dot{\rho} \rho \theta \hat{\omega}$ s $\delta \iota a \iota \rho \hat{\omega \nu \nu} \kappa a \grave{\iota} \sigma \kappa \pi \omega \hat{\nu}$ ］This is one of the very few passages in the play which shew any acquaintance with the characteristics of Socratic teaching．

770．रןáфoıтo］Demosth．adv．Timoth．p．1186，1． 6 oi
 Хрๆиáтшу каі̀ єis ő $\tau \iota$ ．
 The sense of the middle is＂to get taught，＂＂to send to school．＂ Once in Sophocles it means to＂school oneself，＂＂to learn，＂but this is rare．See Elmsl．ad Med．290．As usual，Teuffel defends the vulg．，but the only instance from an Attic of the best times adduced by him is Plat．Repub．IV．p． 421 е $\chi$ кípous $\delta \eta \mu$ коup－ yoùs $\delta \iota \delta a \xi \in \tau a \iota$ ，not the only place in which the MSS of Plato give the middle for the active，e．g．Gorg． 481 àa入íбкŋтaь is the reading of the Codd．for $\dot{a} \nu a \lambda i \sigma \kappa \eta$ ，and so in Rep．viil． 563 D $\pi \rho o \sigma \phi$ é $\eta \tau a \iota$ for $\pi \rho o \sigma \phi$＇́ $\rho \eta$ ，which no critic with any tact would tolerate，except per incuriam．

790．Є่ $\pi \iota \lambda \eta \sigma \mu$ о́татоу for є่ $\pi \iota \lambda \eta \sigma \mu$ о̀є́ $\sigma \tau a \tau о \nu$ ．So according to the Schol，$\dot{\epsilon} \pi \iota \lambda \dot{\eta} \sigma \mu \eta$ was found in Alexis Com．for $\dot{\epsilon} \pi \iota \lambda \eta \sigma$－ $\mu$ о́v $\eta$ ．
 vid．in Hesych．ỏ入ómтєьv，vid．Suid．in àmo入áqєєs，＂Bentl． Hesychius＇gloss is ò $\boldsymbol{c}_{o} \pi \tau \epsilon \iota \nu, \lambda \epsilon \pi \tau_{\zeta}^{\prime} \epsilon \iota \nu, \tau_{\ell}^{\prime} \lambda \lambda \epsilon \iota \nu, \kappa о \lambda \alpha ́ \pi \tau \epsilon \iota \nu$ ．The word was in use with the Alexandrians，but can hardly stand here．

 reputed Atheist－hence the transference of the epithet to Socra－ tes，who has denied Zev́s，according to our veracious poet．See Fritzsche on Aristoph．Ran．319，who gives all that is known of this Diagoras．Schol．ad Aves 1073．Lysias c．Andoc．p． 104
§ 17．Schleiermacher has written a monograph on the same subject ${ }^{1}$ ．

837．ov＇$\delta^{\prime}$ cis $\left.\beta a \lambda a \nu \varepsilon i ̂ o \nu\right] ~ P l a t o ~ h o w e v e r ~ i n ~ t h e ~ S y m p o-~$ sium makes Socrates wash himself or rather his face and hands after his night of revelry．As he was in the habit of wrestling at the Gymnasia the use of the bath and of unction would naturally follow．

838．ката入óєє $\mu$ ov тò̀ ßiòv］Me bonis eluis Dind．For the form ката入óєь conf．a scolium in Athenaeus XV． 695 е


The reading ката入óєь is a necessary correction of the MS reading катa入．ov́є－found however in one Cod．and the margin of another．The diphthong ov cannot be shortened like os and al．$\lambda o ́ \omega$ is the hypothetical 1st pers．indic．of the Attic $\lambda o v ̂ \sigma \theta a \iota, \lambda o v ́ \mu \epsilon \nu o s$ etc．
 $\dot{a} \sigma \in \beta \in i{ }^{\boldsymbol{\imath}}$ каі $\theta є о \mu \dot{\alpha} \chi o v s$ ．The latter is the truer interpretation．



869．For $\kappa \rho \epsilon \mu \dot{\alpha} \sigma \tau \rho \omega \nu$ of the vulg．the Codd．give $\kappa \rho \epsilon \mu \dot{\alpha} \theta \rho \omega \nu$ ． To avoid the production of the penult in this word Meineke gives к．$\tau . \kappa \rho \epsilon \mu a ̆ \theta \rho \omega \nu$ ov̉ $\pi \omega \tau \rho ґ \beta \omega \nu \tau$ ．ėv $\theta a ́ \delta \epsilon$ which may be right，as may $\ddot{i} \delta \iota o \nu$ ，his conj．for $\dot{\eta} \lambda i \theta \iota o \nu$ in 872 ，where with the
 mean＂peculiar，＂＂odd，＂＂queer，＂further explained by the next line．Antiphanes Com．ap．Mein．C．G．III．p． 121

## ỏvó $\mu a \sigma \iota \nu$


sc．Philoxenus，where however the epithet is laudatory．
876．каíтоь $\gamma \in \tau a \lambda a ́ \nu \tau o \nu]$ Enger Praef．in Lysistr．xx． discards the unnecessary $\gamma \epsilon$ as spoiling the metre．
 with Herm．and Meineke ả $\lambda \lambda$＇à $\nu a \tau \rho \in ́ \psi \omega$＇$\gamma \omega$ © $a v ้ \tau$＇$\dot{a} \nu \tau \iota \lambda$ é $\gamma \omega \nu$ ． $\epsilon \quad \gamma \omega$ is wanted，while $\gamma \epsilon$ is unmeaning．

908．тvфоүє́ $\rho \omega \nu$ єỉ кḍváp $\mu о \sigma \tau o s]$＂You are a stupid im－

[^53]practicable old hunks." For $\tau v \phi$. see Lysistr. 335. For ảvá $\rho$ -


 $\theta \omega \pi i$. Themistius, p. 226, ă $\mu$ оvбоs каі̆ àvá $\rho \mu о \sigma \tau о \varsigma$.
915. Sıà $\sigma$ è $\delta e ̀ ~ \phi o \iota \tau a ̂ \nu] ~ R e a d ~ a f t e r ~ G . ~ H e r m a n n ~ \delta ı a ́ ~ \sigma ’ ~ o u ̉ ~$ фоєสа̂̀. We must supply $\epsilon i s$ тaдaí $\tau \tau \rho a \nu$, as in Plat. Gorg. $4 \check{6} 6 \mathrm{D}$ єis $\pi a \lambda$. фоити́бая.
931. $\lambda a \lambda \iota a ̀ \nu]$ Ran. 1067




 $\pi \rho о \mu a \theta \in i ̂ \nu ~ t o ~ r e h e a r s e, ~ a s ~ o f t e n . ~$
 Stesichorus. Cod. R. $\pi \epsilon \rho \sigma$ é $\pi \tau о \lambda \iota \nu$, "Lege $\pi \epsilon \rho \sigma \in ́ \pi \pi o \lambda \iota \nu . ~ T z e t z . ~$


Пaîסa $\Delta ı o ̀ s ~ \mu є \gamma a ́ \lambda o v ~ \delta a ́ \mu \nu o \pi \lambda o \nu ~ a ̈ i \sigma \tau o \nu ~ \pi a \rho \theta e ́ v o \nu . ~$
Lege $\delta a \mu \nu o ́ \pi \omega \lambda o \nu$." Bentl.
968. є̇ขтєІขa $\mu$ évovs] "setting to the words of the song the old traditional music," see inter alia Plat. Phaed. 60 D є̇vтєivas रov̀s rov̂ Aícótov dóyous, putting into metre, versifying.
 $\tau a s$.

 нá ${ }^{2}$ as "ut Acharn. 180." Lucian, Misopogon, p. 78 трivıvov


 compare Vespae 1131.
989. For $\dot{a} \mu$. $\tau \hat{\eta} \varsigma$ T $\rho \iota \tau о \boldsymbol{\rho} \nu \epsilon$ ías read with G. Herm. $\dot{a} \mu \in \lambda \hat{\eta}$ tıs T $\rho$.
991. ßa $\lambda a \nu \epsilon i ́ \omega \nu]$ i.e. $\theta \epsilon \rho \mu \omega \hat{\nu} \lambda o v \tau \rho \omega \hat{\nu}$, infr. 1044.
994. $\pi a \rho a ̀$ тov̀s $\sigma a v \tau o v ̂ ~ \gamma o \nu e ́ a s ~ \sigma \kappa a \iota o v \rho \gamma \epsilon i v] ~ T h i s ~ r e a d i n g, ~$
though supported by great ms authority, is evidently not Greek. Yet Teuffel adopts it in preference to the $\pi \epsilon \rho i$ of other authorities.
995. $\dot{a} \nu a \pi \lambda \eta \dot{\eta} \sigma \epsilon \iota \nu]$ The readings vary between $\dot{a} \nu a \pi \lambda a ́ \sigma-$ $\sigma \epsilon \iota \nu$ or à $\nu a \pi \lambda a ́ \tau \tau \epsilon \iota \nu$ and à $\nu a \pi \lambda \dot{\eta} \sigma \epsilon \iota \nu$. "Recte Hermannus, quicquid pudoris tui decus contaminet." The explanations of $\dot{a} \nu a \pi \lambda \dot{\alpha} \tau \tau \epsilon \iota \nu$ are far-fetched. Cod. Ven. $\dot{a} \nu a \pi \lambda \eta \dot{\sigma} \sigma \epsilon \nu$.
 the $\check{\iota}$ in the antepenultimate syllable, which is lengthened in

 more probable than Meineke's $\mu \epsilon \tau a \phi \epsilon ́ \rho \epsilon \iota \pi о \rho \nu \varphi \delta \iota \omega ิ \nu$. Dawes Misc. Crit. p. 213 (marg.) lays down the rule "qua analogia a
 $\gamma \nu \omega \mu i \delta \iota o \nu$, etc., eadem plane ab iцáтıov, ápyúpıov derivantur i $\mu a \tau \iota-\iota \delta \iota o \nu$ àp $\rho \nu \rho \iota-i \delta \iota o \nu$. Haec autem crasi Attica $i \mu a \tau i \delta \iota \iota o \nu$, $\dot{a} \rho \gamma v \rho i ̄ \delta \iota o v$ efficiunt." 'Ephīठıov Pax 382 owes its production
 (supr. 93) seems an exception; but it may be derived from oikia or a hypothetical oiксоу, not as the Lexx. assume, from оікоя.
999. $\mu \nu \eta \sigma \iota \kappa а \kappa \hat{\sigma} \sigma a \iota ~ \tau \eta े \nu ~ \dot{\eta \lambda \iota \kappa i ́ a \nu] ~ S c h . ~ \tau о v ̂ ~ \pi a \tau \rho o ̀ s ~ \delta \eta \lambda о-~}$ ขо́тı.

## Walsh-

"From a grudge you conceived, when, sturdy and tall, He supported your feet when they tottered."
1047. $\lambda a \beta \omega \dot{\omega} \boldsymbol{a ̈ \phi} \kappa \kappa \tau o \nu]$ I have elsewhere suggested $\lambda a \beta \grave{\eta} \nu$ äфикто⿱, finding it difficult to believe that äфикто⿱ can mean "ita ut effugere non possis". See vol. v. of this Journal, p. 185. To passages there quoted add Plutarch Apophth. є $\lambda \dot{\eta} \phi \theta \eta \lambda a \beta \eta \eta^{\prime} \nu$. ${ }^{\epsilon} \chi \omega \bar{\lambda} \lambda a \beta \dot{\eta}^{\prime} \nu$ is really equivalent to $\lambda a \mu \beta a ́ \nu \omega$ $\lambda a \beta \eta^{\prime} \nu$, which the phrase in Plutarch shews to have been usual. The vulg. in my opinion can only mean "having found you inevitable." For $\mu \epsilon ́ \sigma o \nu$ é $\chi \epsilon \iota \nu$ comp. Ran. 470 à $\lambda \lambda a ̀$ vर̂v ${ }^{\prime \prime} \chi \epsilon \iota$ $\mu$ é $\sigma o s$. The accus. $\lambda a \beta \grave{\eta} \nu$ needs no defence.

[^54] offended by the cacophonous concourse of short syllables proposed $\delta \mathfrak{c} a \mathfrak{v} \tau \grave{\partial}$, which Meineke has adopted. The Dî minores of Germany seem to think it their duty to ignore or disparage any suggestion emanating from England or Holland; and accordingly Teuffel omits all mention of Porson's emendation, which approves itself to all who have ears.
1073. $\kappa \iota \chi \lambda \iota \sigma \mu \omega \hat{\nu}]$ gigglings. The verb $\kappa \iota \chi \lambda i \zeta \epsilon \iota \nu$ occurs 983. There is however another reading $\kappa a \gamma \chi a \sigma \mu \omega \hat{\nu}$ in the Cod. Rav. and that only. Accordingly, Meineke gives каұа $\sigma \mu \hat{\omega} \nu$. In the vv. ll. Teuffel quotes a passage from Clemens Alex. in which $\kappa \iota \chi \lambda \iota \sigma \mu o ̀ s$ is said to denote the laughter of women, $\kappa a-$ $\chi a \sigma \mu o ̀ s$ that of men. If this is true, $\kappa a \chi a ́ \zeta_{\epsilon} \iota \nu$ should perhaps be substituted in 983 . On the other hand $\kappa \iota \chi \lambda$. is supported by a Frag. of the second Thesmophoriazusae (xv. 4) which seems to refute Clement's dictum : à $\lambda \lambda a ́ ~ \tau \epsilon \tau o l a v ̂ \theta ' ~ e ́ \tau \epsilon \rho a ~ \mu \nu \rho i ' ~ e ́ \kappa \iota \chi \lambda i ́-~$ ऍєтo, "were giggled at," sc. by the audience at the representation of a scurrilous play of Crates,-a male audience of course.
1076. кả $\tau^{\prime} \dot{\epsilon} \lambda \dot{\eta} \phi \theta \eta s$ ] This reading is due to Bentl. who found $\kappa a \tau \epsilon \lambda \eta \dot{\eta} \phi \eta$.
1276. тò̀ є่ $\gamma \kappa$ ќ $\phi a \lambda o \nu]$ Athenaeus, p. 65 F , says: 'A $\pi o \lambda \lambda o$ ó-




 strange assertion is refuted by the passage before us and by others from the comic poets. The word according to Athen. is not poetic. Euripides however has катà $\delta^{\prime}$ é $\gamma \kappa$ ќ $\phi a \lambda o \nu \pi \eta \delta a ̂ a ~ \sigma \phi a ́-~$ $\kappa \in \lambda о \varsigma$, and the word is freely used by prose writers of the best age, as by Plato, who places the seat of the intellect in the brain. (Aristotle puts it in the heart. See his treatise $\pi \epsilon \rho i \zeta \varphi \omega^{\prime} \omega \nu$ $\mu о \rho i ́ \omega \nu$.

 431, Vesp. 1348.
1347. $\epsilon i \mu \eta^{\prime} \tau \omega$ ' $\left.\pi \epsilon \pi \sigma i \theta \epsilon \iota \nu\right]$ Soph. Oed. Col. $1031 \quad \dot{a} \lambda \lambda$ '


 Lys．616．＂

1352．For $ク$ そ̋ $\delta \eta$ $\lambda$ é $\gamma \epsilon \iota \nu$ read perhaps with Meineke $\chi \rho \eta े ~ \delta \grave{\eta}$ ． See however supr． $3 \check{0} 0 \dot{a} \lambda \lambda d \grave{\alpha} \tau \eta \dot{\eta} \nu \delta \epsilon \mu \hat{\nu} \nu \kappa a \lambda \epsilon \hat{\imath} \nu$ ，a case of inf．for imperative．Dobree also quotes Lysistr． 536 where the infin． $\xi a i v \in \iota \nu$ continues a series of imperatives．
 $\kappa a i$ тaтєīӨal；Bentl．offended by the anapaest proposed $\chi \rho \hat{\eta} \nu$ $\sigma \epsilon \tau v ́ \pi \tau \epsilon \sigma \theta a i ́ \tau \epsilon \kappa a i ̀ \pi a \tau \epsilon i ̂ \sigma \theta a \iota$ ，but Meineke＇s suggestion $\chi \rho \hat{\eta} \nu$ $\sigma^{\prime}$ ả $\rho a ́ \tau \tau \epsilon \sigma \theta a i ́ \tau \epsilon \kappa a i . .$. deserves consideration，if ápáт $\tau \epsilon \iota \nu$ can be used of knocking a man，as it is of knocking at a door． This however is doubtful．

 reverse of what Pheidipp．thought．I am persuaded that the line is out of place and should be put after $1368^{1}$ ．A line has been lost after $\epsilon i \pi \epsilon \nu$ 1365．See this Journal，vol．xi．p．243， note．Thiersch＇s $\pi \rho \omega \kappa \tau o ̀ \nu$ I see is accepted joyfully by Teuff． In English nostrils non bene olet．

1367．бто́ $\mu \phi а \kappa a]$ Comp．Vesp． 721 кaì $\mu \grave{\eta}$ тov́tovs é $\gamma-$

 and in the next line with Pors．é $\pi \epsilon \iota \delta \dot{\eta} \pi \epsilon \rho$ тó $\delta^{\prime}$ é $\sigma \tau \iota \nu$ ．The Ravenna Cod．omits $\boldsymbol{\gamma} \epsilon$ and so the Venet．

1415．к入áovб九 maîठes．．．］The senarius，a parody on Al－
 be lengthened into a tetram．catalectic by the addition of $\pi \rho \circ \sigma-$
 are omitted in the Rav．and Venet．and are out of place here．


 the metre，répovzas being，he thinks，an interpretation．Inge－ nious and not impossible．


[^55]The Rav．and Ven．both have ri $\theta$ cís．Hence perhaps read
 of the copula $\eta \nu \nu$ needs no defence，and the present participle is supported by the following $\stackrel{\epsilon}{\epsilon} \pi \epsilon \iota \theta \epsilon$ ．

1423．$\dot{\eta} \tau \tau o \nu \tau i \delta \eta \tau^{\prime}$ is given by the Edd．I should prefer ${ }_{\eta}{ }^{\circ} \tau \tau o ́ \nu \tau \iota \delta \bar{\eta} \tau$＇．

1458．The Codd．have éć́⿱㇒木тo日＇öтау тıvà．The change into＇ővtıv’ âv，now accepted by Mein．，was first suggested by Porson．

1471．In vol．v．p． 185 of this Journal I have advocated the，as it seems to me，palmary emendation of Bentley，

$$
\begin{aligned}
& \Delta i ́ a ~ \tau o v \tau o \nu \grave{l} \text { тò̀ } \delta i ̂ \nu o \nu . ~ o ̋ \mu o \iota ~ \delta \epsilon i ̀ \lambda a \iota o s, ~ к . т . \lambda . ~
\end{aligned}
$$

Sivos besides its usual sense of vortex，is also used to denote in Stephen＇s words（II．p．1507）vasculum fictile basi carens，et ab inferiori parte $\sigma \tau \rho o \gamma \gamma u ́ \lambda o \nu$ ．Turbo has a similar meaning in Latin（see Stat．Sylv．Iv．9．27）．The supposition is that an inverted $\delta i v o s$ took the place of the pyramidal $\dot{a} \gamma v \iota \in \dot{s}$ at the door of the Phrontistery．Strattis ap．Athen．xi． 467 E

Creon was $\phi 0 \xi o ̀ s ~ € \emptyset \eta े \nu ~ \kappa є \phi a \lambda \eta \dot{\eta} \nu$ ．See also Vesp． 619 where Sivov means the same thing．＂This wretched jar I then took for Zeus－ what a miserable fool I was to mistake for Zeus a bit of earthen－ ware like thee！＂This interpr．seems to me required by the words $\chi \nu \tau \rho \epsilon o \hat{\nu}$ ö ǒ $\tau a$ ．The philosophical $\delta i ̂ \nu o s$ or vortex has nothing to do with earthenware；but old Streps．with truly comic stupidity has taken the word in a sense more level to his capacity ${ }^{1}$ ．

[^56]sibi hic vult propter Dinum？Quis sensus？Lege meo periculo $\mathfrak{a}^{\lambda} \lambda \lambda^{\prime} \epsilon^{2} \gamma \dot{\omega}$
 Id est Sed ego，stultus，tum credebam Jovem esse Dinum hunc，Hoc pacto sententia loci prorsus clara est．＂

W．H．THOMPSON．

## NOTES IN LATIN LEXICOGRAPHY.

[Words marked * are not found in the dictionaries either of Lewis and Short or of Georges (seventh edition).
Gloss. Labb. = the glosses edited by Labbé, as printed in Valpy's Stephanus ;
Gloss. Amplon., the glosses in the Amplonian library at Erfurt, edited by
Oehler in the Neue Jahrbücher Suppl. Band 13 (1847).]
Some of these notes have been read before the Oxford Philological Society.

Aeneis in the sense of a single book of the Aeneid: Hieron. Chron. Euseb. ann. Abr. 2007, qui Aeneidum libros postea emendarunt.
 $\epsilon \epsilon \xi \dot{\epsilon} \sigma \tau \eta$.
${ }^{*}$ Alapor, - $\bar{a} r i s$, to boast. Archdeacon Palmer has furnished the writer with an instance of this use from a mediaeval translation of St James iii 14 in a manuscript at Corvey, quid alapamini? Comp. Gloss. Labb. alapator, кavðךт $\bar{\prime}$.
*Alifariam, adv., in other ways: Gloss. Labb. alifariam, $\dot{a} \lambda \lambda о \delta a \pi \omega \bar{\varphi}$.
${ }^{*}$ Ancipio, -is, to seize on both sides: Gloss. Labb. ancipit, а́ $\mu \phi \iota \beta a ́ \lambda \lambda \epsilon \iota$.
*Animatorius, adj., that lets the air through: Gloss. Labb. olla animatoria, $\chi \dot{\tau} \tau \rho a \operatorname{\tau \epsilon \tau \rho \eta \mu \in ́\nu \eta \text {.}}$
*Antlium, $=$ Greek $\dot{a} \nu \tau \lambda i o \nu$, a bucket. The existence of this word I infer from a corrupt note in the Scriptor De Idiomatibus Generum ap. Gramm. Lat. vol. Iv p. 582 Keil, antrum rutrum, ${ }^{\text {a }} \mu \mu \eta$ : which probably stands for antlium, ä $\mu \eta$, sutrum, $\dot{a} \mu \mu \eta^{\prime}$ (the last from Gloss. Labb. s.v. sutrum): unless indeed a $\mu \eta$ can be an equivalent of rutrum.

Calciator: this and not calceator is the right spelling: C.I. L. 6. 3939.
*Capex, subst. m., a bonfire: Scriptor De Idiomatibus Generum ap. Gramm. Lat. vol. Iv p. 574 Keil, capex, тиркаita.

Carina. This word is not rightly explained as meaning the keel, if, that is, keel be understood in its strict sense. The Commentator Cruquianus on Horace's Epode 1020 says carina... totius navis compago est. This statement is not quite accurate, but is not far from the truth. Carina, for instance, is used metaphorically of a dog's chest by Nemesianus Cyn. 110 multamque gerat sub pectore lato Costarum sub fine decenter prona carinam, Quae sensim rursus sicco se conligat alveo. Carina then should be not the keel, but the hull, or lower part of the hull.

And this (although the word is often used loosely of the keel) is, I think, the proper meaning of carina. Ennius Ann. 560 carbasus alta vocat pandam ductura carinam (the rounded hull): Caesar Bell. Civ. 313 carinae aliquanto planiores quam nostrarum navium, quo facilius vada ac decessum aestus excipere possent: "the bottoms were somewhat flatter than those of our ships": Catullus 6410 pinea coniungens inflexae texta carinae. And so we find carina with the epithet curva or incurva: e.g. Ovid Met. 1 298: 14534 incurvae fumabant transtra carinae. In Verg. Georg. 2445 (pandas ratibus posuere carinas) Servius explains pandas as $=$ incurvas.

Compare further Curtius 739 (of the huts of the Paropamisadae) structura latior ab imo...ad ultimum in carinae maxime modum coit: and Tacitus Ann. 26 alvei planae carinis.

The plural carinae is sometimes used for the bottom of the hull: thus Horace 1 Od. 147 nec durare carinae Possunt imperiosius aequor, where there is no reason, as will be now seen, for reading cavernae. This usage must have been common in ordinary language; Sextus Pompeius according to Velleius (2 77 1), punning of course on the name of the street, cum in navi Caesarem et Antonium cena acciperet, dixit in carinis suis se cenam dare.

The use of the verb carinare in Pliny 11207 bears out this view: pectus homini tantum latum, reliquis carinatum, volucribus magis et inter eas aquaticis maxime.

The meaning of the word may perhaps help us to its etymo-
logy．I suspect that it is derived from the base cas－or car－＝ empty：compare careo，cas－sus，caries（properly＝emptiness）． Thus carina originally meant an empty husk or shell，a sense in which it is actually used by Pliny 1588 namque sunt bifidae putaminum carinae，nucleorumque alia quadripartita distinctio． The shape of a nutshell may thus have suggested to the early Italians the construction of a rounded hull．
＊Catta，subst．f．，an ichneumon：Scriptor De Idiomatibus Generum ap．Gramm．Lat．vol．iv p． 576 Keil ，catta，ǐvcev́ $\mu \omega \nu$.
＊Caventia，fama，laus boni．So Gloss．Amplon．p． 291 13： should we not read cluentia from cluēre？Comp．the proper name Cluentius．

Cernulus．Gloss．Amplon．p． 292 cernulus，perversus．The form is also found in the Palatine and Roman MSS of Vergil Aen． 10894.
＊Compluus，adj．，wet，rainy：Gloss．Amphon．p． 355 nox conplua，nox umida．
＊Confractura，subst．f．，a hollow or depression：Gloss．Phil－ lips． 4626 quoted by Ellis in Journal of Philology vol．xi p． 174 lamae sunt confracturae viarum．
＊Culio：to cover（？）or to heat（？）Comm．Cruq．Hor． 1 S． 638 culina autem dicta est quia ibi Lares colantur，vel quod carbones culiat．
${ }^{*}$ Dapeo－ēs，to feast：Gloss．Labb．dapet єv̉ $\omega \chi$ єîtal．
＊Decalceo－as：to take off a person＇s shoes：Gloss．Labb． decalceo $\mathfrak{v} \pi \boldsymbol{\pi} \boldsymbol{\lambda} \dot{\omega} \omega$ ．
＊Decollatus $-\bar{u} s$ ，subst．m．，a beheading：Gloss．Labb．decol－ latus èктрахך入ıбнós．

Defrensus－a－um，part．from a lost verb defrendo，nibbled down：Paul．p． 71 Müller defrensam，detritam atque detonsam： Placidus p． 31 Deuerling，defrensum detritum：Gloss．Labb． defrensa ăpoupa $\theta_{\epsilon \rho \iota \sigma \theta \epsilon i ̂ \sigma a, ~ a ̆ \rho o v \rho a ~}^{\tau \in \theta \in \rho \iota \sigma \mu \epsilon ́ \nu \eta \text { ．}}$
＊Demorator－oris，subst．m．from demoror，one who retards： conjectured by Mr Bywater in Martianus Capella 187 for devo－ rator：（Vulcanus）totius mundi demorator（in reference to his lameness）．
＊Deter，adj．，positive of deterior，wanting，deficient：Gloss． Labb．deter катабєグs．
*Deterioratio, subst. f., Acron on Hor. 3 Od. 2753 deterioratio formae.
*Detributus -ūs, subst. m.: Gloss. Labb. detributus à ${ }^{\circ}{ }^{\circ}-$ рıбرós.
*Dilargus, adj., generous, lavish: Gloss. Amplon. p. 239 dilargus, multum donans: see also Löwe, Prodromus Gloss. p. 382.
*Diomedia, name of a poem on Diomede, written by Iulus Antonius, son of the triumvir, Scholia on Hor. 4 Od. 233.
*Dispex, adj., sharp-sighted: Gloss. Labb. dispex $\mathfrak{o} \xi v \beta \lambda \epsilon \pi-$ $\tau \eta$ 's.
*Diteo -ēs, to be rich: Gloss. Labb. diteo $\pi \lambda$ лотé $\omega$.
*Diuto - $\bar{s}$, to hinder, delay: Gloss. Labb. diutare $\mathfrak{a} \pi о \kappa \omega \lambda \hat{v}-$ $\sigma a \iota, \beta \rho a \delta \hat{v} v a \iota$.
*Divatus $-i$, part. from divāre, to divinize: Gloss. Labb. di-


Dossennus or Dorsennus = manducus, the conventional glutton of the fabula Atellana: Varro L. L. 7 95, manducari, a quo in Atellanis Dossennum manducum appellaṇt (so the passage is rightly emended by Müller p. 303). This explanation exactly suits Horace 2 Epist. 1 173, aspice, Plautus Quantus sit Dossennus edacibus in parasitis: what a glutton he is when he comes to represent a parasite; compare also Suetonius Galba 12, 13: illa quoque verene an falso per ludibrium iactabantur, adposita lautiore cena ingemuisse eum, et ordinario quidem dispensatori breviarium rationum offerenti paropsidem leguminis pro sedulitate ac diligentia porrexisse...quare adventus eius non perinde gratus fuit, idque proximo spectaculo apparuit: siquidem Atellanis notissimum canticum exorsis "Venit Dossennus a villa" \&c. A gloss in Papias says Dorsenus, genus parasitorum.
*Duellio -onis, subst. m., a warrior : Gloss. ap. Löwe Prodr. Gloss. p. 384 duellio pugnator, belligerator, pugil vel rebellio.

Subst. f., war : Gloss. ap. Löwe p. 125 duellio bellum, pugna in hostem duplicem.

Ecloga. The following notice from Comm. Cruq. Hor. 2 S. 11 deserves quoting: Ecloga haec nomina sub se continet ; si ad Iovem, prosodia dicuntur ; si ad Apollinem, Dianam, aut Latonam, paeanes: si ad Liberum aut Semelen, dithyrambi; si ad
ceteros deos, hymni; si ad homines laudandos, vituperandos, legendos (?) odae sunt et eclogae; sunt enim brevia poematia.
*Effatuus, adj., babbling: Gloss. Paris. edited by Hildebrand E 26 effatui vaniloqui.
*Elicator, subst. m., = v́бробкото́s. Gloss. Labb.

* Elicies, subst. f., $=\dot{a} \gamma \omega \gamma \eta^{\prime}:$ Gloss. Labb.
${ }^{*} \bar{E}$ max, adj., thin, meagre (from base mac-): Gloss. Hild. E 92, Amplon. p. 326, emax, macer, tenuis, and Mai Class. Auct. vol. VI p. 522.
* ${ }^{\text {Erǔlus }}-i$, subst. m., dim. from erus, a master : Gloss. Amplon. p. 327 eruli domini: see further Löwe, Prodromus p. 419.
${ }^{*}$ Excaveo -ēs, = praecaveo: Gloss. Amplon. p. 328.
*Exfrĕto -as, = navigo: Gloss. Amplon. p. 328: Mai Class. Auct. vi p. 523 exfretat navigat.
${ }^{*}$ Extelo $-a s,=\dot{\epsilon} \lambda \epsilon \cup \theta \epsilon \rho \circ ́ \omega:$ Gloss. Labb.
*Factivus, adj., = active : Gloss. Hildebrand F 23, factive, active, strenue.
*Falliscus, subst. m., = culter: Placidus p. 43 Deuerling: forco, quem nunc falliscum appellamus, nunc cultrum: Papias, falisous, culter vel securis.
*Falsitesti8, a false witness: Gloss. Labb. falsitestis $\psi \in u \delta o ́-$ $\mu a \rho \tau v \varsigma$.
*Fameo - $\bar{e}$ s, to be hungry : Gloss. Labb. fameo $\lambda \iota \mu \omega \dot{\tau} \tau \omega$.
*Favum, a hole: Gloss. Labb. favum фw入єós: Gloss. Hild. F 83 favum fovet ( $=$ fovea).
*Fervura, subst. f., $=\phi \lambda \epsilon \gamma \mu$ ov $\eta^{\prime}$ : Gloss. Labb.
*Fĩdifragus, adj., breaking faith: Gloss. ap. Mai vi p. 524 fidifragus refragus fidei.
*Florido - $\bar{\alpha} s$, to bloom: Gloss. Labb. floridare $\dot{a}^{\nu} \theta \in \hat{\epsilon} \nu$.
*Flumentum, subst. n., a stream: Gloss. Labb. flumentum $\dot{\rho} \in \hat{v} \mu a \pi о т а \mu о \hat{v}$.
* Flumus -i, subst. m., a wick: Gloss. Labb. flumus $\theta \rho v a \lambda \lambda i$ 's.
*Forco, subst. m., a kind of knife or cutting instrument: Placidus p. 43 Deuerling; forco quem nunc falliscum appellamus nunc cultrum. Alias securis, qua pontifices in sacris utuntur, dicta ab eo quod feriendo petit.
*Forfüco - $\bar{s} s$, to cut with shears or scissors: Gloss. Labb. forfico $\psi a \lambda i \zeta \omega$.
${ }^{*}$ Fossus $-\bar{u} s$, subst. m., a digging: Gloss. Labb. fossus ő $\rho v \xi \iota \varsigma$.
*Gallesco -is, to rejoice: Gloss. Labb. gallesco $\chi a i \rho \omega, \gamma \dot{\eta} \theta o \mu a \iota$.
*Gallulo -as, to reach the age of puberty: Gloss. Labb. gallulo $\dot{\eta} \beta \dot{\beta} \omega$. So, according to the MSS, Nonius p. 116.
*Gandeia ; according to a scholion bearing the name of Probus, quoted by Mayor on Juv. 5 89, an African name for a merchant-vessel, called by Juvenal canna Micipsarum.
*Gavesco -is, to rejoice: Gloss. Labb. gavescite, גaí $\epsilon \tau \epsilon$.
*Gingritor? gingriator? or gingrinator? a player on the gingrina or flageolet: Paulus p. 95 Müller, where the MSS give gigeriator.
${ }^{*}$ Gnato - $\bar{\alpha} s$, to beget children: Gloss. Labb. gnato тєкעów.
*Guttio -is, to drip: Gloss. Amplon. p. 335, guttit, paulatim pluit.

Herna, a stone: add Gloss. Amplon. p. 336 harenae (i.e. hernae) saxa Sabinorum lingua.
*Ignominis -ĕ, adj., nameless: Gloss. Labb. ignomines aj $\nu \omega \dot{\nu} v-$ $\mu o$.
*Imboio - $\bar{a} s$ : to put into the stocks (boia): Gloss. Labb. inboio клоò̀ $\pi \epsilon \rho \iota \tau i \theta \eta \mu$.
*Immarcibilis, adj. imperishable: Gloss. Labb. immarcibilis à $\mu a ́ p a \nu \tau o s . ~$
*Immiscuus, adj., unmixed: Gloss. Labb. immiscuus ả $\mu \iota \gamma \dot{\eta}$.
*Impinnatus, adj., without wings: Gloss. Labb. impennatus $a ̈ \pi \tau \epsilon \rho o s . ~ P a u l . ~ p . ~ 211 ~ p e n n a t a s ~ i m p e n n a t a s q u e ~ a g n a s . . . s p i c a s ~$ cum aristis,...sine aristis.
*Implagium, subst. n., a small net: Isid. 1951 : this, not symplagium, is probably the true form. The Oriel MS has implagium.
*Incapito - $\bar{a} s$, to invoke on a person's head: Gloss. Labb. incapito è $\pi a \rho \hat{\omega} \mu a \iota$.

Incolor, adj., colourless : Gloss. Amplon. p. 343.
Incubitus - $\bar{u} s$ : metaphorically, desire of another person's goods: Servius on Aen. 189 incubare dicitur...aliena per vim velle tenere: Placidus p. 55 Deuerling incubitus dicitur ab incumbendo sive iacendo sive aliena cupiendo. This note requires no alteration, such as Mr Onions recently, and editors previously, have proposed.
*Incurto - $\bar{a} s$ : to chip or damage. This word is read for incrustare by the oldest Berne manuscript and others in Horace 1 Sat. 3 56, and some manuscripts of Porphyrio on the passage quote incurtatus calix from Lucilius. There seems no reason to doubt that the word is genuine, and perhaps points to a lost adj. incurtus: comp. incurvo from incurvus.
*Indigito $-\bar{\alpha} s$, freq. of indigeo, to be poor or in want: Gloss. Labb. indigito $\pi \rho \circ \sigma \epsilon \pi \iota \delta \in \dot{v} о \mu a \ell, \pi \in ́ v o \mu a \iota$.

Infrendis, adj., without teeth: Gloss. Labb. infrendes àvóSovtes. Placidus on Statius Theb. 5663.
*Inliceor -èris. In Pliny 14191 the oldest and best manuscript gives tunc avidi matronam oculi inlicentur, graves produnt. The editors read licentur, set a price upon : but inlicentur ( $=$ inveigle) would give a better sense. Thus we should get a verb inliceo or inleceo with its deponent, the original of inlecebra, comp. latebra lateo, scatebra scateo.
*Inpuges, adj. = äтvyos: Gloss. Labb. Gloss. Amplon. p. 343 inpuges qui minores naticas habet.
*Interluvio -ōnis, subst. f., a flowing or flooding between : Gloss. Phillips. 4626 (Ellis in Journal of Philology vol. xi p. 174) quae fieri solent aquarum interluvione.

Iambicus, suitable for lampoon or invective; Marius Victorinus p. 80 Keil trimetrum, tragicum, comicum, iambicum, satyricum.
*Iambographus, a writer of lampoons: Marius Victorinus p. 80 Keil .

Laquear and laquearium (Servius Aen. 1 726, Ammian 29 24 ) are generally interpreted to mean, like lacunar, a panel in a ceiling: Verg. Aen. 1726 dependent lychni laquearibus aureis \&c.

It seems doubtful, however, whether the true spelling of the word in this sense is not lacuar, while laquear means a chain attached to a noose (laqueus). Priscian 1 p. 222 Keil a lacu lacunar lacunaris, a laqueo laquear laquearis: so Ars Anon. Bern. p. 69 Hagen. Gloss. Amplon. p. 346 laquearia catenae aureae, vel ornamenta tectorum: laquearia catenae candelabrum: and p. 345 laquearia funes lucernae, i.e. aureae catenae. Papias: laquearia...funiculi de quibus candelae de camera sus-
penduntur ut stili candelarum. In Aen. 1 726, dependent lychni laquearibus aureis, this may very well be the meaning: and Servius ends his note by saying legitur et "lacuaribus," as if there were a real difference between the two words. So in Aen. 825 the Verona scholia appear to have read lacuaria, and Serv. says laquearia, multi "lacuaria" legunt. The Verona fragment reads laquaria, and so Med. Pal. and Rom. corrected. In Caper Orthographia p. 105 Keil the Berne MS 338 (of the 9th or 10th century) reads originally laquearia non lacuaria: corrected non lacunaria. Ennius Trag. 121 as quoted by Servius Aen. 2241 wrote tectis caelatis lacuatis.

When, therefore, the meaning is a panel in the ceiling, we should probably read lacuar from lacus, synonymous with lacunar: when the meaning is the chain of a lamp, laquear from laqueus.
${ }^{*}$ Malchio $=\boldsymbol{a} \eta \delta \delta^{\eta} s:$ Gloss. Labb. The word is often found as a cognomen in inscriptions, e.g. C. I. L. 1 1087, 1091 (Rome): 5811567 (Verona) : Inscr. Regn. Neap. 3211 (Cumae) \&c. If the gloss quoted be correct, the meaning of Trimalchio in Petronius will be $\tau \rho i s$ ä $\eta \delta \eta^{\prime}$ s.

Necto, nexum $-i$, nexus $-\bar{u} s$. This word, which does not appear in Greek, but to which Sanskrit offers a cognate in the base nah-, was an old Italian word for to bind : Festus p. 165 Müller nectere ligare significat: and seems to have been in the old legal phraseology the equivalent of the later obligare: Gloss. Hild. nectit obligat. Thus a debtor whose person was imprisoned or services exacted on account of his debt, was nexus or bound: Varro L. L. 7105 liber qui operas suas in servitutem pro pecunia quadam debebat, nexus vocatur, Cic. Rep. 2 § 59 nectierque postea desitum: Livy 2231 nexos ob aes alienum: 8282 se nexum alicui dare: so Val. Max. 61 9. Justin 211 5 (Dionysius) nexorum tria milia carcere dimittit; 2122 carcerem nexis...replet.

As applied to things, necto meant to put in pawn: Festus p. 165 nexum aes dicebatur pecunia quae per nexum (from nexus $-\bar{u} s$ ) obligatur: Dig. 4914221 res nexas pignori, for which a moment afterwards the expression res obligatas occurs.

Nexum, as a substantive, means sometimes the thing pledged, sometimes the process of pledging. In the latter sense it should, in my opinion, be carefully distinguished on the one hand from nexus $-\bar{u} s$, which is a general word for any contract or obligation, and on the other hand from mancipium. Mancipium is a process of sale, nexum a process of pledging person or property as security for a debt. The nexum and mancipium were indeed sometimes confused by the Romans themselves, in consequence of the fact that in certain cases a nexum could be contracted per aes et libram, which was the regular proceeding in the case of a mancipium, and also because a mancipium or sale might be accompanied or followed by a nexum in case of non-payment of the purchase-money.

The confusion between nexum and mancipium is as old as the jurist Manilius: Varro L. L. 7105 nexum Manilius scribit omne quod per aes et libram geritur, in quo sunt mancipia: Mucius, quae per aes et libram fiant ut obligentur, praeter quae muncipio dentur. Hoc verius esse ipsum verbum ostendit de quo quaerit: nam idem quod obligatur per libram nec suum fit, inde nexum dictum. That is, Varro agrees with Mucius Scaevola that the proper meaning of nexum is a thing which is (as it were) not its own master (nec suum); and that nexum (as a process) always implies an obligatio: when such obligatio takes place per aes et libram, then the aes et libra are employed to create a nexum, but not otherwise.

This view is confirmed by Cicero (de Oratore $3 \S 159$ ) who notes, as an instance of the improper or metaphorical employment of language, the use of nexum as = quodcunque per aes et libram geritur. The confusion is made by Festus p. 165 Müller : nexum est, ut ait Gallus Aelius, quodcumque per aes et libram geritur, idque necti dicitur. Quo in genere sunt haec, testamenti factio, nexi datio, nexi liberatio. This note is so wanting in precision that it is impossible to suppose that it really represents what Verrius Flaccus wrote. How can it be sense to say quodcunque per aes et libram geritur, id...necti dicitur? But the phrases nexi datio and nexi liberatio involve the important admission that nexum meant originally the thing pawned or pledged, not the process of pledging.

Both the datio nexi (giving of a thing or person in pledge) and the liberatio nexi (freeing of the thing or person) could, as Festus says, be performed per aes et libram. The solutio or process of freeing the thing or person in pledge is described by Gaius 3173 : est etiam alia species imaginariae solutionis, per aes et libram, quod et ipsum genus certis in causis receptum est, veluti si quid eo nomine debeatur quod per aes et gestum sit, sive quid ex iudicati causa debeatur. Adhibentur autem non minus quam quinque testes et libripens; deinde is qui liberatur ita oportet loquatur, "Quod ego tibi tot milibus eo nomine [velut secundum] man[cipium sum damn]as, solvo liberoque hoc aere, aheneaque libra hanc tibi libram primam postremamque secundum legem publicam." Deinde asse percutit libram eumque dat ei a quo liberatur, velut solvendi causa.

I suppose then the stages in the history of the meaning of nexum to have been as follows: It meant first a thing bound : then a thing put into another person's power, or pledged; then (of money) a sum owed to another for a sum lent, and therefore (as it were) bound, but released when paid: then the process of pledging or mortgaging.

In Cicero De Oratore $1 \S 173$ nexorum, mancipiorum iura: Caec. § 102 horum nexa atque hereditates, nexa may mean the property pledged or mortgaged: in Har. Resp. § 14 iure privato, iure hereditario, iure auctoritatis, iure nexi: Rep. 259 omnia nexa civium liberati, nectierque postea desitum, it means pledge or mortgage as a transaction. Comp. Livy 2 23, 828.

In Cicero de Rep. 1 27, omnia non Quiritium sed sapientium iure pro suis vindicare, nec civili nexo (MS sexo), sed lege naturae, nexum is used in quite a general sense.

Nexus - $\bar{u} s$ is a general term for bond, contract, obligation, and may thus (if so be) include mancipium and nexum. Gloss. Amplon. p. 218 nexus obligatio, obligatura. XII Tabb. 61 (Bruns) cum nexum faciet mancipiumque, uti lingua nuncupasit, ita ius esto (i.e. when he has made a contract or a sale, though nexum here has been taken as the neuter).

Cic. Paradoxa $5 \S 35$ non enim ita dicunt eos esse servos ut mancipia, quae sunt dominorum facta nexu aut aliquo iure civili: Top. § 28 traditio alteri nexu: Fam. 7302 cuius quoniam pro-
prium te esse sentis mancipio et nexu, meum autem usu et fructu: Mur. § 3 in eis rebus repetendis quae mancipi sunt, is periculum iudicii praestare debet qui se nexu obligavit: Livy 7195 sorte ipsa obruebantur nexumque inibant (entered into a contract or bond for the transference of their persons): Dig. 10233 partem nexu pignoris liberam: 126267 ut venditorum nexu venditi liberaret (the contract of sale): 4641 acceptilatio et liberatio per mutuam interrogationem, qua utriusque contingit ab eodem nexu absolutio: Festus p. 165 pecunia quae per nexum obligatur. Ti. Donatus on Aen. 874 solent quippe liberari nexu qui semel promittunt et semel vota persolvunt: Isidore 571 nexus foederis faciendi.

The sum of the above argument is that nexum $-i$, when it refers to a transaction or process, is properly speaking applied only to cases of pledge or mortgage: and that nexus $-\bar{u} s$, which in the accusative is liable to be confounded with nexum, is applicable to any bond or contract whatever.

Plăga-ae. Properly speaking the rope stretched along the top and bottom of a hunting-net. Servius on Aen. 4131 sciendum...proprie plagas dici funes illos quibus retia tenduntur circa imam et summam partem; see also Acron on Hor. 3 Od. 5 32, Isidore 195 1, Placidus p. 78 Deuerling: pinnatae plagae, vincula retium extensique funes quibus capiuntur agrestes ferae, in quibus funibus eriguntur pinnae. So no doubt Horace ( 1 Od . $128)$ intends teretes plagas.

In the general sense of a net it is of course common, but almost invariably in the plural.

Metaphorically plaga means a belt or tract or zone of land, sky, or sea. This meaning is perhaps most obvious in Lucretius 51375 atque olearum Caerula distinguens inter plaga currere possit: 5481 maxima qua nunc se ponti plaga caerula tendit. So often of the zones or belts of temperature : and generally of a region.
*Succindeo, or succendeo (sub, candeo), to glow underneath: this word should probably be restored to Ovid Ibis 316 sic tua succindens devoret ossa cinis, where the Gale manuscript reads succindens, and two other of Ellis's manuscripts succendens or succedens.

Vătillum: this and not batillum appears to be the true form. Caper de Verbis Dubiis p. 112 Keil vatillum hoc: Comm. Cruq. Hor. 1 S. 536 vatillum deminutivum a vase, hoc est vas parvum, in quo pro felici hospitum adventu incensis odoribus Iovi hospitali sacra fiebant.... Est et vatillum in quo ponuntur prunae in hieme super mensam, ne cena frigeat. Gloss. Labb. vatillum $\dot{\eta} \pi v \rho \dot{\alpha} \mu \eta$ : Gloss. ap. Löwe, Prodromus p. 277 batillum ( = vatillum) turibulum.

Perhaps vatillum should be read in Plautus Trin. 492, where the Ambrosian palimpsest has verum nos homunculi Satillum animai.

## THE BUDDHIST ORIGINAL OF CHAUCER'S PARDONER'S TALE.

Professor Skeat, in his introduction to the Pardoner's Tale in the Clarendon Press edition, p. xxvi and ff., traces this tale to Italian sources, but a far older form than any that he has given is the Vedabbha Játaka, the 48th in Fausböll's edition, which runs as follows:

## Vedabbhajátaka.

"He who desires advantage unseasonably, \&c." This the Master, when sojourning in Jetavana, spake concerning an obstinate friar. For the Master said to that friar, "Friar, not only now art thou obstinate, but formerly also wast thou obstinate, and owing to thy obstinacy thou didst disregard the counsel of the wise, and wast cut asunder with a sharp sword, and didst fall dead in the way, and owing to thee alone did a thousand men perish." When he had said this, he told the following tale :-
"Long ago, when Brahmadatta was reigning in Banáras, a certain Bráhman in a certain village knew a spell, Vedabbha by name. That spell was indeed of great, of priceless efficacy. When the moon was in conjunction with a certain lunar mansion, he would repeat that spell, and look up to heaven, and then a rain of seven kinds of precious things ${ }^{1}$ would fall from heaven. At that time the Bodhisattva was studying science under that

[^57]Bráhman. One day the Bráhman left his village, and taking the Bodhisattva with him, set out for the kingdom of Chedi for some purpose or other. In the way lay a certain forest, where five hundred Sending Thieves waylaid travellers. They took captive the Bodhisattva and the Vedabbha Bráhman. And the reason wherefore they were called Sending Thieves was this. Whenever they took captive two men, they sent one to fetch wealth : therefore they were called the Sending Thieves. And so, if they captured a father and a son, they said to the father, 'Go and bring us wealth, and then receive back thy son and depart.' And, in like manner, if they captured a mother and her daughter, they sent the mother; and if they captured an elder and a younger brother, they sent the elder brother; and if they captured a teacher and his pupil, they sent the pupil. Accordingly, on this occasion, they kept the Vedabbha Bráhman, and sent away the Bodhisattva. The Bodhisattva respectfully took leave of his teacher, and said, ' I will return after one or two days; do not be afraid; and moreover do this that I advise you. Tonight there will be a conjunction of the moon with a lunar mansion that will enable you to call down a rain of wealth; now, do not you, fretting under your affliction, repeat the spell, and make a rain of wealth descend: otherwise, you yourself will meet destruction, and these five hundred thieves also.' Having given his teacher this advice, he went to fetch wealth. The thieves, for their part, when the sun set, bound the Bráhman, and made him lie down. At that moment the full round orb of the moon rose above the western horizon. The Bráhman, considering the heavenly bodies, said to himself, 'Tonight there will take place a conjunction of the moon with a lunar mansion, that will enable me to produce a rain of wealth: why should I any longer endure affliction? I will repeat the spell and cause a rain of precious things to descend, and bestow wealth on the thieves, and then go where I like.' Having thus reflected, he said to the thieves, 'Ye thieves, why did ye take me prisoner ?' They answered, 'In order to get wealth, reverend sir.' He continued, 'Then, if you desire wealth, quickly release me from my bonds, and have my head washed, and have me clothed in new garments, and anointed with unguents, and adorned with
flowers.' The thieves, hearing his speech, did so. The Bráhman observed the exact moment of the moon's conjunction with the lunar mansion, and repeated the spell, and looked up to heaven. Immediately precious things fell from heaven. The thieves collected that wealth, and tied it up in bundles in their upper garments, and started off. The Bráhman followed them. Then another five hundred thieves made those thieves prisoners. The first five hundred said, 'Why do you take us captive?' The second five hundred answered, 'To get wealth.' Then the first five hundred said, 'If you desire wealth, take captive this Bráhman; he looked up to heaven, and made a rain of wealth fall ; it was he that gave us what we have here.' Then the thieves let those other thieves go, and seized the Bráhman, exclaiming, 'Give us also wealth.' The Bráhman replied, 'I could give you wealth; but that conjunction of the moon with the lunar mansion, that enables me to call down a rain of wealth, will not take place for a year from this time; if you need wealth, wait, and then I will cause a rain of wealth to descend.' The thieves were angry and said, 'What! villain of a Bráhman, after causing a rain of wealth to descend for others, do you bid us wait for another year? Then they cut the Bráhman in two with a sharp sword, and left him in the road, and quickly pursuing those other thieves, fought with them, and slew them all. Then they divided themselves into two bands, and fought until two hundred and fifty were slain; and in this way they slew one another until only two remained. Thus those thousand men perished, all but two. But those two men deftly carried off that wealth, and hid it in a thicket near a village, and one remained guarding it, sword in hand, while the other took some rice, and went off to the village to get it cooked. Truly this passion of avarice is the root of destruction, for the one who was guarding the wealth, said to himself, 'When my fellow returns, this wealth will have to be divided into two portions, so I had better kill him with a sword-cut as soon as he arrives.' So he made ready his sword, and remained watching for his return. The other said to himself, 'This wealth will have to be divided into two portions, so I had better put poison in the rice, and give it to my fellow to eat,
and so kill him, and take all the wealth for myself. Accordingly, as soon as the rice was cooked, he ate all he wanted, and put poison in the rest, and set out with it in his hand. No sooner had he put the rice down, than the other cut him in two with his sword, and threw his body into a tangled thicket. Then he ate the rice and fell dead on the spot. Thus, owing to the treasure, all these men perished. As for the Bodhisattva, he returned in one or two days with the wealth that he was sent to fetch. When he did not see his teacher where he left him, but saw wealth scattered about, he said to himself, 'In spite of my advice, the teacher must have caused a rain of wealth to descend, and no doubt they will all 'have perished.' So he went on along the highway. As he was going along, he saw on the highway his teacher cut in two ; and he said to himself, ' He has lost his life through disregarding my advice.' Then he gathered wood and made a pyre, and burnt his teacher's body, and offered flowers to it. And going on, he saw five hundred men lying dead, and then two hundred and fifty, and so on, until at last he saw only two corpses, and then he said to himself, 'Behold! here are a thousand men slain, save only two; there must be two thieves left alive; they will not be able to control themselves; I wonder where they are gone.' So, going on, he saw their tracks, where they had entered a thicket with the treasure, and further on, he saw a heap of treasure made up in bundles, and a man lying dead upon a plate of rice. Then he understood exactly all the doings of those men, and said to himself, 'I wonder where the other is,' but, after searching, he found him cast away in a thicket, and exclaimed, 'Disregarding my advice, my teacher not only lost his own life by his obstinacy, but caused also the death of those thousand men. Truly, those who unseasonably and wantonly pursue their own advantage, meet, like my teacher, with utter ruin. And having said this, he repeated the following stanza:-
> 'He who desires advantage unseasonably, he is afflicted;
> The men of Chedi slew Vedabbha ${ }^{1}$, and they all likewise perished.'

[^58]Then the Bodhisattva made the wood resound with this utterance, 'Even as my teacher unseasonably and improperly exerting power, caused a rain of treasure to fall, and thus himself met his death, and became to others the cause of destruction,--even so, whosoever, unseasonably desiring his own advantage, shall make strenuous effort, shall himself perish utterly, and shall cause ruin to others': and the silvan deities applauded him, while he thus set forth the moral lesson contained in the above stanza. Then he deftly removed the wealth to his own house, and continued to the rest of his life giving alms, and doing other righteous acts, and when he died, he attained heaven."

When the Master had given this instruction in righteousness, saying, "Friar, not only now art thou obstinate, but formerly also wast thou obstinate, and didst meet with utter ruin," he summed up the Játaka in the following words, "On that occasion this obstinate friar was the Vedabbha Bráhman, and I was his pupil."

For the purpose of comparison I proceed to give from Professor Skeat's Introduction to the Pardoner's Tale, p. xxviii., Mr Furnivall's analysis of the Italian version of the story in the Cento Novelle Antiche, edition of 1572.
"A hermit, lying down in a cave, sees there much gold. At once he runs away and meets three robbers. They see no one chasing the hermit and ask what he is running away from. 'Death, which is chasing me.' 'Where is he? shew him us.' 'Come with me, and I will.' The hermit takes them to the cave, and shews them Death-the gold. They laugh at him, and make great joy, and say, 'The hermit is a fool.' Then the three robbers consult as to what they shall do. The second proposes that one shall go to the town, buy bread and wine and all things needful: but the crafty Devil puts it into the heart of the robber who goes to the town, that he shall feed himself, poison his mates, and then have all the treasure and be the richest man in that country. Meantime the other robbers plot to murder their mate, as soon as he comes back with the bread and wine, and then share the treasure. Their mate returns from the city and they murder him at once. Then they eat the food he has brought and both fall dead. Thus doth our Lord

God requite traitors. The robbers found death. The wise man fled, and left the gold free."

Mr Furnivall has also found the story among the Novellæ of Morlinus, a collection which contains many Oriental Tales.

Professor Adalbert Kuhn, in his Westfälische Sagen, Gebräuche und Märchen, Vol. I. p. 66, quotes the following form of the story from the Mittheilungen des Historischen Vereins zu Osnabrück, 1853, p. 222: "Three Jews commit a robbery and quarrel over the spoil. One of the three is sent to fetch food and drink. On his return, he is murdered by the two who remained behind, and they die from partaking of the food which he had poisoned."

Professor Kuhn does not mention Chaucer's Pardoner's Tale, or any of those quoted by Professor Skeat.

The above is an admirable illustration of the way in which Buddhist Moral Tales have gradually passed into the Folk-lore of European countries.

> C. H. TAWNEY.

## AN UNCOLLATED MS. OF THE 'AD HERENNIUM.'

In the Cathedral library of Durham is a manuscript (C. iv. 5) of the 'ad Herennium' belonging to the early part of the xirth cent. As Kayser in his edition of the 'ad Herennium' (Leipzig, 1854) is not acquainted with it the following account of it may be of interest. It belongs to what Kayser calls the 'codices mixtae originis': it inclines most to the 3rd of Kayser's three families, for it agrees with that family in the following characteristic passages (the references are to page and line in Kayser's edition) :-19, 4-32, 14-40, 4-58, 20-69, 10-76, $8-77,4 \& 5-87,7-89,4 \& 7-92,5 \& 8-94,5-95,8-$ $101,2 \& 8-102,11-103,4-105,10-108,1-109,4-110$, $15-115,7-117,2-119,1-125,7-132,10-177,1 \& 6-$ $178,5-179,6 \& 14-182,1 \& 4 \& 6-185,1-195,13-201$, $15-203,9 \& 10-206,2-209,9-210,13$.

It makes however considerable use of the 1st family, for it has the readings of that family in the following passages :-11, $7-16,6-18,1-22,6-29,1-42,14-57,15-65,15-72$, $13-73,14-75$, 8-78, 6-87, 13-95, 9-102, 18-127, 14-$131,15-137,14-157,2-162,20$.

Of the individual members of the 3rd family it is connected most closely with $b$, agreeing with $b$ in alone preserving the right reading in $89,7-96,14-119,1-120,1$ and agreeing with it alone in 18 other places.

Of the members of the 1st family, it is nearest to $h$, agreeing with $h$ alone in preserving the right reading in 36, 19-56, 10 $-62,1-96,17-115,3 \& 4$ : with $\mu$ in $44,11-56,10-168$,
$13-169,10$ and with $e$ in $5,18-7,2 \& 3$. It shares a good reading with $\pi$ in 117, 19 and with $k$ in $8,21$.

Of the 'codices mixtae originis' it most resembles $\phi$, sharing the right reading with $\phi$ in $77,12-124,4-131,11$; and next resembles $c$, sharing with $c 15,9 \& 100,2$ and agreeing with $c e$ 190,8 and with $c \pi 164,8$. It also agrees with $r 112,14$; with a 57,18 ; with $t 18,16$, with $a^{1} 89,9$; with $a^{2} 58,5-101,4$; with $p 125,4$ and $p^{2} 129,6$.

Of the readings peculiar to itself the more important are :
8, 21 : divitias loquentiam nobilitatem.
16,10 : sumus nominaturi exponimus.
24, 14 : intercederet necessaria quidem non esset illa.
27, 2 : partibus officium artis.
29, 1: coniecturalem eam quae prima est difficillima potissimum si consideremus.

29,15 : ut quom.
32, 7 : sit vel fuerit in eo loco sit solitudo.
32, 8 : attingant si quid passus perspectus et exauditus esse.
40, 13 : quae omnia vel habuisse voluisse scriptorem.
42, 2 : de qua parte iuris utrum aequum cum ea faciant.
59, 8 : ab igne.
60, 1: mea Medea domo.
61, 20 : dicunt volubili.
63, 1 : reperiundo.
67,14 : periclo solus ut rest. p.
103, 3 : eius animum retinet et exsuscitat.
110, 11 : possunt ea quae didicerunt in.
114, 18: domtui ultionem.
114, 21 : domiti ultionem.
115, 1 : subornari vagantem ephigeniam hoc erit.
154, 14 : alterum brevius ut si cum altero plures sunt.
163, 14 : imponite.
166, 18 : commiserationis.
173, 7 : quod facit.
174, 3 : harum nominum denominatio non magis.
181, 2 : vestris naufragiis.
194, 10 : argumentationem.

Its reading in 172, 16: 'id aut ab invento colligitur aut ab inventore conficitur, ut si quis de Tarpeio loquens eum Capitolinum nominet aut ab invento' supplies the hitherto wanting MS. authority for the reading of editors previous to Kayser (so too 173, 7).

By its connection with $\phi$ on the one hand and $c$ on the other it seems to bridge over the chasm which hitherto has separated $c$ from other MSS., and it carries back to the 13th century at least two of the 'correctiones' of $\phi$ supposed by Kayser xxi., n. 8 .

F. B. JEVONS.

## THE PHYSICAL CONSTITUTION OF THE EPICUREAN GODS ${ }^{1}$.

The question of the relation of the Gods of Epicurus to his physical system has been discussed so often, and with such unsatisfactory results, that it is now very generally given up as insoluble. But Lachelier (in a short article on the notorious passage Cic. N. D. 1. 49, in the Revue de Philologie for 1877, p. 264) has put forward a view on the subject which at least avoids the obvious inconsistencies of all previous attempts at explanation. I propose first to state this view, and then to test its correctness by applying it to the elucidation of some hitherto unexplained passages of Philodemus.

The text of Cic. Nat. Deor. 1. 49 is given in the MSS. as follows:-
"Epicurus...docet eam esse vim et naturam deorum, ut primum non sensu, sed mente cernatur, nec soliditate quadam, nec ad numerum, ut illa quae ille propter firmitatem $\sigma \tau \epsilon \rho$ é $\mu \nu \iota a$ appellat; sed, imaginibus similitudine et transitione perceptis, cum infinita simillimarum imaginum species ex innumerabilibus individuis existat et ad deos [or, ad eos] affluat, cum maximis voluptatibus in eas imagines mentem intentam infixamque nostram intellegentiam capere, quae sit et beata natura et aeterna."
(With this must be compared Cotta's repetition and criticism of the passage, $\S \S 105$ and 109.)

We have here a statement by Cicero of Epicurus' view on the precise point in question,-the physical constitution of the Epicurean Gods. Unfortunately, the many hundred pages of commentary that have been written on the passage have failed to settle the question what is meant by it; and Schömann is probably right in thinking that Cicero himself did not understand

[^59]what he was writing. The verbal resemblances to the corresponding passage in Diog. Laert. x. 139 make it evident that Cicero was following closely some Greek original, whether Epicurus himself, or some later Epicurean such as Zeno ; and his own imperfect understanding of the meaning of the passage he was transcribing seems to be proved not only by the strangeness of the language and grammar (the vaguest constructions being chosen, as if to give the reader the choice of taking the words in as many ways as possible), but also by the hints he repeatedly throws out as to a difficulty at this point. Thus Velleius, the Epicurean speaker, introduces the passage with a sort of apology for its obscurity:-" haec quamquam et inventa sunt acutius et dicta sultilius ab Epicuro quam ut quivis ea possit agnoscere, tamen fretus intellegentia vestra dissero brevius quam causa desiderat." And the comment of Cotta the Academician critic points the same way:-"puderet me dicere non intellegere, si vos ipsi intellegeretis, qui ista defenditis." Thus the commentators are reduced to the hope of finding traces of the meaning of the original Greek in Latin which was apparently unintelligible to the writer himself.

Most of the attempts at explanation are based on alterations of the text, more or less arbitrary and improbable. Mr Mayor, for instance, with a large number of other editors, accepts Lambinus' conjecture of ad nos for ad deos.

Lachelier keeps the text as it stands, and translates as follows :-
"According to the teaching of Epicurus, the divine nature is of such a kind, that it is perceived not by sense, but by thought, nor has it the quality of solidity, or numerical identity, like those things which he calls $\sigma \tau \epsilon \rho \epsilon ́ \mu \nu \iota a$ on account of their firmness of substance; but on the perception of a train of similar images, when an infinite succession of images of precisely similar form arises out of the innumerable atoms and streams to the gods, our mind, intently fixed on those images, comes to apprehend the nature of a being at once blessed and eternal."

That is to say, the gods, though material, are not firm and solid, like the gross bodies of men and visible things, but of a
far finer texture. They have not numerical or material, but only formal identity; in other words, the matter of which they are composed, instead of remaining fixed and identically the same through a finite space of time, as is the case with visible and tangible objects, is perpetually passing away to be replaced by fresh matter, the form, or arrangement of matter, alone remaining unchanged. They are formed by perpetual successions of 'images,' or material films, of precisely similar form, which, having arisen (in some unexplained way) out of the infinite atoms dispersed throughout the universe, stream to a sort of focus, and there, by their meeting, constitute for a moment the being of the gods: then, streaming away again in all directions, they pass into the (material) mind of man, bringing with them the notion of the blessed and eternal being whose body they had for a moment helped to compose, and whose form they still bear.

But will the words bear this meaning? To examine them in detail:-

The first clause, "ut non sensu sed mente cernatur" (or as it is repeated by Cotta in § 105, "sic enim dicebas, speciem dei percipi cogitatione, non sensu"), clearly represents the Greek words $\lambda$ óy $\varphi \theta \in \omega \rho \eta \tau o v{ }^{\prime} s$, which occur in the parallel passage in Diog. Laert. x. 139. The explanation is given in Pseudo-Plut.

 $\lambda \in \pi \tau о \mu \epsilon \in \rho \iota a \nu \quad \tau \hat{\eta} \varsigma \tau \hat{\omega} \nu \in i \delta \omega \dot{\nu} \lambda \omega \nu \quad \phi \hat{v} \sigma \in \omega \varsigma$. Cf. Voll. Herc. coll. 2, tom. vi. 2 (the treatise wrongly called in the Naples edition "Metrodori de Sensionibus"), col. 17: кaì $\delta \iota a ̀$





 $\theta \epsilon \omega \rho \eta \tau 0 i ̂ s)^{1}$.

[^60]refers to a process of thought carried on by the spontaneous action of the mind, and not to the effect of images acting on the "internal sense."

Thus the meaning of the first clause is, that the images, by means of which the divine nature is perceived, are too fine to affect the organs of sense, and pass through directly to the mind within, which is able to receive impressions from them, owing to its own corresponding fineness of texture. Cf. Lucr. 5. 148: "tenuis enim natura deum, longeque remota | sensibus a nostris, animi vix mente videtur:" and 6.76: "de corpore quae sancto simulacra feruntur $\mid$ in mentes hominum, divinae nuntia formae."

The sense of the next words, "nec soliditate quadam nec ad numerum," is determined by Cotta's version of them, "nec esse in ea (sc. specie dei) ullam soliditatem, neque eandem ad numerum permanere;" i.e. there is in the divine form no solidity, and it does not remain "eadem ad numerum." But what is the meaning of ad numerum? The corresponding phrase in D. L. is $\kappa a \tau^{\prime}{ }^{\alpha} \rho \iota \theta \mu \grave{o} \nu \dot{v} \phi \epsilon \sigma \tau \omega \tau \tau a \varsigma$, i.e. subsisting, or existing permanently, by way of numerical identity; which is there opposed to катà ó $\mu \circ \epsilon i \delta[\epsilon] \iota a \nu(\dot{v} \phi \epsilon \sigma \tau \hat{\omega} \tau a s)$, "existing permanently by way of sameness of form." There can be no doubt, therefore, that Cicero's words "eandem ad numerum permanere" answer to the Greek $\hat{e} \nu$ or $\tau a v i \tau o ̀ ~ \kappa a \tau ' ~ a ं \rho ı \theta \mu o ̀ \nu ~$ $\mu \epsilon ́ \nu \in \iota \nu$, which according to ordinary usage would be said of a thing that is permanently the same in matter, as opposed to
 matter, and remains the same in form alone ${ }^{1}$.

This sense of $\kappa a \tau^{\prime}{ }^{a} \rho \iota \theta \mu \mu^{\prime} \nu$ is established by the references to Aristotle given in Bonitz under à $\rho \iota \theta \mu \rho_{s}$ : e.g. Ar. Metaph. 4.

 (Aristotle here uses a plural subject, and says "things are numerically the same when their matter is one ;" but he might of course equally well have said " $a$ thing remains numerically

[^61]faded) original, we get the following result;-кат' $\dot{\alpha} \rho \iota \theta \mu о \nu$ катабкєvas' (оi ?) $\delta \epsilon \mu \iota a \nu \mu \in \nu$ кат' $\dot{\alpha} \rho \iota \theta \mu о \nu \quad \tau \eta \nu \quad \delta \cup \nu \alpha \mu \iota \nu$
 $\left.\kappa а \theta_{0} \delta v \sigma \iota \kappa є \chi \rho\right\rceil \tau \alpha \iota \sigma \nu \mu \epsilon \beta \eta \kappa о \sigma \iota \nu$.
the same at different times when its matter remains one and the same.")




 again, complete identity, i.e. identity of matter and form together, is expressed by $\tau a \dot{u} \tau o ̀ ~ \kappa a \tau^{\prime} ~ a ́ \rho \iota \theta \mu o ́ \nu$; likeness, or identity of form between things different in matter, is expressed by таưтà катà тò єidos ${ }^{1}$.

Meteorol. 2, 357 b. 27 sq . (The parallel is here still more exact, because we have not merely $\tau a v i \tau a ̀ ~ \epsilon i v a \iota$, but $\tau a v ̉ \tau o ̀ ~$ $\mu \epsilon \boldsymbol{\varphi} \boldsymbol{\epsilon} \boldsymbol{\nu}$ : i.e. the question is not of the identity of distinct subjects, but of that of the same sulject at different times.)
 $\mu о \rho i \omega \nu \dot{\alpha} \rho \iota \theta \mu \hat{\varphi}, \hat{\eta} \tau \hat{\varphi} \in \not \subset \delta \in \iota \kappa a \ell \tau \hat{\varphi} \operatorname{\pi ó\sigma } \omega, \mu \in \tau a \beta a \lambda$ -



 $\dot{\rho} \in \hat{v} \mu a^{2}$.
 خévย

 $\delta^{\prime}$ èv $\delta$ é $\chi \epsilon \tau a l$. (I.e., that the same individual animal, êv ápı $\theta \mu \hat{\varphi}$, should live for ever, is impossible; but it is possible for a race of animals, the same $\epsilon^{\prime} \delta \delta \epsilon \iota$, though not $\dot{\alpha} \rho \iota \theta \mu \hat{\omega}$, to last for ever. Epicurus, if our theory is right, has found in the case of the
${ }^{1}$ Cf. also Metaph. 999 b. 33 (where it is said that $\tau \delta \dot{d} \rho \iota \theta \mu \hat{\varphi}$ 光 $\nu$ may be used as an equivalent for $\tau \grave{\text { ò }} \kappa \alpha \theta^{\prime \prime}$ ёкаб тov): de An. 411. b. 20 (where the word $\dot{\delta} \mu \sigma \epsilon \delta \hat{\eta}$ is used in this connection): $\pi \epsilon \rho l$ रev. кal $\phi \theta о \rho .338$. b. 13-18.
${ }^{2}$ The passage continues, фave $\rho \partial \nu \delta \dot{\eta}$
 $\mu \epsilon \tau \alpha \beta \circ \lambda \hat{\eta} s, \quad \dot{\epsilon} \pi i \quad \pi \alpha \dot{\nu} \tau \omega \nu \quad \tau \epsilon$ кal $\phi \theta$ орà $\nu$
 $\mu \dot{\nu} \nu \omega s$ бvußalveıv $\pi a ̂ \sigma \iota \nu$ aüroîs. The case of the Epicurean gods, then, will be simply that in which the raxurìs $\tau \hat{\eta} s \mu \epsilon \tau a \beta 0 \lambda \hat{\eta} s$ is increased without limit.
gods a means of transferring the "eternity of formal identity" from the race to the individual.)

We must suppose Epicurus, then, to have used the words in their Aristotelian sense, merely giving to ciठos a meaning more exclusively material and less metaphysical, to correspond to his different philosophical stand-point. Thus the difference be-
 on the one hand, and $\tau \grave{\text { ò }} \kappa$ катà ó $\mu о \epsilon i \delta \epsilon \iota a \nu ~ \dot{v} \phi \epsilon \sigma \tau o ́ s ~ o n ~ t h e ~ o t h e r, ~$ will be that between a pond and a river. The pond is composed in the main of the same matter on successive days; it remains ềv кaт' aj $\rho \iota \theta \mu o ́ v$. The river, on the contrary, is composed of quite different matter on successive days, and its permanent identity is one of form alone ; it remains $\hat{\varepsilon} \nu$ or $\tau a \cup ̉ \tau o ̀$ $\kappa a \tau^{\prime}$ єíסos, but not кат' àpı $\theta \mu o ́ v$.

But can the words nec ad numerum in our passage stand by themselves for neque eadem ad numerum permaneat? Hirzel (Untersuchungen, pt. 1), as well as Lachelier, appears to think that they can; and he would make both soliditate quadam (which must be taken as a 'predicative ablative of quality') and ad numerum, depend on cernatur repeated. But it must be confessed that this makes very strange Latin. Mr J. B. Mayor thinks it impossible, and conjectures "neque eadem ad numerum sit." Whether these were the actual words of Cicero is doubtful (eadem may well have slipped out between nee or neque and $a d$; but sit has less in its favour). But that Mayor's conjecture gives the right meaning is fully proved by Cotta's paraphrase.

The force of the first clause, then, is that the gods are not like the pond, but like the river; that while retaining their form (and, we must suppose, their personality) from moment to moment, they consist at each successive moment of different matter.

The next words, "ut ea quae ille propter firmitatem $\sigma \tau \epsilon \rho \epsilon \in \mu-$ $\nu \iota a$ appellat," qualify and explain both soliditate and $a d n u$ merum. $\sigma \tau \epsilon \rho \epsilon \in \notin \nu l a$ is the word used by Epicurus (e.g. in D. L. x. 50 , and the fragments of the $\pi \epsilon \rho \grave{\phi} \phi \dot{v} \sigma \epsilon \omega \varsigma)$ to express solids, or things having depth as well as surface, as opposed to the
$\epsilon^{\ell} \delta \delta \omega \lambda a$, which are films of insignifieant depth. The clause would seem to assert, therefore, that the gods are of the nature of $\epsilon^{\prime} \delta \omega \lambda \alpha$ rather than of tangible bodies, or are surfaces rather than solids. And this agrees perfectly with what we are told elsewhere about the "quasi corpus" of the gods. Cotta says (§ 75) "Illud video pugnare te, species ut quaedam sit deorum, quae nihil concreti habeat, nihil solidi, nihil expressi, nihil eminentis, sitque pura, levis, perlucida;" and he goes on to say that such a god is like a mere painting rather than a real living being. And the contemptuous descriptions of opponents point in the same direction; thus Cic. N. D. 1. 123: "homunculi similem deum...lineamentis dumtaxat extremis, non habitu solido,...exilem quendam et perlucidum." Again, in 2. 59, Balbus calls them " monogrammos deos," or "gods in outline" (the word was used by Lucilius, ap. Non. 37. 11, to describe comically a lean man). Cf. de Div. 2. 40, "deos...perlucidos et perflabiles."

All these passages suggest beings having shape or outline, but not bulk, and so far at least, of the nature of $\varepsilon^{\prime \prime} \delta \omega \lambda a$.

So far, we have been told what the gods are not. We now come to the positive part of the description, in which the main difficulty lies ${ }^{1}$. The words are, "sed imaginibus similitudine et transitione perceptis, cum infinita simillimarum imaginum species ex innumerabilibus individuis existat et ad deos affluat." They must be compared with the corresponding clauses in § 105, "eamque esse ejus visionem, ut similitudine et transitione cernatur, neque deficiat unquam ex infinitis corporibus similium accessio;" and in § 109, "fluentium frequenter transitio fit visionum, ut e multis una videatur."

The key to these passages is to be looked for in the corresponding Greek of D. L. x. 139 : катà $\dot{\delta} \mu \circ \epsilon i \delta[\epsilon] c a \nu$ (sc. v́фє $\sigma-$

[^62]
 of form, or formal identity, owing to (or formed by) the continual streaming up of the like images wrought into one and the same object." If our account of $\kappa a \tau^{\prime} \dot{\alpha} \rho \iota \theta \mu \grave{\nu} \nu$ and $\kappa a \tau \grave{a}$ $\dot{\delta}^{\mu}$ ociocian was right, this should mean, that the changing matter, of which the gods consist, is supplied in the form of streams or trains of like images, directed to a common point, viz. the point where the gods are.

Applying the same explanation to the Latin passages, we find no difficulty in $\S 109$. "Fluentium frequenter transitio fit visionum, ut e multis una videatur," clearly means, " there goes on a passage, or train, of images streaming in quick succession, in such a way that many produce the effect of one"


Transitio, then, expresses that passage or flux of matter (in the form of a series of images) which is the distinctive mark of the divine beings, as opposed to all other material things. Its meaning is given more in full by the explanatory clause which follows in § 49: "cum infinita simillimarum imaginum species...existat et ad deos affluat;" i.e., "when an infinite number of similarly formed images come into being and stream to the gods ${ }^{1}$."

There remains the "imaginibus similitudine et transitione perceptis" of $\S 49$, the "similitudine et transitione cernatur" of $\S 105$. If the rest of the passage has been rightly explained, these words must mean (as Mayor translates them, p. 147: his explanation of them, p. 146, is different):-"by the perception of a train of similar images;" that is to say, the perception of like images, which pass in succession, from the places where they take their rise, to the point where by their meeting they constitute for a moment the divine being, and from that point again to the human mind. But on what principle can "imagi-

> 1 'Infinita imaginum species ' may fairly be regarded as a periphrasis for 'infinitae imagines,' or rather, for 'infinitae imagines una specie' (we might compare Lucr.'s ' cum species patefacta
est verna diei '): and it is therefore unnecessary to change species into series, with Hirzel and Mayor, though this would express the required sense more simply.
nibus similitudine et transitione" bear the sense of "imaginibus similibus et transeuntibus"? We can only suppose that at this point Cicero was puzzled by his Greek original, and therefore used the vaguest construction available, "by the perception of images in the way of likeness and transience" (possibly $=\kappa a \theta^{\prime}$ о́лоь́тŋта каі̀ торєíà), leaving it to his readers to discover a meaning if they could. This seems confirmed by the fact that the ablatives similitudine et transitione are repeated without variation in the paraphrase, as if the writer could not trust himself to find an equivalent. But great as the difficulty of these particular words may be, it is not enough to counterbalance the arguments in favour of Lachelier's interpretation of the whole passage.

But there still remains an unexplained difficulty in the



 ${ }^{2} \nu \theta \rho \omega \pi \sigma \in \iota \delta \in i ̂ s$.

This sentence, as it stands, asserts that Epicurus affirmed the existence of two kinds of gods, one $\kappa a \tau^{\prime} \dot{\alpha} \rho \iota \theta \mu \grave{\nu} \nu \dot{v} \phi \epsilon \sigma \tau \hat{\omega} \tau a s$, and the other ката̀ $\dot{o} \mu o \epsilon i \delta \varepsilon \iota a \nu$. In spite of some attempts to defend this assertion, it is quite impossible that had this been the doctrine of Epicurus no trace should have been found elsewhere of a distinction so fundamental. Not one of the many passages in which the nature of the Epicurean gods is described gives so much as a hint of any such division of the gods into two classes; whereas, had such a division existed, no such passage would have been fully intelligible without an indication to which of the two classes it was to be understood to refer. Hirzel and Mayor, however, agree in ignoring this objection; both alike defend the text, and attribute to Epicurus or his school the distinction between two different kinds of gods, the objects of a true or esoteric, and of a popular or exoteric doctrine respectively. Moreover, both Hirzel and Mayor appear to imply (though neither asserts explicitly) that Epicurus taught to others the existence of both classes of gods, while himself believing in
the existence of one class only. They differ, however, on the rather important question which of the two classes of gods was that of the true or esoteric doctrine. Hirzel thinks that it was the $\kappa a \tau^{\prime}{ }^{\alpha} \rho \iota \theta \mu \dot{\partial} \nu \dot{v} \phi \epsilon \sigma \tau \omega \bar{\omega} \epsilon \varsigma \quad \theta \epsilon o i ́:$ Mayor that it was the $\kappa a \tau d$
 esoteric doctrine with all that we know of the ostentatiously plain and straightforward method of Epicurus, coupled with the total absence of evidence in its favour ${ }^{1}$, seems conclusively to condemn it. The most that can be admitted is that Epicurus laid more stress at one time on the transcendental or ideal nature of the gods, as blessed and eternal beings, or on their physical nature as beings composed of streams of $\epsilon i \delta \omega \lambda \lambda$; and at another, on their human shape and character, which, though brought into outward connection with the rest of his system, was no doubt due mainly to the influence of the popular mythology. But that he held and taught all these doctrines with equal seriousness, and believed them to be reconcileable with one another, there can be little question.

Hence the only doubt is, whether the passage as we have it is due to a corruption of the text, or to a misunderstanding on the part of Diogenes himself.

On the first supposition, several attempts, all more or less unsatisfactory, have been made to correct the text, and bring it into closer correspondence with that of Cicero. Most of these attempts are based on the conjecture of Gassendi, who changed oùs $\mu$ èv...oùs $\delta e ́$ into où $\mu \grave{v} \nu \ldots \omega$...s $\delta \epsilon^{\prime .}$. Gassendi's alteration probably gives the general meaning of Epicurus; but if the text is corrupt, it is hopeless to try to recover the exact words : and it is possible after all that the mistake may be that of Diogenes

1 The only hint of an esoteric Epicurean doctrine is that contained in Clem. Alex. Stromat. v. c. ix. § 59 : the Epicureans $\phi a \sigma i \quad \tau t \nu a$ кal $\pi a \rho \prime a v i-$
 $\pi \epsilon \iota \nu$ év $\nu \cup \gamma \chi \alpha{ }^{2} \nu \epsilon \iota \nu$ тoútots $\tau 0$ îs $\gamma \rho a ́ \mu \mu \alpha \sigma \iota \nu$. But there is nothing to shew that the forbidden volumes spoke of a different kind of gods ; and it is far more likely that writings such as those of Metro-
dorus concerning the $\gamma \alpha \sigma \tau \dot{\rho} \rho$ were meant, which announced the dogma $\dot{\eta} \delta o v \eta \tau^{\prime} \lambda$ os in a naked form that might be dangerous to weaker brethren.
${ }^{2}$ Schömann, for instance, suggests ov̉ $\mu$ èv $\ldots \gamma \nu \omega \sigma \tau o v ̀ s ~ \delta \epsilon \epsilon$, making $\gamma \nu \omega \sigma \tau o v ̀ s$ катà o̊ $\mu о \epsilon \iota \delta \delta i \alpha \nu$ mean " apprehended by the mind owing to their likeness of substance" (gods and mind alike being composed of the finest atoms).
himself, who is quoting Epicurus in the oratio obliqua. Such a mistake might be accounted for in various ways. Diogenes might well have found in different parts of Epicurus' writings descriptions of the gods so different in tone and tendency, as to seem at first sight to refer to entirely different beings. In one place, they would be spoken of as existences formed by streams of images, and having no material identity ; in another place they would be described in terms far more nearly approaching the language of the popular mythology, as beings of human form, but of superhuman stature and beauty, dwelling in a sort of ethereal Olympus, and possibly even ${ }^{1}$ conversing in Greek. It would be excusable in a compiler like Diogenes to mistake the same gods seen under such different aspects for two different classes of beings. Or the blunder might have arisen simply from a careless reading of a single passage of Epicurus. For instance, if we are right in our view of the material nature of Epicurus' gods, an account of that nature would probably begin with a division of existences into those possessing $n u$ merical, and those possessing merely formal identity. But if Epicurus' account of the gods contained words such as $\phi \dot{v} \sigma \epsilon \iota \varsigma$ ai
 reader might easily take both clauses to apply to the gods, instead of the second alone, and change $\phi \dot{v} \sigma \epsilon \iota s$ into $\theta \epsilon o l$ in his reproduction of the passage. If these are mere assumptions, at least they seem more modest and less improbable assumptions than that of an esoteric Epicurean Theology.

Having described the physical constitution of the gods, Velleius goes on in $\S 50$ to confirm their immortality by an argument founded on the principle of ioovouia, or aequabilis tributio, which according to him is "one of the remarkable properties of infinity." It is the principle that in infinity, all things have their match, "omnia omnibus paribus paria respondent." By this he seems to mean a law of averages or chances; the law, namely, that of two alternatives equally possible, each will

[^63]occur with equal frequency if an infinite number of cases be taken.

In the present case, there is a double application of this principle. First, the number of atoms in motion in the universe being infinite, there must on the whole be equal numbers of atom-motions tending on the one hand to destroy, and on the other hand to feed or maintain composite bodies ${ }^{1}$. But again, this balance of opposing tendencies may itself be preserved in two different ways. The processes of growth and of decay, of combination and of dissolution, may either prevail alternately in each individual object, so that the result on the whole will be a perpetual decay of existing things, accompanied by a perpetual growth of fresh things in their place: or the two processes may go on simultaneously in a given object, so as to produce an equilibrium, the result of which will be eternal duration. Consequently (to apply the principle of ioovouia once more) if we take an infinite number of cases (that is, if we consider the whole universe) the alternate and the simultaneous action of the two processes must go on to an equal extent. Now in our world (and, by analogy, in all the worlds) the first alternative is that which universally prevails; that is, the motions of growth and of decay operate alternately, both on the world as a whole, and (at shorter intervals) on each individual within it, thus producing universal death and universal birth. Hence, outside the worlds, or in the intermundia, room must be found for the other alternative; that is, the "motus auctifici" and the "motus exitiales" must there work simultaneously, and instead of producing successions of different beings, must result in the immortality of such beings as exist.

Cicero does not state this argument in full, but merely sums

[^64]up its result in the words "si mortalium tanta multitudo sit, esse immortalium non minorem." But that the inference from ioovouia, if drawn out at length, would have stood as I have stated it, is confirmed by Cotta's commentary in § 109, "Quomodo probas continenter imagines ferri ?" (i.e. "how do you prove that the stream of images which constitutes the gods is not intermittent?") "aut si continenter, quomodo aeternae? 'Innumerabilitas,' inquit, 'suppeditat atomorum.' Num eadem ergo ista faciet ut sint omnia sempiterna? Confugis ad aequilibritatem...et ais, quoniam sit natura mortalis, immortalem etiam esse oportere." Here we see that the exact point proved by the principle of ioovouia is the perpetual continuance, in the case of the gods, and in their case alone, of the auctifici motus; and that it is on this perpetual continuance that their immortality depends. The Epicurean, when asked how it is that the stream of matter in the form of images which goes to form the gods never fails, replies at first, that it is because there is an infinite supply of matter to draw upon; but to the objection that this argument would tell equally for the immortality of all things, he answers in effect, that the principle of ioovouia determines the supply of the infinite matter in such a way, as to produce death and birth in some beings, and immortality in others.

According to this account, the argument from ioovopia is at least consistent with itself; while the more common explanation (adopted by Hirzel and Mayor amongst others), that the balance is between an excess of destroying motions in the worlds, and an excess of preserving motions in the intermundia, confessedly amounts to a charge against Epicurus of flagrant inconsistency. Thus Mr Mayor himself says (Cic. N. D. I. p. 149) "It is unkind to touch the card-castle of the Epicurean philosophy, or one might be disposed to ask why there might not be sufficient employment for the conservative forces in the constant building up of new worlds as the old ones perish, without finding a special seat for them in the intermundia; and how these auctifici motus are to show themselves in a place sacred from the intrusion of atoms." It would have been kinder to give Epicurus
credit for a little common sense, and not to attribute to him doctrines so glaringly self-contradictory. The answer, on our theory, would be that the "building up of new worlds as the old ones perish" is one of the two employments of the auctifici motus or conservative forces (more exactly, growth-producing motions, or formative processes); and that the intermundia, so far from being "sacred from the intrusion of atoms," are regions where the gods are kept in eternal existence by the perpetual intrusion of atoms, in the form of these very auctifici motus. Indeed, it is difficult to understand how anyone can have supposed the Epicurean system to represent the motus exitiales as being in excess in the worlds, in the face of Lucretius' distinct and detailed statement (2. 1105-1147) that each world has first a period of growth, and then a period of decay, so that in the worlds the formative and destructive processes prevail by turns, and on the whole a balance is preserved between them.

Taking Lachelier's theory as a whole, it has this advantage over all others that have been put forward, that it shews an ingenious attempt on the part of Epicurus to bridge the fatal gap in his system, and answer the obvious objection to his account of the gods.

> "If all be atoms, how then should the gods, Being atomic, not be dissoluble, Nor follow the great law ?""

If our theory is correct, Epicurus' answer would have been, that the ceaseless flight of atoms to and from the gods (in the

[^65]tions; e.g. "are these images," viz. those which come to us from the gods, "immortal? If not, why are these gods, which are much finer than men, and grosser than their own images, imperishable?" (In "Metrodori de sensionibus" cols. 17 and 18, quoted above, the explanation of the immortality of the divine body here assumed by Munro to be the only one, viz. тd $\lambda \epsilon \pi \tau \delta \mu \epsilon \rho \epsilon \varsigma$, does occur; but I cannot believe that no better one was given by Epicurus.)
form of images), so far from being destructive to their immortality, constitutes their very being; and that they are eternal, just because they are undergoing a perpetual death and a perpetual birth. This doctrine, if it was that of Epicurus himself, must be supposed to have met with little notice in the more popular accounts of the Epicurean system, which are all that are preserved to us ${ }^{1}$, on account of its comparatively recondite and technical nature; and hence the passages of Cicero and Diogenes in which it is preserved both shew an imperfect understanding of it; while all that we find in Lucretius is an unfulfilled promise to treat the subject later, as though he had postponed it from a consciousness of its difficulty ${ }^{2}$.

Of the many other explanations that have been proposed (almost all of which do more violence to the text than that of Lachelier), none contains even a plausible attempt at an answer to the great difficulty involved in the atomic constitution of eternal gods. Gassendi, Tennemann, Heindorf, Schoemann, Zeller ${ }^{3}$ and others ${ }^{4}$ have tried their hands upon the passages of Cic. and D. L., and have left the difficulty as great as they found it. But two of the most recent theories, those of Hirzel (Untersuchungen, pt. 1) and Mayor, require closer attention.

Hirzel (" the first," says Mr Mayor, "to give a satisfactory explanation of the whole") adopts the conjectures series for species, and ad nos for ad deos. He takes ad numerum or кат' ${ }_{a} \rho \iota \theta \mu o ́ \nu$ in the Aristotelian sense, and transitio in the sense of constant succession; both, I believe, rightly. But he takes the passage, or at least the second and positive part of it, to be a

[^66]individuis "from the (divine) individuals," instead of "from the atoms." Is there any authority for the use of individuum in good Latin in this sense of the Greek árouos? (or even for äтoبos itself so used by an Epicurean?)

* Since writing this, I have seen P. Schwenke's article on Cic. N. D. 1. 49, in the Neue Jahrbücher für Philol. u. Paedag., Leipz. 1881. I find in it no reason to change what I have written.
description of the images of the gods that come to us, rather than of the gods themselves; and he accounts for this by the supposition, for which he argues at considerable length, that Cicero "identified the gods and the images with one another, saiw images in the gods, and gods in the images." And he explains this mistake of Cicero as a not unnatural confusion between the two kinds of gods, between which Epicurus, as reported by Diogenes, drew a distinction ; namely, on the one hand "the right and true gods, who dwell in the intermundia, and on the other hand, the images, which represent the divine being within the world, and are by the majority of men regarded as gods." The gist of the passage, according to him, is that while innumerable images of this kind strike on our mind in rapid succession, we do not perceive each single image separately, but are conscious only of a general impression produced by the series.

One objection to such an explanation is that it makes the passage a mere description of the process of perception in general, which is clearly not wanted here, instead of a description of the special nature of the gods, and the special process of perceiving them, which is wanted. For according to Epicurus, all perception took place alike by means of a succession of images not singly distinguishable; and he would certainly not have gone out of his way to assert this elementary fact in a passage intended to describe the difference between the nature of the gods and that of all other things.

But a still more decisive answer may be given. For (not to speak of the extreme improbability of the supposition that Epicurus recognised a double set of gods), to accuse Cicero of such a fundamental mistake as that of identifying the flights of perishable images in the world with the $\mu$ кка́рьо каї äфӨaртор of Epicurus, dwelling apart in unbroken peace, amounts to a total denial of the value of his evidence. If Cicero was really capable of such a blunder, nothing that he says on the subject can be of any importance, and we shall have to confine ourselves to the information given by other and less ignorant writers. But that he was in reality as well aware as anyone that the Epicurean gods were not in the world, but outside it, is too
obvious from every page in which he mentions them to be worth proving.

The truth is, that the expressions which Hirzel brings forward to prove that Cicero identified the gods of the intermundia with the images flying about the world (e.g. Cic. N. D. 1. 109, and 2.76), can be satisfactorily explained by Lachelier's theory, and by that alone. The gods and the images are in one sense identical; that is to say, the images do, by their meeting, at one point in their course, constitute for a moment the substance of the gods; but they have ceased to do so, and are mere dead films, when they arrive in the world and impress themselves upon the human mind.

Mayor adopts Hirzel's view, with some important modifications. He agrees with the latter that "there were two distinct systems of theology recognised in the Epicurean school, one of a more esoteric nature,- -the other more suited to the popular belief; which two systems have been not unnaturally confounded together by Cic." (Mayor on Cic. N. D. I. p. 147, n. 2). But he differs from Hirzel in thinking that the gods of the esoteric doctrine were those mentioned by Diog. as the second class, and exclusively dwelt upon by Cicero here, viz. the streams of images, as opposed to the more individualized gods of the intermundia ${ }^{1}$. The "more spiritual" gods of the esoteric doctrine "exist for us in virtue of a continuous stream of images combining to produce in us the impression of a human form" (p. 147); and he suggests an analogy with Matthew Arnold's "stream of tendency which makes for righteousness," which, he says, similarly consists at first of a series of outward events, but shapes itself by degrees in the minds of men into a human form.

This theory is so far an improvement on that of Hirzel, that it chooses for the exoteric doctrine the doctrine which has as a fact been commonly known to the world, that, namely of the eternal and happy beings dwelling at peace in a region apart. But in other respects, it is open to the same

[^67]objections as that of Hirzel ; and to the further one, that the supposed esoteric doctrine, so far from "acknowledging a divinity of a more spiritual type," would seem to deny all objective living existence to the áфӨapтov каì $\mu a \kappa \alpha ́ \rho \iota o \nu$, and reduce it to a mere series of states of the human consciousness.

It only remains to ask in what relation a view of the divine nature such as I have stated would stand to previous systems. Epicurus made no attempt to think out a physical system for himself, but merely adopted that which seemed most suited to his ethical purpose, which happened to be the atomic doctrine of Democritus ${ }^{1}$; making no change in it beyond such modifications of detail as were rendered indispensable, partly by the criticisms of later philosophers, and partly by the requirements of his own ethics ${ }^{2}$. This being so, it has always been felt as a difficulty that Epicurus, while following Democritus so closely in the rest of his system, and especially in his account of the $\epsilon^{i} \delta \omega \lambda \lambda a$ as the means of perception and thought, should have differed from him, as it seemed, so completely, in his account of the physical constitution of the gods.

Democritus spoke of a second class of $\epsilon \geqslant \delta \omega \lambda \lambda a$, not (like those to which sight and thought are due) films from the surface of bodies, but formed directly from the $\theta$ eía ovioia, or material fiery world-soul. These eíठ $\omega \lambda a$ are actual gods or demons, of human shape and superhuman size, long-lived, but not immortal. They fly about the world, and are

[^68][^69]capable of uttering prophecies and of doing good and harm to $\mathrm{men}^{1}$.

What modifications of this doctrine, then, would be needed to make it serve the purposes of Epicurus? His ethical views postulated the perfection and happiness of the gods, and the possibility of happiness for men. But it was necessary to the perfection of the gods that they should be immortal ; and it was indispensable to the happiness alike of gods and men that the gods should be excluded from the world. At the same time, in order to bring the theology of Epicurus into connection with his theory of knowledge, the gods must be apprehended by means of $\epsilon i \delta \omega \lambda \lambda$. Now all these objects are effected by the device of making the gods consist not of single $\epsilon \ell \delta \omega \lambda a$ flitting about the world, but of endless successions of like images in a region apart; which images, having by their confluence formed the divine being for a moment, stream away into the world, and impress upon our minds the notion of such a being. By this change the $\epsilon^{\prime \prime} \delta \omega \lambda a$ can be attenuated, and so brought into correspondence with those of ordinary perception and memory; while, at the same time, the gods themselves are raised to the required position of permanence and security. The world-soul of Democritus of course disappears, being inconsistent with the denial of divine government; and consequently, no clear explanation of the origin of the images can be given ${ }^{2}$. No other account of

[^70]dasselbe,' die wir empfangen, - die ganz allgemeinen Bilder in uns. Das sind die Götter; einzeln fallen sie im Schlaf in uns. Dies allgemeine Bild, ein concretes, das zugleich menschlich vorgestellt ist, ist dasselbe, was wir Ideal nennen; nur dass ihm hier der Ursprung so gegeben ist, dass Bilder aufeinander fallen." I.e. the gods are a sort of Platonic Idea personified and embodied in a material quasi-corpus. This view is (pace Schömann) perfectly intelligible, and would fit in excellently with the theory maintained above. The numberless like images given off
the Epicurean theology that has been suggested puts it in so natural a relation to that of Democritus．

Supposing our account of the Epicurean gods to be the right one，it should give the clue to several passages con－ nected with this subject，which seem to have received no satis－ factory explanation．

Pseudo－Plut．plac．phil．I．7． $15=$ Stob．ecl．1，p． 66. （Doxogr．ed．Diel，p．306）＇E $\quad$ íкovpos，ảv $\theta \rho \omega \pi \sigma \epsilon \iota \delta \epsilon i ̂ s ~ \mu \grave{e ̀ \nu} \pi a ́ \nu-$ тas тov̀s $\theta \epsilon o v ̀ s, ~ \lambda o ́ \gamma \varphi ~ \delta e ̀ ~ \pi a ́ v \tau a s ~ \tau o v ́ т o v s ~ \theta \epsilon \omega \rho \eta \tau o u ̀ s, ~ \delta ı a ̀ ~ \tau \eta ̀ \nu ~$




［ä入入as cannot be right；for Epicurus certainly did not recognise four immortal natures besides the gods．ä $\lambda \lambda \omega \varsigma$ （Gassendi＇s conjecture，confirmed by one MS．），gives the sense required．］

As to the first three immortal natures，there is no difficulty． They are the atoms，the void，and the infinite universe，or summa summarum，made up of the two ${ }^{1}$ ．But what is the fourth immortal nature，here called the ó $\mu o \circ o$ ót $\eta \tau \in$ ？
by many individual men might be sup－ posed to stream together to certain foci，and there so blend and modify one another，as mutually to correct their imperfections，and produce a single absolute or ideal form－which is the god．But the images flow on，and， thus modified，stream back into the world，bringing to men the notion of the ideal form，or god，whose shape they have now taken．And this might be simply the material side of the mental process of forming a universal or ideal from many particulars by ab－ straction，or elimination of differences； Epicurus reducing all mental processes to flights of material elfw入a，in the same way that a modern physiologist might reduce all mental processes to
modifications of the material structure of the brain．But tempting as this theory looks，no good authority can be quoted in support of it．（In Cic．l．c．， ＂ex innumeris individuis existat，＂a mention of the atoms seems rather superfluous；and a mention of the origin or mode of formation of the images is badly wanted．Remembering that the Latin is an unintelligent translation from the Greek，is it pos－ sible that Zeller is after all right in translating＂from the innumerable individuals＂？If so，the meaning should be individual men，not，as he takes it，individual gods）．
${ }^{1}$ Lucretius（5．351－363）gives the three in the same order．His argu－ ment is，that the world must be perish－

As nothing else in the Epicurean system is immortal except the gods, it has always been seen that the word $\dot{\rho} \mu \circ \circ \dot{o} \neq \eta \tau \epsilon s$ must be intended to describe the nature of the gods; but its meaning has not been satisfactorily explained ${ }^{1}$.

Is it not possible that ócóóт $\eta \tau \epsilon$ s may be an abbreviated

 of successions of similar combinations of atoms, and not, like other objects, of more or less permanent combinations of the same atoms? Taken in this sense, the word ó oоóт $\eta \tau \epsilon$ s will at once describe the physical nature of the gods and account for the possibility of their being immortal ${ }^{2}$.

Philodemus $\pi \epsilon \rho i ̀ \epsilon \dot{\jmath} \sigma \epsilon \beta \epsilon i ́ a s, ~ V o l l . ~ H e r c . ~ I I . ~ T o m . ~ I I . ~ p . ~ 80 ~ s q . ; ~$ Gomperz Herc. Studien, p. 110:




 тоs.
(Gomperz writes the second word ( $i \delta \iota$ )ót $\eta s$. He rightly alters $\dot{v} \pi o \tau \epsilon \lambda \epsilon \hat{\imath} \sigma \theta a \iota$ into $\dot{a} \pi \sigma \tau \epsilon \lambda \epsilon \hat{\imath} \sigma \theta a \iota$, which occurs again just below, and brackets the 七 after évót $\eta \tau \epsilon$. He is probably
able, because it belongs to none of these three orders of being; i.e. he ignores the existence of any fourth immortal nature. This is perhaps another indication (cf. Lucr. 5. 155, referred to above), that he had not as yet carefully studied or fully understood the Epicurean doctrine of the divine nature.
${ }^{1}$ Gassendi (ed. 3. tom. 2. p. 55-6) took it to mean a "corpus sui generis, aliud videlicet ab iis quae sint ex atomis concreta :" but all authority is against such a view. Schoemann suggests, without much confidence, that
the gods may perhaps have been composed of homogeneous atoms, and therefore have held together more firmly than things composed of heterogeneous atoms. But this hypothesis (besides being totally without authority), would not make the gods immortal, though it might lengthen their lives.
${ }^{2}$ The concluding words of the com-
 $\sigma \tau o x \in \epsilon \hat{a} a$, are evidently an unfortunate attempt to explain the obscure word $\dot{\delta} \mu o t \dot{\partial} \eta \tau \epsilon s$, by a writer ignorant of its meaning.
right also in reading vináp $\chi_{0} \sigma a$ for - $\sigma$, though it might be not quite impossible to translate the word as a dat. plur. He professes himself unable to make sense of the passage.)

If we take $\dot{\text { и oóót } \eta \tau o s \text { in }}$ the sense explained above, the first sentence becomes perfectly clear. "A being, if consisting of the $\dot{\delta} \mu o \circ o$ т $\eta \mathrm{s}$ (that is, composed of successions of like matter,) can enjoy its perfect happiness for ever." The next clause, as it stands, is unintelligible. But if $\delta \mu o i \omega \nu$ and $a \dot{v} \tau \hat{\omega} \nu$ were interchanged, it would make good sense, and give just
 (or individual existences), can be formed out of the like elements (succeeding one another) no less than out of the same elements (remaining) ; and (such unities) are recognised by Epicurus, as for instance in his treatise $\pi \epsilon \rho i$ ó ó $о$ ó $\eta \tau \sigma$.". Considering the innumerable blunders, either of the writer or of the modern transcriber, which occur in the Volumina Herculanensia, such a correction hardly seems too violent.

Then follow several mutilated lines on the same subject; the only words that suggest a definite meaning are $\epsilon \in \pi \epsilon \delta \dot{\partial} \nu \dot{\epsilon} \kappa \tau \hat{\eta} s$ $\dot{\delta} \mu о i \omega \nu \quad \ddot{ } \lambda \lambda \omega \nu$ ( $\kappa a ̈ ้ \lambda ?) \lambda \omega \nu \ldots \sigma v \nu \kappa \rho i \sigma \epsilon \omega \varsigma . . . "$ when (a being is formed) out of the combination of like elements in succession."





The general sense of this is clear, though the sentences are incomplete. As Gomperz points out, the first sentence must

 that, in saying that all things are bodies, and not reckoning the gods alongside of them (that is, not putting the gods in a class apart, distinct from bodies), Epicurus excludes the gods altogether, is sheer stupidity."

The second sentence Gomperz considers to be "in hopeless confusion;" but he says "the sense was undoubtedly, 'unless one expects that he should, when setting forth a highest division, at the same time mention by name all the subordinate classes included.'"

It seems to me that this sense may be got out of the words as they stand, with two slight corrections; - tas for - $\boldsymbol{\text { os }}$ (with Gomp.), and $\Gamma \mathrm{E}$ for H after ${ }_{\epsilon}^{\epsilon} \nu \phi \rho \omega \nu$ or ${ }_{\epsilon}^{\epsilon} \mu \phi \rho \omega \nu$. Supplying an infinitive after ${ }^{\epsilon} \epsilon \mu \epsilon \lambda \lambda \epsilon \nu$ from the preceding sentence, we may translate as follows;-"unless indeed any man in his senses was to be expected to do so (sc. $\sigma v \nu a \rho i \theta \mu \in i ̂ \nu$ tov̀s $\theta \in o v ̀ s$, to enumerate the gods as a distinct class) while distinguishing the highest general classes (sc. $\sigma \dot{\omega} \mu a \tau a$ and $\kappa \epsilon v \sigma^{\prime} \nu$ ) when they (the gods) are already included in those highest classes (viz. in that of $\sigma \omega \dot{\mu} a \tau a)$."

The passage continues :-





The argument is this. An opponent says, "Epicurus divides all existing things into body and void; he therefore denies the existence of anything else. But the gods are neither body nor void ; therefore, he denies the existence of the gods ${ }^{1}$." Philodemus replies, "the gods are a species of the summum genus $\sigma \omega \prime \mu a \tau a$ : there was no need therefore for Epicurus to mention them specially, any more than any other particular kind of body, such as men or horses."

On p. 116 occurs $\sigma \tau \epsilon \rho \in \in \mu(\nu \iota-$ ?), and two lines lower, $\tau \grave{\eta} \nu$ $\pi a \rho a \iota \sigma \theta \dot{\eta} \sigma \epsilon \iota$ [or $\pi a \rho^{\prime}$ aí $\theta \dot{\eta} \sigma \epsilon \iota$ ? $] \quad \sigma a \rho \kappa(i) \nu \eta \pi \epsilon \rho \iota \lambda \eta \pi \tau \grave{\eta} \nu$ aï $\sigma-$ $\theta \eta \sigma \iota \nu$-: so that the subject of the page appears to be, that the gods are $\lambda o ́ \gamma \varphi \theta \epsilon \omega \rho \eta \tau o i$.

In p. 118 occurs a tantalizing passage, of which just enough remains to shew how instructive it would have been if complete. We may read the text as follows, accepting most of Gomperz's suggestions :-

$$
\begin{aligned}
& \ldots \ldots . \kappa a \iota \tau a \ldots \phi \iota \\
& (\lambda a \tau ?) \tau о \nu \tau \omega \nu . . \delta \\
& \ldots \nu \text { оноьа } \eta \lambda a \mu \beta a
\end{aligned}
$$

[^71]```
(\nuo\nu)\tau\omega\nu \eta \gamma\epsilon\gamma\epsilon\nu\nu\eta
(\mu\epsilon\nu)\eta \kappaa\nu \epsilon\xi v\pi\epsilon\rho\betaa
(\sigma\epsilon\omega\varsigma?) \tau\omega\nu \mu\epsilon\taua\xiv
(\kappaа\iota? \tau)\eta(\nu) кат а\rho\iota}0\muо
(\sigma\nu\nu\kappa)\rho\iota\sigma\iota\nu o\tau\epsilon \mu\epsilon\nu
(\tau\eta\nu \epsilon\kappa \tau\omega\nu?) av\tau\omega\nu \kappaa\lambda\epsilon<l>\nu
(отє \delta)є }\tau\eta\nu\in\kappa\tau\tau\omega
(o\muо\iota\omega\nu? [a\lambda\lambda\omega\nu Gomp.]) \kappaa\iota \tau\eta(\nu)\ldots
..(\tau?)a\xi\iota\nu ov-
```

（Ten lines lower，occurs（ $\dot{a} ?) \phi \theta a \rho \tau o v$.
We can recognise here the кат＇$\dot{\alpha} \rho \iota \theta \mu \dot{\partial} \nu$ бט́ชкрıбья，or combination by way of numerical or material identity ；and （probably）the distinction between combinations of the same and of like elements，as on p． 80 ；but the meaning of the passage as a whole seems hopelessly lost．

In p．121，an objection is discussed similar to that answered in p．81，that Epicurus left no room for the gods in his classifi－ cation of existences．We may read as follows，still mainly
 $\omega \dot{s} o\left(\mathcal{v}^{\prime} \delta^{\prime}\right) \dot{\epsilon} \nu \tau o i ̂ s ~ \sigma a ́ \mid \mu a \sigma \iota \nu(\kappa a) \tau a(\lambda \epsilon i \pi \epsilon \iota$ ？）［or $\kappa a \tau a \rho \iota \theta \mu \epsilon \hat{\imath}$ ？The facsimile has ．．$\tau a . \nu . . \epsilon \iota] \mid \tau o \nu ̀ s ~ \theta(\epsilon o v ̀ s, \tau \hat{\omega} \nu \sigma) \omega \mu a ́ \tau \omega \nu(\lambda \epsilon ́ \gamma \omega) \nu$

 тov̀ऽ？），$\dot{\epsilon} \pi \epsilon \iota \dot{ŋ} \boldsymbol{\eta} \pi \epsilon \rho-$.

The gist of Philod．＇s argument clearly is，that the gods are $a$ special kind of $\sigma \dot{v} \gamma \kappa \rho \iota \sigma \iota \varsigma \bar{\epsilon} \xi \dot{a} \tau \dot{\sigma} \mu \omega \nu$ ．

In the next page（122）occur some mutilated lines，the general sense of which was probably something of this sort ：－


 $\mu)$ ¢́⿱亠凶禸ov̀ єis（aùтoús？）

[^72]$$
16-2
$$

Then follows:-
 $\pi \epsilon \rho \grave{\grave{l}} \theta \epsilon(\hat{\omega} \nu) \ldots \delta^{\prime} \epsilon \epsilon \nu \tau \hat{\varphi}$ [so Gomp. for $\left.\tau \hat{\omega} \nu\right] \pi \epsilon(\rho \grave{\imath} \mu \epsilon \tau a) \beta o \lambda \hat{\eta} \varsigma \tau \grave{o}$ $\mu \eta)$ ( $\mu \epsilon \tau \epsilon ́ \chi o \nu ?$ ? $\tau o \hat{v} \kappa \epsilon \nu o \hat{v} \mid(a ̈ \phi \theta a \rho \tau)$ ov [? so Gomp.: facsimile has

 should rather be $\mu \eta^{\prime} \delta^{\prime} \ldots \mu \eta^{\prime} \delta^{\prime}$.

The opponent has been arguing thus :-" on Epicurean principles, all bodies containing voids, i.e. all composite bodies, are dissoluble. Now you admit that your gods are $\sigma v \gamma \kappa \rho i \sigma \epsilon \iota \varsigma$ or composite bodies; therefore, your gods are mortal, and you, who hold such a doctrine, are impious." Philodemus is engaged in defending the Epicureans, and Metrodorus in particular, against this charge. The Epicurean answer should be, that they never asserted all $\sigma v \gamma \kappa \rho i \sigma \epsilon \iota$ without exception to be perishable, but only the кат' $\dot{\alpha} \iota \iota \mu \dot{\nu} \nu \quad \sigma v \gamma \kappa \rho i \sigma \epsilon \iota s$. The question is, whether this answer can be found in the words before us.

Is the word after $\tau v \gamma \chi \dot{\alpha} \nu \epsilon \iota$ ( $\pi a \rho a \iota$ ) $\tau \dot{\eta} \sigma \epsilon \omega \varsigma=$ excuse? This would make sense, if there were an infinitive (e.g. єimeiv) to go with the $\tau \hat{\varphi}$. "Metrodorus finds an excuse, or a way of clearing himself, by means of the fact that he nowhere says (as the opponent accuses him of saying) that (only) what contains no void (viz. the atoms) is imperishable, but that every combination is perishable." Without such an infinitive, it seems impossible to find any construction.

The next page (123) carries on the same argument. We


 $\mu \epsilon \tau a \mid(\beta o \lambda \hat{\eta} s)$, каí $\phi \eta \sigma \iota \nu\left(\epsilon i v \mid a \iota ? \sigma v v^{\nu}\right) \kappa \rho \iota \sigma \iota \nu \tau \hat{\omega} \nu . . \mid\left(\kappa a \tau^{\prime} a ̉\right) \rho \iota \theta-$
 ( $\phi a ́ v a \iota ?$ ?) каì $\phi i \lambda a \lambda \eta \theta \hat{\omega} \mid(\varsigma) \ldots \in \nu$ ois à̀ $\mu \eta$-.

Gomperz writes $\tau \hat{\omega} \nu$ ( кã' ả) $\rho \iota \theta \mu \grave{\nu} \nu$, supposing only four letters to be lost here. But this fails to make sense; for why should a $\sigma ט ́ \gamma \kappa \rho \iota \sigma \iota \varsigma ~ \tau \hat{\omega} \nu \kappa a \tau^{\prime}$ a $\rho \iota \theta \mu \grave{\nu} \nu$ be imperishable ${ }^{1}$ ?

[^73] that he can find no satisfactory answer.

Moreover, the space in the facsimile suits six letters better than four (the corresponding space in the line below contains nearly 7). We have only to suppose the two additional letters to have been $\mu \grave{\eta}$, and read $\sigma \dot{v} \nu \kappa \rho \iota \sigma \iota \nu \tau \hat{\omega} \nu \mu \eta े \kappa a \tau^{\prime} \dot{a} \rho \iota \theta \mu o ̀ \nu$, in order to make everything clear. The opponent's argument, as appears from the last page, was that the Epicureans had committed themselves to the principle that all ouvкрiбєıs whatever must be perishable. "No," answers Philodemus, " Metrodorus, in his treatise on 'Change,' makes the requisite distinction, and says that he could rightly and truthfully assert those composite bodies which are composed of elements not numerically identical (but perpetually replaced by other like matter) to be imperishable, and even divine ${ }^{13}$."

Philodemus $\pi \epsilon \rho i \quad \theta \epsilon \hat{\omega} \nu \delta \iota a \gamma \omega \gamma \hat{\eta} s$, pap. no. $\left.\begin{array}{c}157 \\ 152\end{array}\right\}$, Voll. Herc. (Nap.) I. tom. vi. $1,=$ Apogr. Ox. vol. 1, p. $73^{2}$. Nap. col. x.

1. 6. T $\pi \epsilon \rho \grave{̀}$ тoìvv кıขク́ $\sigma \epsilon \omega \varsigma$


1. $a s(\tau ?) \omega \hat{\nu} \dot{\delta} \delta \delta \omega(\nu$ ? $)-$
= Ox. p. 18.



2. $\delta \mathbf{\alpha} a \gamma \omega(\gamma) \dot{\eta}$ ( $\dot{\eta}$ ? ) $\dot{\eta} \delta \in \hat{i} a \pi \rho o \pi i(\pi) \tau \in \imath-$

## 

${ }^{1}$ The same sense might perhaps be obtained in a different way, by reading $\tau \hat{\nu} \nu\left(\right.$ or $\tau \hat{\nu} \nu \gamma \epsilon$ ) $\kappa a \tau^{\prime} \dot{\alpha} \rho \iota \theta \mu \partial \nu$ withont. $\AA$ negative, and supplying (djp) $\nu(\epsilon \hat{\sigma} \theta \theta a \iota)$ instead of (á) $\boldsymbol{\nu}$ (фával). [The space before $\nu$ suits two letters better than one.]
${ }^{2}$ We have here the advantage of the earlier and completer Oxford transcripts, except in the eight or nine lines
at the top of each column, which were obtained from pap. no. 157, unrolled after Hayter had left Naples, and therefore given only in the Naples published facsimile. I have compared the original, which is preserved in the Naples Museum. It is now in many places more imperfect than either of the facsimiles, but often gives valuable help where the facsimiles differ.

21. aiтíшу 'єтєра ка日’ є̋кабтоу (ai) $\theta \theta \eta \tau \grave{\nu . . . . . . ~}$

 Biov, ( $\delta \iota-$ )
24. -о́тєр каї кєข-
31. — — coy $\delta \eta \lambda o \iota . ~ \delta \iota o ́ \tau(\iota) ~ к а i ̀ ~ \tau(\eta े \nu) ~$





37. $a \dot{v} \tau \omega \hat{\nu} \sigma v \nu \epsilon \sigma \tau \eta \kappa \omega ̀ s ~ \mu \epsilon \tau a \lambda a \mu \beta a ́ \nu \epsilon(\iota \tau) \hat{\omega} \nu$

Nap. col. xi.

2. - $\nu \eta \tau \iota \kappa \omega ̂ \nu$. єै $\sigma \tau \iota \nu \mu \epsilon ̀ \gamma ~ \gamma a ́ \rho ~ \tau \iota \varsigma ~ \omega \rho \iota \sigma \mu e ́ v o s ~ \tau o ́ \nu o s ~ o ̀ \nu ~$






=Ox. p. 19.





16. $\sigma \tau \epsilon \rho(\epsilon \in \mu) \nu(\iota-$







24. -

Nap. col. x. l. 7. Nap. єpron : Orig. looks like єpıнn. Prob. ép ${ }^{\prime}$.

10-13. Corner containing beginnings of first four lines broken off, and lost in Orig. Placed as above in Ox. : one line higher in Nap., so that ton Bion -- Eytyjuc, etc., are in one line.
12. init. Оx. .. ретіz $\omega$ : Nap. هріст.' ${ }^{-} \omega$.

ib. Orig. and Ox . $\mathrm{H} \Delta \in \mid a \pi p o \pi I . \Gamma \in I$ ( $H, \Gamma$, and $\in$ faint in Orig.) Nap. . बеıатроாা. . . .
23. Ox. and (probably) Orig. al $\omega \mathrm{Na}$ : Nap. $\operatorname{a}$ ( $\omega \mathrm{Na}$.
32. Orig. yt. p $\ddagger$ inan . poy ....... onthn (rest gone). Ox. fin. tढnkinhonten: Nap. thn. iкhcint.
33. fin. Orig. полл (indistinct) : Ox. пофд: Nap. по..
 brackets faint and doubtful; the others clear]: Ox. amelpeio-Boco--- TWN: Nap. amoiBoce--- ITON.
37. Orig. -мєталамв-: (в faint.) Oх. металамеідо-: Nap. metadamban-.

Nap. col. xi. 1.1. Nap. ta : Orig. to(?).
3. Orig. (prob.) alळNa: Nap. ar由Na.
8. init. Orig. toic $\theta \in \ldots \ldots$. NH: Nap. cte[p]emnionh.
11. fin. Orig. hmin : Ox. h

Orig. - $\Delta \epsilon$ - єрєढлоу: Nap.....є.єп- понтє.
17. fin. Nap. cm... Nєin: Ox. cm... oin.
18. init. Orig. and Ox. cetal : Nap. icetal.


19. Ox. ^...толеХо...пүк: Nap....... nєХо. .птүк: Orig. -єх[0 ?]. Пүк.
ib. fin. Ox. ta.vo.: Nap. ta.. Єı..
20. Orig. сарто: Ox. -apto: Nap. -apro.
 Nap. ск由ाtontaithn . . palo.

The passage seems to be an attack on the Stoic doctrine that gods reside in and travel with the heavenly bodies ${ }^{1}$.

Col. x. 11. 6-13: "Concerning the motion of the gods, we ought to hold as follows. We must neither suppose that they have nothing else to do than (to travel) through the infinite paths (?)- -; for he is not happy who is whirled round ${ }^{2}$ all his life through: nor must we regard the gods as motionless; for a thing of that sort (sc. a thing without motion) is not thought to be so much as alive; and at the same time, their pleasant way of life falls to the ground (?).".

Of $11.19-24$ enough is preserved to shew that they describe the contrast between the substance of the gods, as beings $\lambda$ ó $\gamma \omega$ $\theta \epsilon \omega \rho \eta \tau o i$, and composed $\epsilon \xi \xi$ ä $\lambda \lambda \omega \nu \kappa \alpha \grave{a}$ ä $\lambda \lambda \omega \nu$ (cf. $\pi \epsilon \rho \grave{\imath} \epsilon \dot{\jmath} \sigma \epsilon \beta$. p. 80 above), and that of a $\sigma \tau \epsilon \rho \epsilon \epsilon_{\nu} \iota o \nu$, such as a man, which remains ềv кaì тaùтò кav’ ápı $\theta \mu o ́ \nu$ : but we can hardly hope to recover the exact words. The word after ai $\sigma \theta \eta \tau o ̀ \nu$ may very likely have been $\chi$ póvov: the line would then mean "(elements) different at each perceptible time," i.e. after each finite interval of time.

In 1.31 sq., the sense seems to require something like $\tau \dot{\tau} \nu$
 propose to explain the paragraph as follows:-"because he who asserts the motion of the gods (sc. motion of translation, or in an orbit ?) destroys their very being. For the moving body must be one, and not many in its successive positions (i.e. must presserve its identity through its changes of position); and (accordingly) the living being (which resides in, or is identified with, the moving body) must be always the same, and not many like things." In other words, motion can be said to take place only when the same matter is found after a finite time in a fresh position. Hence, the moving body (and therefore

[^74]gravely points out in his Latin note, that would be particularly annoying to the pleasure-loving gods of Epicurus. This is hardly more than a fair sample of the sort of work published, apparently in all seriousness, by the Neapolitan restorer of the text.
the living being identified with it) must, from the nature of motion itself be a $\kappa a \tau^{\prime} \dot{a} \rho \iota \theta \mu \grave{\nu} \nu \sigma v ́ \gamma \kappa \rho \iota \sigma \iota s$, i.e. a body composed of matter permanently the same; whereas the gods are not such bodies, but are (in respect of their matter) ov̉ $\hat{\epsilon} \nu, \vec{a} \lambda \lambda \lambda^{\prime}{ }^{\prime \prime} \mu o \iota a$ $\pi o \lambda \lambda a$. Therefore a living being residing in a star cannot be a god.

But then, it occurs to the writer that he has overstated the sameness of matter in a moving body; and he proceeds in the next sentence to make the necessary limitations. "Not but that such a god (sc. the supposed star-god) does change, in the way I have mentioned, inasmuch as, though consisting of the same elements (at successive moments), he takes in turn the being of the different things suited to generate him, at the successive periods of time." I.e. the solid star or other body does from time to time lose same of its elements and take in some fresh ones, in the ordinary processes of nutrition and decay (cf. "aether sidera pascit," Lucr.); although, taken as a whole, it consists of the same matter from moment to moment. "For there is a certain definite course, or orbit, which the elements do not quit during the whole time (? $)^{1}$; but of the particular positions (occupied by the moving body) within this space, they (sc. the elements) naturally come to occupy in turn first one and then another; so that the wholes composed of these elements are easily conceived as moving."
I.e. while traversing a certain definite portion of its course (though not perhaps during its whole existence), the body continues to consist of the same matter; and so, the same matter occupies successively different positions. Accordingly, the body answers to the definition of a moving body.

The theory underlying the argument appears to be that a thing retains its identity, while either changing its position without change of matter, or changing its matter without change of position. But if both matter and position change together, no kind of permanent existence is left, and it could only be said that one thing has perished and another has come into being. Now the gods change continuously in respect of matter; there-

[^75]fore，they must remain unchanged in respect of position，and ＂he who attributes motion to them（as those do who make them travel with the heavenly bodies）destroys their very being．＂

The next section appears to discuss the question whether a god could be said to reside in or be supported by a solid body such as a star，even putting its motion out of account ${ }^{1}$ ．The first sentence may have run in some such way as this；－ov̉ס⿳亠口冋

 ov̉ठ＂＂̋$\lambda \omega s \mu_{\epsilon ́ \nu \epsilon \iota \nu . ~ " F o r ~ w e ~ d o ~ n o t ~ c o n c e i v e ~ a n y ~ d i f f i c u l t y ~ i n ~}^{\text {in }}$ that which is not a dense body forming a support to the gods，as long as they remain at rest；but then we must not regard them （sc．the supposed star－gods）as remaining at rest at all．＂I．e． there are two objections to the star－god theory：first，that the true gods cannot be in motion，and secondly，that they cannot reside in or on any dense（and materially permanent）body． Philodemus has already proved the first point，and now goes on to prove the second．

The next sentence is easier．＂We men，being solid bodies ourselves，could neither remain at rest nor move，unless we had some solid body to form a support for us（but we must not go on to suppose that the gods are supported by solids too $)^{2}$ ．＂

11．17－23：（For if one regards the gods and their habitations as not dense or materially permanent），nature would without difficulty admit of ${ }^{3}$ a composite being apprehended only by thought（ $=\lambda o ́ \gamma \varphi \theta$ $\theta \epsilon \omega \rho \eta \tau o ̀ \nu)$ ，and having a density apprehended only by thought（such as is the Epicurean god）：but if a man conceives the gods as mortal like himself，and dwelling in a

[^76]${ }^{3}$ Is it possible that $\beta \dot{a} \sigma c s$ ，and not $\phi \dot{v} \sigma s$ ，is the right reading？The （usually more trustworthy）Oxford fac－ simile gives $\phi \Delta \mathrm{Clc}$ ．We might then translate，＂there would be no difficulty in the substratum（sc．a $\beta a \dot{\sigma} \iota s \nu o \eta r \eta ̀$ ，or thought－apprehended base）support－ ing a thought－apprehended composite being，＂which would agree better with the context．
region of density, and has no idea of their true nature (?) (then they could not exist except as objects of sense?)

The last sentence can hardly be restored, but may have taken some such shape as this; $\epsilon i$ iè $\tau o v ̀(\varsigma ~ \theta \epsilon o v ̀ s ~ \phi) \theta a \rho \tau o(v ̀ s) ~$

 $\kappa \omega \lambda$ v́ovтal-.

Philod. $\pi \epsilon \rho \grave{\imath}$ 日 $\theta \epsilon \hat{\nu} \nu$ סıay. Nap. Col. xv. (The concluding paragraph.)

1. 2. 

$$
\text { -ímá } \rho \text { - }
$$


4. -тa८ тò̀ ä $\pi a \nu \tau a$ Х $\rho o ́ v o \nu ~ \pi a ́ \nu \tau \omega s " ~ к a i ̀ ~ \gamma \epsilon \gamma \epsilon ́ \nu \nu \eta-~$



8.
$\zeta \stackrel{\varphi}{-}^{-}$
= Ox. p. 23.
9. -a $\delta \grave{\eta} \pi a ́ \nu \tau a ~ \kappa a i ̀ ~ \tau a ̀ ~ \pi a \rho a \pi \lambda \eta ́ \sigma i ’ ~ a v ̀ \tau o i ̂ s, ~ o v ่ \delta \epsilon \tau \epsilon ́ \rho o v ~$
10. $\delta \dot{\eta} \pi о \nu \theta \epsilon \nu$ é $\chi є \tau a \iota ~ \tau \omega ิ \nu ~ \epsilon i \rho \eta \mu \in ́ \nu \omega \nu$.
11. 1-8 are given as above in Nap., except -ploss in 1. 6.

1. 5. Orig. confirms aùzo îs. The last two letters of $\gamma \in \nu \nu \eta$ $\sigma 0 Y$ are faint in Orig., and what is left of them might stand equally well, or perhaps better, for $\epsilon$.
l. 6 fin. Orig. gives aia $\theta \eta \tau \eta \rho \iota o \cap_{n}$.vy: i.e. ol followed by the top of a round letter twice over; then (after a blank of one letter), the upper part of a $X$. Thus enough is left to prove that the true reading is aioӨ $\begin{aligned} & \text { i }\end{aligned}$ -pıoy oủz.
1. 9 fin. Orig. apparently confirms Ox . in reading oúठeтéfov, and not, as Nap., ov̉סè $\gamma \dot{a} \rho$ ov̉.

The meaning of the passage depends on the question what is the subject of the verbs $\gamma \epsilon \gamma \epsilon \bar{\nu} \nu \eta \kappa \epsilon \nu$ and $\gamma \epsilon \nu \nu \eta \sigma 0 \gamma$. The Naples editor boldly changes $\gamma \epsilon \boldsymbol{\gamma} \epsilon \nu \nu \eta \kappa \epsilon \nu$ into $\gamma \epsilon \gamma \epsilon \nu \nu \eta^{\prime} \kappa a \sigma \iota \nu$, and $\gamma \in \nu \nu \eta \sigma_{0 \gamma}$ into $\gamma \in \nu \nu \eta \dot{\eta} \sigma o v \sigma \iota$, and translates (aspirating av́тoîs), "suppeditaverunt sibi et suppeditabunt quae commoda sunt." But this violent alteration of the text by no means gets rid of the difficulty; for $\gamma \epsilon \nu \nu a ̂ \nu$ means, not suppeditare, but generare;
and it is well known that the Epicurean gods generate nothing. The only way of making sense without unjustifiably altering the text appears to be to take $\pi a ́ \nu \tau a$ as the subj. and $\tau a ̀ \pi \rho o ́ \sigma \phi o \rho a$ as the obj of the verbs, and to translate (reading $\gamma \epsilon \nu \nu \eta \eta_{\epsilon}$, which the Orig. rather confirms,) "All things have ever generated and will ever generate for them what is appropriate to them, [sc. those " ${ }^{\prime} \mu \boldsymbol{\sigma} \boldsymbol{a}$ ei $i \delta \omega \lambda a$ by the confluence of which the divine being is constituted,] (in a form) comprehensible by thought, but not subject to the organs of sense, as these organs exist in animals ${ }^{1}$." That is, images such as are needed to constitute the gods are perpetually given off by objects throughout the worlds; and consequently, there is nothing impossible in the immortality of the gods so constituted.

Philod. $\pi \epsilon \rho \grave{\text { il }}$ Өavátov, pap. no. 10รั0. Voll. Herc. (Nap.) i. tom. $\mathrm{Ix} .=\mathrm{Ox}$. tom. Iv. Nap. col. $1=\mathrm{Ox}$. p. 22.

1. $\nu \hat{\nu} \nu(\delta$ è $\sigma) \circ \phi \hat{̣ ̂} \gamma \in \nu \circ \mu \in ́ \nu \varphi \kappa \kappa a \grave{~} \pi \sigma \sigma(o ̀) \nu$








1.1. Ox. nyn... $\cap$ ф $\omega$ Irenc: Nap. nin..... . wiren.
2. Ox. піzнс: Nap. ..zнс. Ib. fin. Ox. aıa: Nap. a. a.
3. Ox. alle. \hft: Nap. a... \hit.
4. fin. Ox. псрєו: Nap. $\pi$. pel.
5. Ox. $\epsilon \omega c:$ Nap. $\epsilon \omega$.
> ${ }^{1}$ It is not easy to guess the purport of the missing line. It may perhaps have been something like this:-("But the question whether they use their bodily members like) all animals and similar beings, does not belong to either of the subjects $I$ have here treated." (The writer has just been
saying that there are some questions about the gods which it is better not to ask.) I formerly thought of reading aürov̀s for aủtoîs, and taking $\tau \grave{\alpha} \pi \rho b \sigma$ форa $\pi$ ávza as subj.:-"All things appropriate to their nature generate them;" but the letter in the Orig. is clearly $I$, and not $Y$.

## 6. Ox. єІнा ... zєin : Nap. єוнp... zein : Orig. ${ }^{1}$ is said to confirm Nap.

7. Ox. (and Orig.) ta. the : Nap. taythc.

The general meaning is clear enough. The writer is shewing that, for man, greater length of life does not mean greater happiness. The only doubt is as to the sense of the middle sentence. The words $\epsilon i \varsigma$ ät $\epsilon \iota \rho o \nu$ suggest a contrast between the eternal happiness of the gods and the temporal happiness attainable by man; and this, I believe, gives the key to the passage. The form in which this contrast would present itself to an Epicurean may be gathered from other passages ${ }^{3}$. Perfect happiness, to Epicurus, means complete freedom from pain ${ }^{4}$; and pain may be either the sense of evil in the present, or the apprehension of evil in the future. Now man, as well as god, may (by acquiring wisdom) attain to a complete exemption from present evil ; but the intensity of the god's happiness at each moment is immeasurably increased by the certain assurance that it will continue for ever,-that is, by the complete absence of apprehension for the future ${ }^{5}$. Now man can never have this assurance; and therefore, when he has once reached the maximum of happiness attainable without it, in the extinction of present pain or desire, he has got all that nature has to give, and has no reason to wish for a longer life ${ }^{6}$.


#### Abstract

${ }_{1}$ Recently examined, through the kindness of Professor Comparetti. I have not seen it myself. ${ }^{2}$ The Naples commentator's interpretation is worth quoting, as a specimen of the lengths to which bad scholarship can go. mopeia, according to him, stands for mopia, and mopla for єúropla, wealth. He then puts a note of interrogation after oikeîov $\ell \in \sigma \tau \nu$; takes the mutilated verb before olкeiov to be $\dot{\rho} \iota \tau \dot{\alpha} \zeta \epsilon \iota \nu$, and translates,-"cum autem comparatae sint divitiae $[=\pi 0-$ pelas $\gamma \iota \nu 0 \mu$ év $\eta s$, ] conditioni et ideis(!) cujusque pares, [=катд т $\boldsymbol{\eta} \nu$ l $\sigma \delta \tau \eta \tau a$ aủтov̂ кal $\tau \grave{\eta} \nu \dot{\delta} \mu \circ \epsilon i \delta \epsilon \iota \alpha \nu$,] quousque in infinitum, si fieri possit, projicere


patrimonium [=oiкêov? ? licet?" And it was for the sake of commentaries such as this that the publication of the facsimiles was delayed for half a cen. tury!


 $\tau \grave{\eta} \nu \dot{\alpha} \nu \theta \rho \omega \pi<\nu \eta \nu, \epsilon \in \chi \circ \nu \sigma a \nu \pi \rho \circ \sigma \theta \dot{\eta} \kappa \eta \nu$ каі $\dot{\alpha} \phi a l \rho \in \sigma \iota \nu \dot{\eta} \delta o \nu \omega ิ \nu$.
${ }^{4}$ D. L. x. 139 and 128.
${ }^{5}$ Cic. N. D. 1. 51 : "(Deus) habet exploratum fore se semper cum in maximis, tum in aeternis voluptatibus."
${ }^{6}$ D. L. x. $145(\kappa v \rho . \delta \circ \xi .20): \dot{\delta}$ ä $\pi \epsilon \iota \rho \circ s$


The first sentence of the present passage is to the same effect. "(If we were gods, it might be different;) but as it is, when a man has once become wise (i.e. learnt the secret of happiness) and has lived on for a certain time, he has got the greatest good (attainable by him)."

Of the second sentence, I can offer no translation that is altogether satisfactory; but there are some indications of its drift. катà - - т $̀ \boldsymbol{\nu} \dot{\delta} \mu \sigma \epsilon i \delta \epsilon \iota a \nu$ refers us to D. L. x. 139, and the $\kappa а \tau a ̀ ~ o ́ \mu о \epsilon i \delta \epsilon \iota a \nu ~ v i \pi o ́ \sigma \tau a \sigma \iota s ~ o f ~ t h e ~ g o d s . ~ A n d ~ i n ~ t h i s ~ c o n n e c-~$ tion, тореia, the substantive of торєv́oнat, and the natural Greek equivalent of transitio, suggests the transitio visionum of
 If this is right, we have here a description of that peculiarity in the nature of the gods, which secures them from destruction and decay to all eternity, and thereby makes the higher happiness possible to them. But iбóт $\quad$ тa, as it stands, seems inexplicable. Perhaps (without professing to restore the actual words) we may get something like the true sense by reading iठıót $\eta \tau a$ for iбóт $\eta \tau a^{1}$, and filling the lacuna by tayta̧ধ $\epsilon \nu^{2}$, "to go on in the same way." The sentence would then read thus:"but while the flux of matter answering to his (sc. the god's) peculiar nature, and to his (merely) formal identity, goes on, it is proper to his nature to continue in the same state ( sc . a state of unchanging happiness) to all eternity, should it prove possible ${ }^{8}$." Such a sentence would of course be intelligible only on the assumption (which seems a reasonable one) that the words ó $\mu \boldsymbol{\sigma} \boldsymbol{i} \delta \epsilon \iota a$ and $\pi$ торєía are in this connection recognised terms of

 944-9, (Natura loq.,) "Nam tibi praeterea quod machiner inveniamque, quod placeat, nil est: eadem sunt omnia semper. ...eadem tamen omnia restant, omnia si perges vincendo vincere saecla, atque etiam potius, si nunquam sis moriturus."
${ }^{1}$ i.e. $\Delta$ for $c$. The grain of the papyrus is so easily mistaken for an $I$, that the presence or absence of 1 in
the copies counts for little.
${ }^{2}$ There is good authority for the word in the form $\tau \epsilon v \tau \alpha \xi \epsilon \nu$, which implies the other. tavtáset agrees exactly with the indications of Ox., the earliest transcript, though the later ones give $\rho$ as the first letter. The number of verbs in -jeav that will fit the lacuna is limited, and I can find no other that would make any sort of sense.
${ }^{3}$ єl ouvatд̀ єlं $\eta$ needs explanation.
the Epicurean philosophy, defined elsewhere, and supposed here to be understood by the reader without further explanation.

The next sentence is perfectly straightforward. The lacuna must be filled with some verb in the subjunctive,-e.g. $\pi a-$ $\rho a \gamma(\epsilon i \mathbb{N})$ нтdı, $\tau \hat{\eta} s$-: and we must translate as follows :- "but if it so befall (i.e. if misfortune or death comes), we are not deprived of the happiness (viz. that which is already past) but merely prevented ${ }^{1}$ from partaking of it any longer." J.e. the happiness which we have already enjoyed is our own, and cannot be taken from us, whatever may befall us in the future.

## W. SCOTT.

[^77]
## THE MERTON CODEX OF CICERO'S DE NATURA DEORUM.

As I have had occasion to spend a good deal of time upon this Codex, which was kindly lent to me by the authorities of Merton College with a view to my edition of the De Natura Deorum, I think it may be useful that I should put on record what I have learnt as to its history and character.

We are told in the fly-leaf that it was given to the Merton Library by William Reade, a Fellow of the College, who was Bishop of Chichester from 1368 to 1385 . He purchased it from Thomas Trilleck, who was Bishop of Rochester between the years 1364 and 1372. It is curious that the British Museum contains a ms volume of Latin Sermons (Royal mss 10 A xi) similarly purchased from Trilleck by Reade, and presented by him to the College 'de Sancta Trinitate,' founded by Richard Earl of Arundel at Chichester. Both volumes have Bp Reade's library mark, and the fly-leaf in both shows the same handwriting, probably Reade's own.

The Merton Codex, which I have denoted as Oxf. in the new volume of my edition, is a neatly written parchment volume consisting of 134 leaves or 268 pages. There are two columns in the page, each column containing 37 lines, and each line containing on the average 8 words. The words and sentences are divided. Abbreviations are frequent. It contains the three books of the De Officiis in 68 pages, two pages of Epitaphia Ciceronis edita olim a duodecim sapientibus, the three books of the De Natura Deorum in 64 pages, the 1st book of the De Divinatione (here called the 4th De Natura Deorum) as far as § 106 duros ulta labores in 21 pages, and the first four

Philippics as far as Iv § 15 quem habebat amisit. The 3rd Philippic is made to end at III 27 victurum neminem, the latter half (from § 28 hodierno die to censuerint) appearing as the 4th, and our 4 th as the 5 th. This completes the original codex ending at p. 200. The last 68 pages, which are occupied with Palladius De Re Rustica in 13 books, are written in a different hand belonging to the 13th century.

Mr E. M. Thompson of the British Museum has kindly examined the volume for me and informs me that the original Codex was written in England towards the end of the 12th century. As there are only three MSS which are definitely stated to be of an earlier date, viz. the Vienna Codex V of the 10th century, the imperfect Harleian $\mathbf{K}^{*}$, and the Leyden Vossianus A of the 11th, to which we may perhaps add the Palatine ( P ), called perantiquus in Baiter's ed., it is evidently deserving of a full collation. The only other mss which can rival it in age are two others in the Leyden collection, Orelli's B and C (Baiter's H) both of the 12th century, and two French mss which seem never to bave been collated, one in the National Library at Paris no. 15085, said to be written at the end of the 12th century, and one in the Library at Tours no. 688, said to belong to the same century. I mention these last in the hopes that I may be able to learn further partieulars about them from some reader of the Journal, and also that I may perhaps hear of other mss of equal antiquity which have escaped my notice. Halm in his preface to the Orellian edition of the philosophical treatises of Cicero mentions a codex of the 11th century contained in the Munich Library (MS 528), but I am informed by Mr Reid that he can learn nothing further about this from the present Librarian.

Notwithstanding his neat writing, the scribe is undoubtedly very careless (1) in the division of words and sentences, (2) in mistaking uncommon for familiar words, (3) in repeating words or clauses, (4) in omissions arising from the recurrence of similar words or syllables. As examples of (1) I may cite quid jus for quidvis I 39, in situ for nisi tu 1 57, video for in deo I 67, feres

[^78]for se res III 66, hoc diceretur pius esse for hoc diceret turpius esse I 70, invidia for in India III 42, quid doceam for quid Oceani III 24, tam utiles for tutelae III 74. Examples of (2) are carnales for Carneades III 29, triformis for Trophonius III 49, celsos for caesios I 83, teximus eo ede for Thelxinoe Aoede III 54, et amet for Aeetam et III 55. Examples of (3) are III 17 where instead of plurima a te Balbe dicta sunt we read plurima cum pulchritudine mundi B. d. s., the words cum-mundi being taken from a few lines below, where they followed pulchra, which the copyist probably confounded for the moment with plurima, and never corrected his mistake, if indeed he ever became aware of it. In the same way in III 33 , instead of nullum igitur animal aeternum est, we read n. i. a. appetit quaedam aeternum est, without any attempt at sense, the words appetit quaedam being inserted from below, where they followed another animal; but the copyist writes on, apparently quite unconscious of his mistake. So in III 34, instead of quin id intereat, etenim ea ipsa, the copyist looking back a few lines sees another intereat followed by necesse est, and accordingly writes necesse est for etenim here: in III 71 (inita subductaque ratione nefaria scelera meditantes), the copyist on coming to ratione allows his eye to stray to another ratione some lines below and goes on there qui in amore summo summaque inopia, returning then to nefaria.

The last kind of carelessness specified was the omission of clauses owing to the recurrence of similar words or syllables. The following may be quoted as examples.

II 21 after non utitur om. nihil autem-utitur. after esse mundum om. similiter-esse mundum.
32 after pluris esse om. necesse est-pluris esse.
36 after non sit deterior om. mundi-homine deterior.
43 after praestantem intellegentiam om. in sideribus-intellegentiam.

46 after nihil sit melius om. mundo-id sit melius.
47 after absit extremum quantum, om. idem a summo-eruditum.

64 after vacare voluerunt om. ea parte-voluerunt.
III 9 after facerem in om. causis-facerem in, which is however superscribed in the same hand.

18 after esset aliquid om. in rerum-esse aliquid.
29 after omne animul om. tale est-omne animal.
35 after corpora intereant om. non-cum intereant.
79 after valere sic om. non-nemo sit.
90 after penis om. luendis-poetis.
I 70 after alterum utrum om. esse verum-concessit before esset.

So in I 95 we read nisi nunquamne vidisti, instead of nisi numquam vidi solem aut mundum beatum. Quid! mundum praeter hunc umquamne vidisti?

In the great majority of the above quotations, if not in all, and in many similar cases the Merton Codex stands alone. While they show the carelessness of the copyist, they also show that he does not go wrong of malice prepense, like the writer of the Cambridge Codex, with the idea of improving on his original. He does not try to make sense, and therefore his blunders are all of a mechanical nature. If we set aside these idiosyncrasies, the question arises, with which of the other MsS is this most closely connected. I think the instances given below, which might be multiplied to any extent, show conclusively that it is very nearly allied to the oldest known codex, Orelli's V, written in the 10th century, and to the Harleian Codex 5114 $\mathbf{M}$, written in the latter half of the 15 th century. To the same group belong the Roman and Venetian editions of 1471. The relation in which it stands to Orelli's V is curious. Where there is a second reading in V , this is usually followed in the Merton Codex (Oxf.), but not by any means universally, not in general where it is specified that the correction or marginal reading in V is written secunda manu, as in II 69 , where $\mathrm{V}^{2}$ has the correct deflagravisse, while Oxf. agrees with $\mathrm{V}^{1}$ in the reading deam migravisse. Sometimes an older reading is preserved in Oxf., which has been corrected in V, thus in II 18 Oxf. has appareat and ne cogitari, where V has by correction apparet and nec cogitari ; in II 56 V has ementita by correction, while Oxf. with MCR retains, what was probably the original reading of V , ea mentita. Sometimes both readings are combined, as in II 27 where $V^{1}$ has eis fervescunt, $\mathrm{V}^{2}$ effervescunt, Oxf. eis effervescunt; II 127 where $V^{1}$ has cursu, $V^{2}$ morsu, Oxf. incursu morsu. Some-

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17-2
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times we observe a general resemblance combined with slight and probably accidental variation, as in II 123 where $\mathrm{AB}^{1} \mathrm{~V}^{1}$ have data elephantos (doubtless representing an original elephantost), corrected to d. elephanto in $\mathrm{B}^{2}$, to d. elephantis in $\mathrm{PV}^{2} \mathbf{H M R}$, and to d. elephanti in Oxf.; in II 146, where ABEP read et parte tangendi, V by corr. et arte tangendi, and Oxf. arte et tangendi; in II 42 , where BC rightly give $i d$ et, and $\mathrm{A}^{1} \mathrm{PV}^{1}$ id est, $\mathrm{V}^{2}$ has id est que, E idem, and Oxf. MRCV idemque. The conclusion to which these things point, seems to be that Oxf. was copied from V at a time when some, but not all the corrections, which are now found there, had been made. One would like to know whether Orelli's 'secunda manus' always denotes the same handwriting and, if so, what is its date. At the same time there are occasional difficulties in the way of this hypothesis: for twenty cases, say, in which Oxf. agrees with V against the rest of Orelli's MSS, we find one, it may be, in which Oxf. approaches more nearly to some of them than to V. Thus in II 86, where Baiter reads ecferant, AC have et ferant, B haec ferant, E hec ferant, V eo ferant, while Oxf. and M have nec ferant. Perhaps here the true reading of $V$ may have been $e c$, misread $e o$ by the collator, and then ec may have been changed to the more familiar nec by Oxf. In II 73 V has locus, the other mSS locus est, Oxf. locutus est; in II 64 BCV bave caelestem, Oxf. BM caelestium, AECR caelestum; in II 50 V with HMR has tum australis, while Oxf. has aut austr. with ABCEPB.

As $V$ wants the whole of Book I, my examples are necessarily confined to the 2 nd and 3rd books.

II 27 subditis $\mathrm{V}^{2}$ Oxf. M Asc., subitis ABCEPVㅂB.
29 in quoque genere $\mathrm{A}^{2} \mathrm{~B}$ Asc., quoquo CB, quo $\mathrm{A}^{1} \mathrm{PV}$ Oxf.
31 cum homines $A^{2} \mathrm{~B}^{2} V$ Oxf. Asc. HLMO, quin h. CEPB.
33 prima ABEV Oxf. BMV Asc., primo CPHLO.
34 in ulla $\mathrm{V}^{2}$ Oxf. LM, in nulla mss generally, in illa $\mathbf{V}$ Asc.

38 id quod ACEGBH, quod BPV Oxf. M.
in equo quam in eculeo $\mathrm{V}^{2}$ (sec. m.) and mss generally, nequaquam in eculeo $\mathrm{V}^{1}$, nequaquam (contracted) in eque Oxf. id in perfecto CPBM Oxf. corr. fr. is AV, is in p. BE.
41 omnium $\mathrm{V}^{2}$ (sec. m.) and mss generally, om. Oxf. $\mathrm{V}^{1}$.

45 restat mss generally, sane (repeated from sanae above) restat V Oxf. MCV.

47 extremum quantum $\mathrm{V}^{2}$ Oxf. Red. Asc., extremum mss generally.

48 potest indoctius $\mathrm{ACEPV}^{1} \mathbf{B H}$, potest esse indoctius $\mathrm{BV}^{\mathbf{2}}$ Oxf. Asc. Limo.

49 quot $\mathrm{CEPV}^{2} \mathbf{G H}$ Oxf., quod $\mathrm{AB}^{1} \mathrm{~V}^{1} \mathbf{B O}$, quid $\mathrm{B}^{2} \mathbf{M}$.
conficiat B by corr., confeciat A by corr., confectat CEPBL, confecta V Oxf. MRV.

51 Saturni by corr. BV also Oxf. HM, Saturnis A, Saturnia CEB.

56 versantur CBH, versatur ABEPV Oxf. MC.
59 modum AEV Oxf., mundum $\mathrm{B}^{1} \mathbf{C B}$.
venis et Oxf. $\mathrm{B}^{2} \mathrm{~V}^{2} \mathbf{M O}$, venisset $\mathrm{B}^{1} \mathbf{B}$, venis sed CAE, venis nec $\mathrm{V}^{1}$.

61 ea ipsa B, ea ipsa vis $\mathrm{ACEV}^{2}$ Oxf. Mus.*, ea ipsa vi $\mathrm{V}^{1}$. vides-vides $\mathrm{V}^{2}$ Oxf. MO, vides-vide $\mathrm{AV}^{1} \mathrm{~B}$, vide-vide CEB.
62 Semela V Oxf., semele $\mathrm{A}^{2} \mathrm{BCE}$, semel $\mathrm{A}^{1}$. mysteriis ABCEBO, ministeriis V Oxf., LMR.
65 planius quam BO , planius quem $\mathrm{AV}^{1}$ Oxf., planiusque EV'BLMRV, pleniusque C.

66 alteri $\mathrm{A}^{2}$, alterum $\mathrm{A}^{1} \mathrm{BCEV}^{1} \mathbf{B}$, altero $\mathrm{PV}^{2} \mathrm{Oxf}^{2}$ HM + .
69 deflagravisse $\mathrm{CEPV}^{2}$ (sec. m.) BH, deagravisse A, demigravisse B by corr., deum migravisse $\mathrm{V}^{1}$ Oxf.
abfuisset $\mathrm{A}^{2} \mathrm{~V}^{2}$, afuisse $\mathrm{A}^{1} \mathrm{BC}^{1} \mathrm{~V}^{1}$, affuisse E, adfuisset Oxf.
70 ut cum gigantibus ABEV ${ }^{1}$ Oxf. M, id est gigantibus $\mathrm{V}^{2}$ (sec. m.).

71 quos deos $\mathrm{ABCEV}^{1}$, hos deos $\mathrm{V}^{2}$ Oxf.
76 sit necesse est melius $\mathrm{ABCV}^{1}$ Oxf., sit necesse est esse melius $\mathrm{V}^{\text {a }}$.

80 nihil autem $\mathrm{ABCEV}^{1}$, nihil autem est $\mathrm{V}^{2} \mathbf{M}+$, nihil autem esse Oxf. CR.

83 quacumque movemur BV Oxf. $\mathbf{M}$, qua movemur $\mathrm{ACE}+$.
100 saxa nativis CEV Oxf. M, saxasanativis $\mathrm{AB}^{1}$, saxosanativis $\mathrm{B}^{2}$.

101 spiritu BV $^{2}$ Oxf. M, spiritus ACEV ${ }^{1}$.

[^79]111 Andromeda aufugiens V Oxf. by corr. in A and B, Andromeda haud fugiens CP, Andromeda haut fugiens E.

114 infernis e BCP, inferni se $\mathrm{V}^{1} \mathbf{M}$, inferni de $\mathrm{V}^{2}$ Oxf., infernis de $\mathbf{E}$.

122 ea est BCE, eas et APV Oxf. M.
humilitas BCEV ${ }^{1}$ Oxf., humilatas AP, humiliatas $\mathrm{V}^{2}$.
123 alii generis bestiis P , aliis generis escis $\mathrm{ABC}^{1}$, aliis gen. estis $\mathrm{V}^{1}$, alius generis escis $\mathrm{V}^{2}$ Oxf.

126 purgantes $\mathbf{O}$, purgante $\mathrm{ABCV}^{1}$, purgatione P , purgare $V^{2}$ Oxf. M, purgantur E.

127 morsu $\mathrm{PV}^{2} \mathbf{M}$, cursu $\mathrm{ABCEV}^{1}+$, incursu morsu Oxf.
129 aiunt Oxf. V by corr., alunt ABCEPV.
excuderunt ABCPV, excuderint $\mathrm{EV}^{2}$, excluserint $V$ marg. Oxf.
131 varia et tam $\mathrm{V}^{2}$ Oxf. Asc., variae tam $\mathrm{AV}^{1}$, varie tam B, varia tam CEP.

134 constrictis V Oxf. MCR, constructis ABCEP.
136 ducant ABC, adducant PV Oxf. M, abducant E.
138 contagione ABCEP + , coagitatione V Oxf. M.
143 coniventibus PV Oxf. M, conluentibus ABCEBH, confluentilus LNO.

150 ad tibiarum $\mathrm{ABCEV}^{1}$, ac tibiarum $\mathrm{PV}^{2}$ Oxf. M.
admotione $\mathrm{B}^{2} \mathrm{CPV}^{2}$ Oxf., ad motionem $\mathrm{AEV}^{1}$, admonitione $\mathrm{B}^{1}$.
151 consectione $\mathrm{V}^{2}$ Oxf. $\mathbf{M}$, confectione B , confectionem ACEPV $^{1}$.

153 accipit ad cognitionem $\mathrm{A}^{1} \mathrm{BCEPV}^{1}$, acc. ab iis cogn. $\mathrm{V}^{2}$, $a c c . a b$ his cogn. Oxf. MRV.

162 providentia (by corr. fr. prudentia) V Oxf. M, prudentia ABCEP + .

167 prosperae semper $\mathrm{ACP}+$, prospere semper $\mathrm{BEV}^{1}$, prospere eveniunt semper $\mathrm{V}^{2}$ Oxf. RV.

168 vobis $\mathrm{ABCEPV}^{2}$, quovis $\mathrm{V}^{1}$ Oxf.
III 8 posses Oxf. ${ }^{2}$, possis ABCEPV ${ }^{1}$.
9 coniveres edd., contuereris $\mathrm{EV}^{2}$ Oxf. HMRV, contueres $\mathrm{ABCPV}^{1}$.

11 praesentis ABCE , praesertis V Oxf., praesentes V marg. credis esse V Oxf., credidisese A, credidisses B, credidisse CP, credisse E.

13 rationes $\mathrm{ACEV}^{1} \mathbf{B}$, rationes requiro $\mathrm{BV}^{2}$ Oxf.

14 commemorabas $\mathrm{BPV}^{2}$ Oxf., commorabas ACEV ${ }^{1} \mathbf{B}$.
20 velles $\mathrm{BPV}^{2}$ Oxf., velis $\mathrm{ACEV}^{1} \mathbf{B H}$.
21 quid dicismelius $\mathrm{ABCEPV}^{2}$ (sec. m.), om. Oxf. $V^{1}$ MINCRV.
23 erit mundus V marg. (ead. m.) Oxf. MNCRV, om. ABCEPV.

24 habent ABCEP, om. $\mathrm{V}^{1}$, habent vel servant V marg. (sec. m.) Oxf. MCV.

28 quasi consensus Oxf. and MSS generally (quidam superscr. sec. m. V), quasi quidam cons. H.

29 ferundam edd., fruendam $\mathrm{A}^{1} \mathrm{BCEPV}^{1} \mathbf{B L}$, ferendam $\mathrm{A}^{2} \mathrm{~V}^{2}$ Oxf. MCRV.

35 diceret intellegi $0 x f . V^{2}$, diceret quod intellegi $\mathrm{ABCEPV}^{1} \mathbf{B}$.
omnem vim ABCEPV marg., omnium V by corr. Oxf., omnia unum MCR.

38 nos ABCEP, non V Oxf. HMNR.
nilil est nec esse ABCEP, nihil esse nec esse V , nihil esse necesse Oxf.

41 sermonis ABCEP, sermones $\mathrm{V}^{1}$, sermone $\mathrm{V}^{2}$ Oxf. MCV. reddes $\mathrm{ABCEPV}^{1}$ BHL, redde $\mathrm{V}^{2}$ Uxf. M + .
44 aiebat (2nd) $\mathrm{ABCEPV}^{2}$, agebat $\mathrm{V}^{1}$ Oxf. BM.
morbus edd., modus ABCEPV ${ }^{1} \mathbf{B H L}$, motus $\mathrm{V}^{2}$ Oxf. M, metus $\mathbf{N C R}$.

45 Rhesus BEP, Hesus ACV ${ }^{1}$ B, Theseus $\mathrm{V}^{2}$ Oxf. MNCRV.
48 duces $\mathrm{A}^{1}$, dices B , ducis $\mathrm{CEV}^{1} \mathbf{B}$, dicis $\mathrm{A}^{2} \mathrm{PV}^{2}$ Oxf. $\mathbf{M}+$.
49 Erechtheus CP, erectheus AB, eritheus E, eratheus V Oxf. $\mathbf{M}^{2}$, aratheus $\mathbf{M}^{1}$.

60 aliaque edd., atque V Oxf. MRCV, et $\mathrm{B}^{2}$, om. $\mathrm{AB}^{1} \mathrm{CEP}$.
79 conficit cur ABEP, conficit ut CB , conficitur $\mathrm{V}^{1}$, conficit utrum $\mathrm{V}^{2}$ Oxf.
J. B. MAYOR.

## ON THE TRUCULENTUS.

Cicero (de Senect. xiv) speaking of the occupations of old men mentions the Truculentus with the Pseudulus as the works of Plautus' old age, Quam Truculento Plautus (gaudebat), quam Pseudulo! Of the two plays thus associated most readers will probably prefer the former; to the philologist at any rate it is more attractive from the excessive corruption of the text, and the real advance which has been made in clearing up at least some of its difficulties by the two editions which have appeared within the last fifteen years, Spengel's (1868) and F. Schöll's in the continuation of Ritschl's Plautus (1881).

Dziatzko (Neue Iahrb. for 1883, p. 63) has signalized the merits of Schöll's edition ; and it is impossible not to be grateful for the uniform care with which he has done his work and for the many ingenious and often highly plausible conjectures which he has introduced of his own. But there is one change which I fancy all students of Plautus will concur in regretting. The Apparatus Criticus no longer, as in the plays edited by Ritschl, cites the readings of B at full length, line after line: and the eye no less than the mind of the reader who wishes to arrive at the Plautine text as transmitted by the MSS is perplexed by a confused medley of readings and conjectures which prevents any given scene from presenting its proper clearness as a whole. So full from first to last is the Truculentus of difficulties that it would be well worth an editor's while to give the text of B in extenso opposite the text as reconstituted by modern criticism ; the saving of eye-labour would be immense, and the work would have a permanent value independent of the goodness or badness of the actual result any supposed editor
might achieve. It is of course only in the most corrupt works that such a plan could be recommended: but of these is the play before us. The following remarks have accumulated since 1873, 4 when I first read the Truculentus in Spengel's edition.

## I. 1. 7, 8

Quot illic blanditiae, quot illic iracundiae
Sunt quot sui perclamanda. di uostram fidem hui.
None of the conjectures proposed seems plansible : perhaps Plautus wrote Sunt, quot super exanclanda. Placidus exanclare exhaurire, quoting Stich. I, 3, 115.
I. 1. 29 Sin increbrauit, ipsus gaudet, res perit.

I believe increbrauit (noctes) to be right. Gloss. Philox. increbo (1. increbro) ধ̇ $\pi \iota \sigma v \chi \nu a ́ \zeta \omega$.
I. 1. 33, 34

Aut empta ancilla aut aliquod uasum argenteum Aut uasum ahenum aliquod aut electus laptiles.
The second of these vv . has been altered in many ways, for which see Schöll. I cannot but believe Lipsius to have been right in considering laptiles to be substantially correct, ' Laptilis pura puta Plauti scriptura est, ualetque dapsilis'. Antiq. Lect. I. 15. (Cf. Corssen Ausspr. J. p. 224.) If this was so, electus may be elenchus, a pendant or earring, and the line may possibly have been

Aut uasum ahenum aut aliqui elenchus laptilis.

## I. 1. 47

Nam nusquam alibi si sunt, circum argentarias
Scorti lenones quasi sedent cotidie,
Ea nimiast ratio.
Read Scortis lenones qui assident cotidie: immediately after for Eri of MSS I conjecture Etiam. Nearly the same corruption has taken place in II. 6. 28 where Astaphium in reply to Stratophanes' question whether the child of which he believes himself the father has yet grown to any size answers

Ere nudius quintus natus quidem ille est,
i.e. as I would read it.

Etiam. Nudius quintus natus ille quidem est.

## I. 1. 71

Eum isti suppositum puerum opus [erat] pessumae.
So I would complete the verse. That the construction opus erat puerum suppositum (esse) is possible I should have believed even without Non. 482. But in Asin. II. 2. 93 Iam hoc opus est exasciato the reading of the MSS exasciatum can hardly be right.
I. 2. 79

The Ambrosian palimpsest gives

## AMANŢISICUIṄQUODDABONONEST

for Amantis si quit non danunt of B. I conceive this to be the better reading of the two: and would write the whole verse thus

Amanti non est 'quod dabo'. Non didici fabulari.
'Has a lover not the needful? I don't understand palavering'. Cf. Pers. I. 1. 6 Nec quicquam nisi 'non est' sciunt mihi respondere quos rogo.

## II. 2. 20

Pignus da ni L . . Neae hae sunt quas habes uictorias, so A; the lost letters are doubtful. The word appears in the other MSS as lauinie or lauime. Perhaps the word was lamneae or lamineae 'of mere foil', a word which though not in the lexicons is unexceptionable in form. Or is it possible that Plautus uses lamina in its other sense of 'ear-lobe'? Gloss. Philox. Lamna $\lambda$ oßòs $\omega$ 'íov. Arnobius speaks of boring laminas aurium to receive earrings. We might then read laminae as a dative, the small figures of Victory being intended for suspension on the ear-lobe.
II. 2. 51
nunquam edepol mihi
Quisquam homo mortalis posthac duarum rerum creduit.

Schöll very ingeniously alters this to duarum nucerum; but I think this is unnecessary, as the opposite is omnium rerum credere, and the one expression would suggest by contrast the other. Asin. II. 4. 53 quoii omnium rerum ipsus semper credit.

## II, 2. 62

Verum ego illum, quamquam uiolentust, spero inmutari pote
Blandimentis hortamentis ceteris meretriciis.
Vidi equidem †exinem intu domito $\dagger$ fieri atque alias beluas.
The obelized words are changed by Schöll to elephantum Indum domitum, which is rather remote from the actual letters of the mss. Following in his traces I venture to propose exetram Indum (=Indorum) domitam, and understand an allusion to the monstrous worm ( $\sigma \kappa \omega \dot{ } \lambda \eta \xi$ ) of the river Indus, of which Aelian gives a fabulous account N. H. v. 3, derived as he says from Ctesias. The Romans used excetra widely, not only of the bydra, but of any serpent of an unusually formidable or hideous kind. I believe that this word is concealed in a well-known passage of Lucretius, Iv. 638, where the MSS give Est itaque ut serpens hominum quae tacta saliuis Disperit ac sese mandendo conficit ipsa ${ }^{1}$, where I would read Excetra ut est serpens. It is extraordinary in what strange shapes this word appears in mss. Gloss. Mai (Class. Auct. vi. 523) Estidram quam ueteres canapum nominarunt. Gloss. Bodl. Auct. T. II. 24 (viiith century) Excreante plena malitia. hoc est ira quam ueteres canopum nominaraent. In these glosses excetram for estidram and hydra for ira have already been corrected by Löwe Prodrom. p. 403. But what is Canopum or Canapum?

[^80]hardly be excetram te, as in the extant plays of Plautus the vocative alone excetra tu seems to occur. The etymology given by Isidorus xir. § 23 from excrescere is of course equally impossible. Excetra is no doubt a corruption of some dialectical variation of ê $\chi\llcorner\delta \nu \alpha$.

I think it is Campum, a rarely-found latinization of ка́ $\mu \pi \sigma$ or $\kappa \alpha ́ \mu \pi \eta$. The Greek ка́ $\mu \pi о$ s is neuter, but there would be nothing unusual in the Romans assimilating the gender of the word, when transferring it to their own language, to the masc. hippocampus, iтто́кантоs. That excetra might fairly represent $\kappa \dot{\alpha} \mu \pi \eta$ campus follows from Diod. iII. 72, who speaks of
 $\pi \eta \nu$, in the Libyan desert, no doubt a serpent of the kind mentioned by Silius Italicus (vi. 140 sqq.) as delaying the march of the Romans under Regulus by the river Bagrada, the skin of which, 120 feet long, was sent to Rome as a curiosity (Val. Max. I. 8. 19). Similar is Nonnus' description of a prodigious $\kappa a ́ \mu \pi \eta$ or serpent, Dionys. 18. 237.

As I am speaking of glossaries, I will mention a curious illustration of Most. I. 3.93 sqq. Philematium has asked for her mirror in order to dress herself for her lover Philolaches. Scapha the waiting-maid replies

Mulier quae se suamque aetatem spernit, speculo ei usus est. Quid opust speculo tibi, quom tute speculo's speculum maxumum?
upon which Philolaches breaks in
Ob istuc uerbum ne nequiquam, Scapha, tam lepide dixeris, Dabo aliquid hodie peculi-tibi, Philematium mea.

The pun on speculum peculi seems very tame. But it would appear from the following gloss in Phillipps Glossary 4626 peculum speculum that the $s$ was sometimes dropt in pronunciation, and that the only difference between the words (s)pecŭli pecūli would be one of length. May not this be true of other words in Plautus? At any rate much has yet to be done for Latin lexicography-and what better opportunity than our Anecdota Oxoriensia?-in the way of editing unpublished glossaries, as Mr Minton Warren has shown in the American Journal of Philology, vol. II. There must be many words which as technical and special were likely to be used rarely, and the very existence of which can now only be ascertained from glossaries. Such a word I believe may lurk in the unexplained indoctores of Asin. iII. 2. 6. Camerarius conjectured 'Plautum, qui non dubitaret
quiduis fingere, fecisse incloctores, de sonitu uerberum...nam clogmum $\pi \epsilon \pi о \iota \eta \mu$ év $\omega \varsigma$ strepitum et sonitum Graeci appellarunt ut in iocoso oraculo Luciani $\mu \dot{\partial} \theta$ ov $\dot{\epsilon} \tau \epsilon \rho a \lambda \kappa \epsilon ́ \iota \kappa \lambda \omega \gamma \mu \hat{\omega}{ }^{3}$. I have not been able to find this word in any glossary; yet I think it

 $\pi о \iota o \hat{\nu \tau a \iota} \kappa \nu \rho i ́ \omega s$. From this it seems that $\kappa \lambda \omega \gamma \mu o ̀ s$ was specially applied to the noise made by donkey-drivers to make their beasts go on. Incloctor would therefore $=$ 'donkey-driver', a sense which would not only suit the passage in question

## Incloctoresque acerrimos gnarosque nostri tergi

(for the voice and the arm generally accompany each other in driving these animals, as anyone familiar with Hampstead will have observed), but have a special significance in the Asinaria, just as in the Prologus the poet addressing the crier says

Face nunciam tu, praeco, omnem auritum poplum
in allusion to the long ears of the ass, and as Leonida III. 2. 43, 44, with very little point except as referring to the trifling incident of the donkey-sale which forms the ground-work of the Asinaria, says

Nimis uellem habere perticam. Lib. Quoi rei? Leon. Qui uerberarem
Asinos, si forte occeperint clamare hinc ex crumina.
Truc. II. 4. 74
Phron. Sic fucito quicquid $\dagger$ ait uierit.
Diniarch. Boni consulas.
Haupt, Brix, Kiessling all agree in accepting the correction attulerit, and Schöll has done wrong, I think, to attempt a better. Few will be disposed to accept his quiduis iuuerit instead: a criticism which applies to many other passages of the Truculentus. I suppose Diniarchus to interrupt Phronesium by a remark which indicates his impatience. 'Whatever present he brings with him'-Din. 'Take it in good part', i.e. be contented. Ovid has a similar use of boni consulere, Pont. III. 8.

23, 24 Quae quamquam misisse pudet, quia parua uidentur, Tu tamen haec quaeso consule missa boni.
II. 6. 44

> ah nequeo caput

Tollere ita $\dagger$ do ut itaque ego me dulo $\dagger$ neque etiam queo Pedibus mea sponte ambulare.

Spengel's reading of this passage seems substantially right ita dolet itaque egomet dolui, except that doleo is perhaps nearer to the MSS than dolui. Egomet has its proper meaning 'such a pain has my head, and such a pain have I myself' i.e. in the rest of my body. I cannot think Schöll's itaque aegrest dorso very probable.

## i. 7. 5 sqq.

Domist qui facit inprobe facta amator.
Qui sua pro stercore habet, foras iubet fieri.
I do not see the necessity for all the changes introduced here by Schöll-for tam inserted before inprobe, furta for facta, degeri for fieri. It is not that, in itself, any of these changes is violent or improbable; but that collectively they are unnecessary. Why should not foras fieri be as good Latin for 'to be put out of doors', as palam fieri to be published or obuiam fieri to meet? But Schöll's restitution of the next verse Metuit puluisculos: unus mundissumust for metuit publicos mundissumim sit is most ingenious, not to say convincing.
II. 7. 24

Iubeo uos saluere.
Phron. †Noster geta $\dagger$ quid agis? ut uales?
None of the proposed corrections is probable: I cannot conceive geta having been substituted by mistake for cuame. I should prefer to read heia.
II. 7. 29

$$
\text { Ecquid auditis } \dagger \text { heque tam } \dagger \text { inperat? }
$$

Schöll conj. Ecqui auditis quae era inperat? But the metre of the immediately succeeding verse is cretic, uasa nolo auferant,
desiccari iube, and following the suggestion of this, I would read Ecquid auditis haec quae cuamo mi inperat?
II. 7. 68

Sed ego cesso mi hinc amosire uentre dum saluo licet?
Probably me hine amosse (amouisse).

## iv. 1. 3

Dii magni ut ego laetus sum et laetitia differor.
Bothe changed Dii to Diui, which Schöll admits into his text with the approval of Leo Rhein. Mus. 1883, p. 3. It is my conviction that the Romans did not use diui on any light occasion, and certainly not in an interjection of this kind. I should prefer almost any expedient to this, e.g. inserting totus before differor, as in v. 7 totus gaudeo.

## Iv. 2, 3, 4

Nunc dum isti lubet dum habet tempus ei rei secundum est
Prome uenustatem amanti tuam ut tu gaudia cum per eis.
Ego interim hic restitricis presidebo.
Possibly
Nunc dum ísti lubét, auet, tempús rei secrindumst, Próme uenústatém tuam amánti ut dǐu gaudía compériaris Ego hínc interím praestitrícx praesidébo.
Schöll objects to Turnebus' emendation restitrix as 'inauditum'. The word however may yet be found in some unexplored glossary; it is not against analogy, meanwhile I suggest praestitrix, the fem. form of praestitor (Apul. Asclep. 92 ), but in the sense of 'acting as guarantee'.
iv. 2. 14 sqq.

This passage I would write as follows :
Ast. Eloquar, sed $t u$ taceto. nostin tu Strabacem ?
Din. Quidni?
Ast. Solus summam hic habet apud nos: [rerum $]$ nunc is est fundus nobis.
Animo bono male rem gerit, [perit].
Din. Perii hercle ego [it $]$ idem, two trochaic octonarii followed by an iambic septenarius.
$t u$ for diu of mss seems to justify my correction diu for tu in Iv. 2. 4. After these vv. Schöll inserts a verse not found in the mss, but quoted by Priscian as from the Truculentus, Bona perdidi, mala repperi : factus sum extimus a uobis. There is no doubt that Priscian found extimus in this passage, for he quotes another instance from the Chorographia of Varro Atacinus huic extima fluctu Oceani, interior neptuni cingitur ora. But it is very unlikely that the verse was originally written in the form given by Priscian, and I am inclined to believe that Plautus wrote factus sum exterinus uobis 'you have turned me out of doors' ' made an alien of me'. Auct. T. II. 24 Exterrinus peregrinus. Unless indeed we might assume a form exterimus, the original of extremus:
Iv. 2. 20

Dis. Quia enim plus dedi.
Ast. Plus enim es intro missus quam dabas.
So mss. I would read
Quia enim plus dedi. A. Plus [quia] enim e.i.m. quom d. Quom is Schöll's.
Iv. 2. 42

Redin an non redis?
Ast. Si uocat me quae in me potest plus quam potest.
Is not this an idiomatic expression for 'an impossible amount. of influence' 'an inconceivable influence'? On this view the verse might have been

## Redin an non redis?

Ast. Vocat me quae in me plus quam pote potest.
Iv. 2. 50

Suppostrix puerum ego edepol itu a probra aperibo omnia.
Possibly
Suppostrix puerum : ego tua edepol ita probra aperibo o.

## iv. 3. 3

Rogitaui ego uos $\dagger$ uerberantis bas $\dagger$ pendentis simul.
I regard this as an error arising from uerberatas antis
pendentis. The slaves were fastened by ropes to the pillars on each side of the door and so flogged.

## iv. 3. 12

Nisi quia timeo tamen ego nec et quid peccaui scio.
The verse is perfectly correct if only et is omitted : nec=nec tamen as often.
Iv. 3. 19

Iam liuorem mutẽ capulis istoc concinnas tuis.
For mutẽ of B other mss have ut $\bar{e}$. The right word is probably mulier. Generally capulis is altered to scapulis: may it not be a variety of form?
iv. 3. 66

Call. Eamus, tu, in ius,
Dis. Quid uis in ius me ire? tu's praetor mihi, Verum te obsecro ut tuam gnatam des mi uxorem, Callicles. Call. Eundem pul te iudicasse quidem istam rem intelligo.

Perhaps
Eundum. Pol te iudicasse pridem istanc rem intelligo. Pol te Camerarius, pridem Spengel, istanc Schöll.
v. 39,40

Venitne in mentem tibi quod uerbum in cauea dixit histrio? Omnes homines ad suom quaestum callent et fustidiunt.

Surely this has a very intelligible meaning. Phronesium has been taunted on her bad taste in admitting a rustic to her intimacy. She replies; in our trade it is much as in other professions e.g. the actor's: our discernment and our particularity are according to our gains. The actor in the theatre remarked to the audience, 'everybody makes his professional skill and his nice observance of the proprieties of his art bend to the exigencies of his purse': just so the hetaera, when it suits her interest, can give up her particularity and admit a clownish lover.
v. 18

Phron. Cedo quamquam parumst.
Strat. Ad omnae manucistic poste parumst.
Perhaps, slightly varying on Spengel, Addo minae minam istuc postea. Parumst?
' I add a second mina to that first at some future day. If that is too little, I will give you anything you command.' minae minam (Spengel) are monosyllables.

R. ELLIS.

NOTE ON PETRONIUS, c. 43.

Mr J. H. Onions objects to my conj. olorium as contradicting niger tamquam coruus. It was suggested to me by these words. 'How many years do you think he was when he died? Seventy and more. But he was hard as horn, a man to bear his years lightly, black-haired as any raven. I remember I knew the man when his hair had changed to swan-white, and even then he was libidinous.' I would not however deny that olim is rather pointless: possibly it arose from some error of dittography.

> R. ELLIS.

## NOTE ON PROPERTIUS IV. 5. 61, 2.

Vidi ego odorati uictura rosaria Paesti Sub matutino cocta iacere noto.

In the Panegyricus Berengarii p. 45 ed. Valesius, is the following verse,

> Vt cum sole malo tristique rosaria pallent Vsta noto,
which is too like the Propertian distich above cited not to be a conscious imitation. We may perhaps conclude that Propertius was still no unfamiliar poet in the latter half of the ninth century.
R. ELLIS.

## BABRIANA.

## I.

Fab. xcv. 84 ed. Rutherford.


Mr Rutherford is doubtless right in rejecting Lachmann's emendation oî $\delta \epsilon \nu$ for $\delta \lambda \epsilon \in \omega \nu$, but he has not proposed any of his own in place of it. The 'spondeus in quarto' cannot however stand, and I suggest that $\delta \lambda \epsilon \in \omega \nu$ is not improbably an 'interpretamentum' of some pronoun-кєîvos for instance. ov̀סèv $\dot{\varepsilon} \chi \theta \rho o ́ v$ is of course not to be meddled with. It follows the analogy of such phrases as $\tau a ̀ s ~ o v i \delta e ̀ \nu ~ v i \gamma \iota \epsilon ́ s, ~ o i ~ \tau o ̀ ~ \mu \eta \delta e ́ v ~ a n d ~$ the like. Eur. Phoen. 598 $\mathfrak{\eta} \lambda \theta \epsilon \varsigma ~ \pi \rho \rho o ̀ s ~ \tau o ̀ \nu ~ o u ̛ \delta e ̀ v ~ \epsilon i s ~ \mu a ́ \chi \eta \nu . ~$

## II.

cxv. 4.

On this Mr Rutherford remarks: "In Athoo tav̂ta, quo exít hic versus, latet participium aliquod quod ego supplere nequeo."

May I suggest $\pi \rho o \sigma \pi \tau a ́ s$ as possibly the missing word? The rav̂ra of the Athoan is evidently a mere stopgap, as the metre shews.

## III.

cxxix. 5.

Mr Rutherford remarks, "Summa cum fiducia ego ả $\lambda \epsilon \tau \rho \epsilon \dot{v} \omega \nu$ proposui, de é $\mu \epsilon \iota \nu$ ’ dubitans. Corrupte Vaticanus ó $\delta$ é $\gamma$ ’ ò òos тク้̀ $\mu$ ย̀v עv́кка $\lambda a \tau \rho \epsilon v \in \omega \nu$." Sharing both Mr R.'s confidence and his doubt, I propose for ${ }^{\epsilon} \mu \epsilon \epsilon \nu \nu^{\prime}$, $\epsilon \kappa \kappa a \mu \nu{ }^{\prime}{ }^{\prime} \lambda \epsilon \tau \rho \epsilon v \in \omega \nu$. An imperfect is wanted to answer to кaт $\eta \gamma^{\prime}$ in the line next but one.
W. H. THOMPSON.

## NOTE ON JUVENAL XII 129130.

possideat quantum rapuit Nero, montibus aurum exaequet, nec amet quemquam nec ametur ab ullo!

Cic. de amic. § 52 nam quis est,...qui velit, ut neque diligat quemquam nec ipse ab ullo diligatur, circumfluere omnibus copiis atque in omni rerum abundantia vivere?

In these two passages the curse of wealth unloving and unloved, is expressed in terms as nearly identical as possible, considering that one is in prose and the other in verse ; amet, ametur, take the place of diligat, diligatur; but the contrast of active and passive, the combination of quemquam and ullo, occur in both. I cannot doubt that Juvenal here, as elsewhere, is consciously imitating Cicero. The dictionaries, general and special, are very superficial in the treatment of pronouns. The grammars do indeed state that quoquam is rare (they give no example); and that ullo is used for the ablative of quisquam; but no dictionary or grammar, so far as I have observed, cites either of the above texts. Weissenborn (on III 57 §6) tells us that Livy uses quoquam twice only, elsewhere always ullo. Cic. Att. Ix 15 § 5 has quoquam.

## NOTE ON GAL. III 28.


 'I $\eta \sigma o v ̂$.

This catholic charter of emancipation, admitting into the unity of the church every race and rank, and both sexes, on equal terms, has never, so far as I have observed, been compared by any commentator with sayings current in the Jewish and

Greek schools, which can hardly have been absent from the apostle's thoughts as he wrote.

Dr Taylor (Sayings of the Jewish fathers, Cambr. 1877, p. 29) after quoting several Rabbins who refuse education to woman, or class her with the slave and the child, proceeds: 'Another remarkable grouping is found in the Jews' Morning Prayer, where the men in three consecutive Benedictions, bless God "who hath not made me a Gentile...a slave...a woman." This affords an illustration (the more striking on account of its indirectness) of a characteristic saying of St Paul' (i.e. our text). Gataker (on Lact. cited below) also quotes this Jewish prayer, and Bünemann (ibid.) cites similar thanksgivings from Rabbinical sources.

Authorities, as usual, father the Greek thanksgiving on several eminent names, but the very diversity proves that it was proverbial in the schools. Diogenes Laertius (I § 33) hesitates between Thales and Sokrates: "Epuınitos $\delta$ ’ èv qoîs Bioıs cis


 трíov öть"E $\lambda \lambda \eta \nu$ каì ov̉ $\beta a ́ \rho \beta$ рароs. Dio Chrys. or. 64 (II 335



Plutarch puts the saying into Plato's mouth (Marius 46 § 1):



 So Lactantius (III 19 § 17) non dissimile Platonis illud est, quod aiebat se gratias agere naturae, primum quod homo natus esset potius quam mutum animal; deinde quod mas potius quam femina; quod Graecus quam barbarus; postremo quod Atheniensis et quod temporibus Socratis.

JOHN E. B. MAYOR.

## ALEXANDER IN AFGHANISTAN.

The expedition of Alexander to India, with his previous operations in the Afghan mountains, have a peculiar interest for us, whose armies are the only European forces which have marched through the same country since the days of Alexander, or since those of the Seleukidai and Macedonian-Bactrian princes, if their armies were European.

Returning from Bactra (Balkh) in the late spring of 327 B.c.,
 crossed the Paropamisan mountains by a nearer way (Strabo xv. 1) than that which he had followed marching northward, through Afghanistan into Bactria, before in 329 B.c., and no readier way would offer itself than the road by Bamian towards Kaubul.

Having descended into the Kaubul valley, he dispatched Hephaistion and Perdikkas towards the Indus to prepare a bridge, under the guidance of a friendly prince Taxiles, while he himself with his friend Ptolemy, and his real fighting general Krateros, pursued further operations.

The majority of historians send the first-named officers down the Khyber pass to the Indus, and dispatch Alexander on a nearly impossible expedition through the mountains of Kafiristan, north of the Kaubul river.

It is perhaps rash to challenge such a weight of authority, but I cannot help thinking that there is some mistake in the route assigned to him.

In the first place: I am not writing on the supposition that Alexander was a mere "Macedonian madman", or even a genius with a touch of insanity like Charles XII. His campaigns,
battles, sieges, above all his marches, as well as the indications of his civil policy, forbid such a notion. He wanted to conquer India, and his movements were designed for that end.

There are two ways of following his route. The one is to seek for an analogy among the names given by Arrian and those in modern use; the other is to reflect what a reasonable man would do under his circumstances, where he would go, and where Arrian's account permits us to believe he went. Every conqueror who has approached India from the north-west has had the same task, every English expedition into Afghanistan has had the same task. Certain passes have had to be secured, the adjacent mountaineers cowed, and a communication established by that means between the plains of the Punjaub and the Kaubul valley.

The mountains of Kafiristan are traversed by no road leading into India. A route is said to exist coming from the north, through Kashkar, down towards Peshawur. But a glance at the map will show that the country north of the Kaubul river is not the road to India. It commands no road to India. In our several dealings with Afghanistan we have not been concerned with the tribes inhabiting it. Their country is indeed probably inaccessible for an army coming from west to east, as Alexander must have done. It is described by the few travellers who have been near it, as precipitous, traversed by dizzy paths, with swinging bridges over the deep gorges of torrents. Timour tried to penetrate it from the upper Kaubul valley, as Alexander is said to have done, to chastise the heathen inhabitants for aggressions upon their Mohammedan neighbours, but he quickly emerged with little advantage, without having passed through the country.

But supposing that instead of making an objectless plunge into this inhospitable country, Alexander like a rational commander proceeded to clear the passes between Afghanistan and India; with that idea let us see how Arrian and Strabo describe his movements. Before following them however we must consider what they mean by the Indus river. In its lower course they mean the same river so called still, in its upper course they are certainly confused, and probably mean something different.

Arrian is positive, and Strabo seems to follow him, that the Indus rises in the Paropamisan mountains, or the Hindhu Kush. Of course it does not; but the Kaubul river does. When the two meet above Attock they are equally large and striking, and Arrian or his informants probably took the Kaubul river for the main streám. Half-way between its junction with the Indus and the city of Kaubul, another river, the Kunar, joins the Kaubul river, as large in volume, and "well deserving as regards length to be considered as the main stream" (Col. Yule). This river flows down from the eastern extremity of the Hindhu Kush, from near the Pamir plateau. I take the true Indus, the Kaubul river, and the Kunar to form the Indus of our authorities. The rest of the Kaubul river is the Kophes no doubt, its confluent the Logur may be the Choaspes.

Well, from Arrian, Anabasis, iv. 22, and seqq. and from Strabo Geogr. xv. 1, we learn that Alexander, at the end of spring, recrossed the Paropamisus on his way to India, and came in ten days to Alexandreia at the foot of Paropamisus, somewhere probably west or north of Kaubul, according to the pass he used. He marched with India on his left hand (Strabo), towards the Kophes (Arrian), and the Choaspes its tributary (Strabo), and then turned towards India and the mountains which form her western boundary (Strabo). I submit that if he crossed by the nearest way from Bactra towards Kaubul, over the Hindhu Kush, he would have had to march with India upon his right hand if he had been going where he has been sent north of the Kaubul river, and he would have had to cross the upper part of that river, the Kophes, twice or not at all, whereas one crossing only is mentioned. Neither can the Kafiristan mountains be exactly described as west of India. They are NNW. to N. of the Punjaub. If however he went somewhere towards Ghazni before turning towards India, he would cross the upper Kaubul river and its branches, which branches will then answer to the rivers named by Arrian.

Perdikkas and Hephaistion, with Taxiles, a friendly Indian prince, he despatched to the Indus to prepare his bridge while he himself undertook operations in the mountains. He had heard accounts of the character of the Punjaub and north-west

Provinces, and of the inhospitable deserts further south in Sindh and Rajputana, and therefore he would not go south to the Bolan pass, but preferred to operate by the passes leading directly to the Punjaub. So at least I understand Strabo, in the passage

 the hill forts and villages, and subdued the mountain region,
 mountains which slope eastward"; the valleys of Kafiristan run generally south-west.

He thus came to the Gouraioi, with a large river eponymus of their country (Arrian), the name of which suggests the Kurum river. He had probably descended by one of the great trade routes of the present day, the Gomul and Ghawalari passes, or possibly by the route which strikes from the west into the Kurum valley. Thence he marched north-eastward, wis émi $\tau \grave{\nu}$ 'I $\boldsymbol{\nu} \delta o^{\prime} \boldsymbol{\nu}$ (Arrian), and joined Perdikkas and Hephaistion in the territory of Peukelaotis, whither they had come by a shorter route. Among many doubtful identifications of places, the identification of Peukelaotis and its city Peukela ${ }^{1}$ (?) with Peshawur, is one of the most plausible. Prof. Wilson (Ariana p. 183) finds the name in Pelchely near Peshawur. Hard by too is Attock, the place where the Sikhs and the English alike have found it convenient to establish a bridge of boats, or other means of crossing the Indus. The reasons which made it convenient to Runjeet Singh would have made it a convenient spot for his forerunner Taxiles also. There Nadir Shah, and there it is believed Timour crossed the Indus, on their respective Indian expeditions. If Peukelaotis however is Peshawur, and if Alexander's bridge was at Attock, a new difficulty is placed in the way of his having come from Kafiristan and that neighbourhood. He would in that case have had to cross the Kaubul river again, near the confluence with the Indus, in the early summer when there is plenty of water, and the crossing is difficult. There is no ford below Jellalabad (Col. Yule), a bridge or many boats would have been needed, and of this crossing no

[^81]hint is given. Perdikkas and Hephaistion had probably arrived by the Shutargardan and Peiwar passes, by Thull, and Kohat, the country over against the territory of Taxiles, who ruled just beyond the Indus, whence his influence might extend. That they did not come by Jellalabad and the Khyber pass must be inferred, if we are to make room for the subsequent operations of Alexander, still south of the Kaubul river.

Alexander had now cleared the passes, and cowed the tribes from the Suleiman mountains northward to near Peshawur. It remained for him to complete the conquest of the "scientific frontier" by clearing the Khyber and the neighbouring passes also.

The Assaceni, whom he had attacked after crossing the Gouraios river, had some of them fled to mountain fastnesses, which the Greeks call "Aopvos, and which it is represented Hercules had formerly attacked without success. If this story means anything, it means that some former conqueror, coming from the west, found himself in difficulties among the frontier mountains. But this unknown conqueror would, no more than Alexander, have been concerned with anything far from the usual routes from Kaubul to the Punjaub. The plateau, or rock-bound plain of Aornos, has never been certainly identified. It was near the river, not on it, according to Arrian, and may have well been among the hills between the Khyber and the Kaubul river. Or was it the Khyber pass itself, with the rock Ali Musjid in front, whence a stream flows down, as a stream was said to flow from Aornos? On his way to it Alexander came to Embolima, the place where a pass debouches on the country (cf. $\grave{\epsilon} \mu \beta o \lambda \eta$, Xen. Hell. 5. 4. 48), such a place as Jamrud, at the mouth of the Khyber.

After forcing Aornos Alexander went forward into the country of the Assaceni, another side of which he had passed through already, and came down towards the Indus again, through a difficult country (Arrian IV. 30.7): that is, I suppose, he approached the Kaubul river, as we call it, near Dacca. (Dyrta, which he presently found deserted, is not Dir, many miles from the Indus, on the borders of Kafiristan and Swat ${ }^{1}$.)

[^82]In this neighbourhood, near the river, he captured the elephants of the brother of the king of the Assaceni; in the warm valley below Jellalabad elephañts though not native will thrive. In the country between the Kophes and the Indus Alexander came to the so-called Dionysiac city of Nysa. The abundant fruits, and grapes especially, of the cooler district immediately above Jellalabad may have suggested the Bacchic origin of the city. Arrian throws in the episode of the Nysæans at the beginning of the fifth book, but he has before told us (iv. 30.7) that after the capture of the elephants Alexander built boats, and dropped down the river, to get to ( $\omega \dot{s} \dot{\epsilon} \pi i$ ) the bridge which had been already made. From Jellalabad downwards Col. Yule says that the Kaubul river is navigable for large boats of 50 tons; above Attock on the true Indus I am told that a dangerous whirlpool obstructs navigation. With regard to the identification of rivers, we must remember that none of our authorities knew the country personally, that in a wild country different parts of the same river often bear different names, and that the true Indus above Attock lies in a remote and, till lately, scarcely known country. I do not advance my opinion of where Alexander did go so confidently as I do my opinion that he did not go where he is commonly represented as going, into trackless mountains, traversed by no passes from west to east that an army could follow. He cannot be brought so far south as the Bolan pass for want of time. He was in the Punjaub in the rainy season, or about July. Krateros apparently marched through the Bolan, from the Indus to Drangiana, on the return of the expedition.

A possible reason for sending him into Kafiristan is furnished by the interesting tradition, mentioned by Marco Polo I think first of Europeans, and commented upon by his editors, M. Pauthier and Col. Yule, to the effect that the people of Kafiristan and Badakshan are descended from Alexander and his soldiers. The tradition is no doubt a trace of the continued rule of the Macedonian kings of Bactria, whose subjects have been gradually forced into the mountains by new comers. Or, as is common, a story once widely spread has lingered among the most primitive people of those who shared it; a people,
too, in the case of the Kafirs, untouched by Mohammedan influences.

I have taken Strabo and Arrian as the sole authorities for the details of Alexander's movements. The fables of Q. Curtius, the excellent moralities of Plutarch, and the sketches by others, are worthless beside the compilation from Ptolemy and Aristoboulos,

H. E. MALDEN.

## THE GREEK NUMERICAL ALPHABET.

At a time when Greek epigraphy is commanding daily more and more attention, it is desirable to point out some facts which may be of service in determining the date or the place of an inscription, where either is not obvious.

Of the enormous collection of extant Greek inscriptions a very large proportion do not contain numbers at all, and, of those that do, a large proportion again have the numbers written out in full. The remainder contain numerical symbols, which I propose to discuss shortly in this article.

The oldest known writings of the Egyptians and Phœnicians have signs for $1,10,100$, \&c., each of which may be repeated nine times, without any intermediate compendia for 5, 50, 500, \&c. ${ }^{1}$ This also, according to Iamblichus (in Nicom. $A r$. ed. Tennulius, p. 80), was the earliest Greek practice, but no authentic instance of it has yet been discovered. An inscription from Tralles ${ }^{2}$ has $\epsilon \tau \epsilon o s$ IIIIIII, but Böckh suspects this to be a forgery of late imperial times. Such forgeries were, of course, not uncommon, where a city wished to produce a documentary title to some ancient privilege.

But the oldest known set of Greek numerical symbols are I. $\Delta$. H.X.M, of which the last four are respectively
 these may be repeated not more than four times, $5,50,500$, \&c., being represented by the compendia $\Gamma$ ( $\pi \epsilon \in \nu \tau \epsilon$ ). इT. F. \&c. These symbols are now called 'Attic', but they were formerly called 'Herodianic', because attention was first called to them

[^83]by a fragment ${ }^{1}$ of Herodianus (a Byzantine grammarian of the 3rd century) who alleged that he had often seen them in Solonic laws and other ancient documents and coins. His statement has since been abundantly confirmed. In fact, no other numeral signs occur in any known Attic inscription of any date b.c.: or at least no others occur in the first two volumes of the Corpus Inscriptionum Atticarum. But they are by no means exclusively Attic: they were, probably, at one time the universal Greek numerals. They are found in Halicarnassus and Rhodes, and (with variations according to the local forms of the alphabet) in Bœotia and Arcadia, down to about 100 B.c. ${ }^{2}$ They remained in use, also, outside Attica long after the ordinary alphabet had come to be used for numerical purposes. A great number of papyrus-rolls found in Herculaneum state, on the title-page, after the name of the author, the number of books in his work, given in alphabetic numerals, and the number of lines in Herodianic nu-
 We might, in the same way, use Roman numerals for the one division, Arabic for the other, as XV. 3200. One author, who is presented with such a title-page in these rolls, is Philodemus, a rhetorician of Cicero's time ${ }^{3}$.

But at some date, at present unknown, the Greeks adopted the practice of using the letters of the alphabet in order as their numeral signs, and this style ultimately became universal among Greek-speaking peoples. The alphabet so used was the Ionic, with three additions, the so-called $\bar{\epsilon} \pi i \sigma \eta \mu a$. For 6 (after $\left.\epsilon^{\prime}\right) 5^{\prime}$, the old digamma, was used : for 90 (after $\pi^{\prime}$ ) $\phi^{\prime}$ : and finally for 900 (after $\omega^{\prime}$ ) $\rangle^{\prime}$ was added. It is needless, in this place, to mention any other details of a system, which is exhibited in every Greek grammar.

[^84]It has been commonly assumed, since the Greek alphabet was derived from Semitic sources, and since the numerical use of the alphabet was a Semitic practice, that the Greeks took from the Semites, along with the alphabet itself, the habit of using it for numerical signs ${ }^{1}$. And this theory derives further colour from the fact that the Greek numerical alphabet contains three Semitic letters, the $\epsilon \pi i \sigma \eta \mu a$, which were, within historical times, discarded from the literary alphabet. But this evidence is wholly illusory. The Greek alphabet was derived from the Phœnicians, but the Phœnicians never used the alphabet for numerical purposes ${ }^{2}$. The Jews and Arabs did, but the earliest documentary evidence for this practice, even among them, is not older than 141-137 B.C., when dates, given in alphabetic numerals, appear on shekels of Simon Maccabæus ${ }^{3}$. The Greek evidence goes a good deal further back than this.

It is urged, however, on the other hand, (1) that the Jewish practice of gematria, adopted by the later Kabbalists, is said by them to be very early and is perhaps as old as the 7th century b.c. This was a curious system of Biblical interpretation, whereby two words were treated as interchangeable, if their letters, considered as numerals, amounted to the same sum ${ }^{4}$. And again, (2) both the Hebrew and the Greek literary alphabets are too short for a good arithmetical symbolism, and both are supplemented up to the same limit, the 27 th sign in each standing for 900 . But as to (1), it must be observed that the supposed antiquity of gematria depends solely

[^85]Hankel rejects the Semitic origin, but abides by the common opinion that Greek alphabetic numerals date from the 5th century b.c.
${ }^{4}$ See Cantor, Vorles. 1. pp. 87, 104, 105. Also Dr Ginsburg's monograph Kabbalah p. 49, and his article on the same subject in Ency. Brit. 9th ed. Vol. xiII. Gematria is by metathesis from $\gamma \rho а \mu \mu a \tau \epsilon i \alpha$. It is used in Rev. siii. 18 , where 666 , the number of the beast, is the sum of the Hebrew letters in Nerun Kesar.
on a merely conjectural and improbable comment on Zechariah xii. $10^{1}$. There is, in fact, no clear instance of gematria before Philo or Christian writers strongly under Philonic influence ${ }^{2}$. The practice belongs to Hellenistic Jews : its name is Greek and it is closely connected with Alexandria, where, as we shall see, alphabetic numerals first appear. And as to (2), it seems more likely that the Jews took the idea of alphabetic numerals from the Greeks than vice versa ${ }^{3}$. The Greeks could, by hook or by crook, furnish the necessary 27 alphabetic symbols. The Jews could not. Their alphabet contains only 22 letters and the numbers, $500-900$, must be represented by the digraphs, $\boldsymbol{\sim}, 7$, \&c., compounded of 100 -$400,200-400, \& c .{ }^{4}$. It may be said, therefore, that there is no evidence against, and a good deal for, the supposition that the Jews derived the use of alphabetic numerals from the Greeks.

But the date at which the Greeks adopted the alphabetic numerals is not easily to be determined. The alphabet was indeed, at an early time, used quasi-numerically, but not in the manner now under discussion. The tickets of the 10 panels of Athenian jurymen (heliastae) were marked with the letters of the alphabet from $a$ to $\kappa, \varsigma$ being omitted ${ }^{5}$. So also the books of Homer, as divided by Zenodotus about b.c. 280, were numbered by the 24 letters of the ordinary Ionic alphabet, both 5 and $\bigcirc$ being omitted: and the works of Aristotle were also anciently divided into books, numbered on the same principle ${ }^{6}$. It seems unlikely that the regular numerical alphabet

[^86]B.c., and these five finals were not definitely fixed for many centuries afterwards. See the table of alphabets in Madden's Coins or Dr Euting's, appended to Bickell's Outlines of Hebr. Gram. 1877.
© Schol. to Ar. Plutus, 277. Hicks, Gr. Hist. Inser. no. 119, p. 202. Franz, Epigr. Gr. p. 349.

6 This appears from Alexander Aphr. who (in Metaph. 9.81 b. 25) quotes from $\zeta^{\prime} \tau \hat{\omega} \nu \mathrm{N} \iota к о \mu а \chi \epsilon i \omega \nu$ a series of definitions which belong to the 6th book. The Aristotelian books so numbered are the Ethics, Politics and Topics.
(with $\varsigma^{\prime} 0^{\prime}$ and $\lambda^{\prime}$ ) was in common use at the time when these divisions were made. Secondly, in the numerical alphabet $\varsigma^{\prime}$ is undoubtedly the digamma and this and $Q$ both occur at their proper (i.e. original) places in the alphabet. But the evidence at present forthcoming shows that there never was, in any Greek country, a literary alphabet which contained both $s$ and $\rho$ along with both $\psi$ and $\omega$. One or other of the former had been discarded, before one or other of the latter had been introduced ${ }^{1}$. The last numeral $\hat{\lambda}$, sampi, whether it represents the Phœenician shin ${ }^{2}$ or tsadé, occurs in either case out of its place. It seems to have been rarely used and to have disappeared early, and is clearly resumed into the alphabet merely for numerical purposes. These facts surely raise a presumption that the numerical alphabet was settled, not casually and by local custom, but deliberately and by some man of learning. Further, since no antiquarian could mero motu persuade a people to revive, and to revive in their right places, letters which they had long since discarded, it is probable that this particular savant was supported by some paramount political authority. It is plain, also, that this authority did not reside at or near Athens, since the Athenians and their neighbours continued to use the Herodianic signs for two centuries or more after the alphabetic had come into use elsewhere. It may be conceded, indeed, that public inscriptions would be the last place in which the new numerals would appear, but it is incredible that the old signs should have been retained by custom so long if the new had meanwhile been in common use. Lastly, it must be stated that the alphabetic

[^87]
## Franz, Epigr. Gr. p. 19.

${ }^{8}$ It should be mentioned that we know of no variations in the value of the Greek alphabetic numerals. 9 , for instance, might be expected occasionally to have its Semitio value 100 , instead of 90 , or ( $\varphi$ being omitted) $\Sigma$ might oceasionally represent 100 instead of P. But there is no case in which any such doubt arises. It is, no doubt, purely accidental that $\boldsymbol{\lambda}_{7}$ does not occur in any extant inser.
numerals were a fatal mistake and hopelessly confused such nascent arithmetical faculty as the Greeks may have possessed: The Herodianic signs were clumsy, but they did not conceal those analogies which ought to be obvious to the tiro in arithmetic. An Athenian boy, who had been taught that III multiplied by III produced ПIIII, would very soon have understood that $\Delta \Delta \Delta$ multiplied by $\Delta \Delta \Delta$ produced $\mathbb{} \omega \Delta \Delta \Delta \Delta$, and he might have guessed that, if $\Gamma \mathrm{I}$ added to $\Gamma$ amounts to $\Delta \mathrm{I}$, then $叩 \Delta$ added to $\square^{\square}$ would amount to $\mathrm{H} \Delta$. And these are really the severest difficulties which can occur with Herodianic signs. But with alphabetic signs $\gamma^{\prime} \times \gamma^{\prime}=\theta^{\prime}$ is no clue to $\lambda^{\prime} \times \lambda^{\prime}=\lambda^{\prime}$ : or $s^{\prime}+\epsilon^{\prime}=\iota a^{\prime}$ to $\xi^{\prime}+\nu^{\prime}=p \iota^{\prime}$. Such signs as these are no assistznce to calculation, and involve, in themselves, a most annoying tax on the memory. Their advantage lies only in their brevity, and it is to be suspected that they were invented first for some purpose to which brevity was essential or desirable.

It curiously confirms all the inferences which have here been made to find that the earliest evidence of these alphabetic numerals is found on coins of Ptolemy II. (Philadelphus), assigned to 266 b.c. ${ }^{1}$. The lateness of this date accounts for the later persistence of the Herodianic signs. Alexandria, if anywhere, was the place where a scholar might have composed the numerical alphabet, and a king have published it, with effect. Coins are precisely the documents on which it is desirable to state numbers as concisely as possible, and which would attract general attention to a new symbolism ${ }^{2}$. Other evidence begins also soon after the date of these coins, and in the same place. The oldest Graeco-Egyptian papyrus, which is ascribed to 257 в.c. ${ }^{3}$, contains the numerals $\kappa \theta^{\prime}(=29)$, and after this alphabetic numerals are common enough on Ptolemaic coins and papyri ${ }^{4}$. They do not occur, however, on stone inscriptions, as might be expected, till somewhat later. The

[^88]earliest instance is probably one of uncertain place (though certainly from the Levant), ascribed to about 180 B.c. ${ }^{1}$, or another of Halicarnassus at about the same date ${ }^{2}$. A Rhodian inscription in the British Museum (mentioned above) of the same time still uses the Herodianic signs, but soon afterwards, say from 150 b.C., the alphabetic numerals are used invariably on all Asiatic Greek monuments ${ }^{3}$.

The cumulative evidence is surely very strong that alphabetic numerals were first used in Alexandria early in the 3rd century B.C. It remains to be added only that, later in the same century, two of the greatest Greek mathematicians, Archimedes and Apollonius, were certainly very much interested in the abbreviation of the Greek arithmetical nomenclature, and it would seem also that they used, with their proposed nomenclature, a special abbreviated symbolism. But the latter statement is only conjectural, and need not be discussed in this place.

The conclusions, of importance to Greek epigraphy, which I wish here to draw, are (1) that a Greek inscription, containing alphabetic numerals, of any place, can hardly be older than about 250 b.c.: (2) that a Greek inscription, containing alphabetic numerals, of uncertain place, if dated $250-150$ b.c., is probably Egyptian or from some part of the Ptolemaic empire: if dated 150 b.c. or later may be Asiatic, but can hardly be Peloponnesian if of any date B. c. Further accumulations of evidence may alter these statements slightly, but I think they will probably not affect them materially. Indeed, Böckh seems to me to have acted instinctively on these rules, though he had not worked out the facts on which they are founded.

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[^89]the text, were struck at Tyre. These facts may suggest some Semitic influence in the origin of alphabetic numerals, but I do not attach any weight to them. The practice of writing numerals in the alphabetic order survived in Macedonia and N. Greece till the 2nd century. See C.I. G. II, nos. 1965, 1970, 1971.

## MISCELLANEA HOMERICA.

The name of Telemachos occurs only twice in the Iliad, and both times in a phrase which is quite unique in Homer. In B 260 Odysseus, by way of an imprecation upon himself if he fails to punish Thersites, says

And again in $\Delta 354$ he speaks of himself, with offended dignity, as $\mathrm{T} \eta \lambda \epsilon \mu a ́ \chi o เ o ~ \pi a \tau \eta \dot{\rho}$.

Commentators have stumbled a good deal at these expressions, but have not pretended to explain them. On the first passage Schol. A says that the curse is a double curse: "in the first place against Telemachos and in the second against Odysseus, for if the son died, Odysseus would no longer be his father." However satisfied the Scholiast may have been with this striking elucidation, he has sense enough to see that it does not apply to the second recurrence of the phrase, which he accordingly passes over in silence, only mentioning the argument drawn from it by Aristarchos, that the poet of the Iliad yas one with the poet of the Odyssey. Prof. Geddes in his Problem of the Homeric Poems, p. 85, thinks that the hero who "prefigures the future character of the Greek race" is thus "represented as the only one not seeking his honours in the past but looking down into the vista of the future."

The real explanation, I think, is of a less poetical but not less interesting kind. The practice of taking a name of honour from a first-born son is found among primitive races of all sorts. The following instances are from Sir J. Lubbock's Origin of

Civilisation, p. 3ă8. "In Australia when a man's eldest child is named the father takes the name of the child, Kadlitpinna, the father of Kadli; the mother is called Kadlingangki or mother of Kadli, from Ngangki, a female or woman. This custom seems very general throughout the continent. In America we find the same habit....In Sumatra the father in many parts of the country is distinguished by the name of his first child, and loses, in this acquired, his proper name... The women never change the name given them at the time of their birth, yet frequently they are called through courtesy from their eldest child, "Ma Si Ano," the mother of such an one; but rather as a polite description than a name."

So in Theale's Kaffir Folk-Lore, p. 117, "Nomagunda, so called because she was the mother of Magunda," and p. 211, "Upon the birth of her first child, the Kaffir woman is frequently called by every one after the name given to the child, the mother of so-and-so." An Arab too in his full style will call himself "Abu Mohammed," father of Mohammed, or whatever his eldest son's name happens to be. The same practice, $\mathrm{Mr} \mathbf{A}$. Lang tells me, exists among the Eskimo, where a man who has no son will even style himself father of his favourite dog. Numerous other instances could doubtless be found.

Prof. Geddes quotes as a similar "Paedonymic" the expression "Althaea Meleagris," which according to the Latin grammarian Diomedes was used by Ibykos (Fr. 14, Bergk); this example however is hardly apposite, for two reasons; first, that Meleager was so much more famous than his mother that his name would be a very natural mark to distinguish her; secondly, because Diomedes gives in the same sentence the expression "Helene Menelais," which is clearly not to be regarded as a proof that what may be called Andronymics were ever used in Greece, familiar though they are now.

If the explanation offered be accepted, it follows that the argument of Aristarchos and Prof. Geddes, that the author of the phrases in the Iliad was acquainted with the Odyssey, loses its force. So long as the name of Telemachos was given by the legend to the son of Odysseus, he might take a title of honour from it, even though the story of the adventures on which

Telemachos' fame, such as it is, depends, had not been yet composed.

Whether or no the custom of Paedonymy has left any other trace among the Indo-European peoples must be left to anthropologists to say. The absence of such traces would not disprove the presumption of an isolated survival in Homer, for the practice is apparently based upon modes of thought which were long antiquated at the time when European history begins to be known to us.

## Odyssey xi. 302-4.

The episode of Kastor and Polydeukes ends with the lines

 $\tau \epsilon \theta \nu a ̂ \sigma \iota \nu \quad \tau \iota \mu \grave{\nu} \nu$ סè $\lambda \epsilon \lambda o ́ \gamma \chi a \sigma \iota \nu$ í $\sigma a \operatorname{\theta \epsilon oî\sigma \iota .~}$

I do not know if it has ever been pointed out that the last line is an unmistakeable and late interpolation ${ }^{1}$. The sense of it contradicts the whole tenor of the story, for the two dead heroes are in no sense put on a level with the gods. The repetition of $\tau \iota \mu \eta \nu$ is intolerably weak. The quantity of the $a$ in $\lambda \in \lambda o ́ \gamma \chi$ đ́a $\sigma \iota$ is very suspicious, the only Homeric parallel being in Od. $\eta$ 114, where Edd. read $\pi \epsilon \phi$ v́кӑб८ from Herodian, MSS. $\pi \epsilon ф \dot{\prime} \kappa \epsilon$.

All doubt on the subject must I think vanish on a reference to Il. $\Sigma 470-3$ :-




äддотє $\delta^{\prime}$ aủte used in this way is in fact virtually the Homeric Greek for "vice versa" and the verb following it need

[^90]not be expressed. Some rhapsode not knowing this proceeded on his own responsibility to supply a verb and fill up the line as best he could out of his penury, thus giving us a characteristic interpolation of a type which was fully recognized by Aristarchos and has been familiar ever since. An exactly similar case is $\Phi$ 569-570-indeed one almost seems to recognize the same master-mind :-
[धै $\mu \mu \epsilon \nu a i{ }^{\circ}$ av̉тáp oi K





As a corollary it may be observed that Curtius should modify the statement ( $V$ b.II. 169) that the short $a$ of the 3rd pers. plur. termination - $\breve{\sigma} \iota$ is "gut bezeugt durch zwei Homerstellen." The fact that this scansion was common enough in the 6th and 5 th centuries, as Curtius shews, gives us a good idea of the date at which the interpolation took place.

## каípıos.

The word raiplos occurs three or four times in Homer (Il. $\Delta 185, \Theta 84,326, \Lambda 439$ ?), always in the neuter in the sense of "a deadly spot." It has so far as I know, always been derived without question from кaıoós, as though "opportune." But this appears to me quite incredible. ка८оós properly means "right measure," "due proportion," and is so used in the oldest writers in whom it is found, Hesiod (Opp.692) and Theognis 401, both times in the proverb кaıpòs $\delta^{\prime} \dot{\epsilon} \pi \grave{\imath} \pi a \hat{a} \sigma \iota \nu$ äpıбтos. From this is derived the sense of "the fitting moment," common from Pindar onwards. Now from a "fitting, opportune" stroke to the idea of a deadly stroke is a jump which is credible perhaps in the language of the tragedians, but is utterly alien from the directness of Homeric language. It may be excused where the primitive
word is in familiar use, but Homer never uses кaıpós or any other of its family except this supposed descendant in the third generation. The derivation is peculiarly ludicrous when the wounded man himself uses the word; when Menelaos says "the dart lighted not upon an opportune spot," or Agamemnon cries "Ah me, I am stricken through with an opportune stroke."

There is however no need to acquiesce in this absurdity, as we need not go far for a more satisfactory etymology. The exact sense required in the primitive is given by the Homeric $\kappa \eta \prime \rho, ~ c f . " S k t . k a r$ to kill, kāras death-stroke" (Curt. Ett. no. 53, p. 148, 5th ed.). Homer himself uses the negative adjective in the passive sense, aкグpıos = unharmed: Od. $\mu$ 98, $\psi 328$. There can then surely be little doubt that we ought either to restore кripıos to the text of Homer, or else derive кaipıos direct from the root $\kappa a \rho$. The latter alternative would best explain the homonymy of the two adjectives in later Greek; but I am not aware of any analogy on which we could account for the
 I therefore accept the former alternative. As the word кaı ós became common and к $\dot{\rho} \rho$ archaic in the sense of "death" but familiar as a personal name for the Fates, $\kappa \dot{\eta} \rho \iota o s$ became attracted by a false etymology into the form of кaipoos. A further result was that кaıpós itself came to be used-but I believe in only one extant passage-to mean "a deadly spot," ov̉ $\gamma$ àp és каıрòv $\tau v \pi \epsilon$ is è $\tau v \chi^{\gamma} \chi$ ave, Eur. Andr. 1120. This is no doubt a pedantic archaism, or archaisticism, on the part of Euripides; but it shews that we must not venture to restore к $\boldsymbol{\eta} \rho \iota o s$ in the tragedians for кaiplos in the sense of "fatal."

## A ZENODOTEAN VARIANT.


Schol. A. (Aristonikos) ötı Zquóסotos ypáфєє "òs vaîe $\Sigma a \tau-$







Dindorf follows Bernhardy and Düntzer in reconciling the
 very justly remarks (App. to Ameis' Il. on Z 34) that it would be more reasonable to read $\nu a i ̂ \epsilon$ in the second, as otherwise the accusation that Zen. made a false quantity would be obviously baseless: and that the scansion of $\nu a \hat{\imath} \epsilon$ as a pyrrhic was probably defended by the analogy of $\stackrel{\epsilon}{\epsilon} \mu \pi a i o s$ and other words. Still the explicit statement that Zenod. read ôs $\nu \dot{\alpha} \epsilon$ in N. deserves some consideration. For $\nu a ̆ \omega$ by the side of vaíw "to dwell" (root nas? Curt. Et. no. 432, Vb. I. 299) is just as possible as $\nu a ́ \omega$ by the side of vaí " to flow" ( $\iota 222$ ) (Curt. no. 443 : cf. $\nu \in \in(\omega$ for $\nu \in ́(\sigma)-\omega, V b$. I. 314).

It is therefore possible that the older reading was ôs $\nu$ áe, and that Zenodotos either suggested or adopted the alteration into the recognized form $\nu a i ̂ \epsilon$, so that there existed a variant, whether in his text or his glossary. The Aristarchean Scholiasts, who knew Zenodotos only at second hand, would be likely enough to confuse the two, and give us the inconsistent statements which we actually find.

## $\beta \rho \eta ิ \gamma \mu a$.

Schol. B. on E 586 (ed. Dindorf) says $\beta \rho \in \chi \mu$ òs $\lambda$ é $\gamma \epsilon \tau a \iota$
 ракоя äто́ттуүна.

The last words look as though they referred to the rim of the Homeric cuirass. But a reference to Hesych. shews that they mean something curiously different. We find there $\beta \rho \hat{\eta} \gamma \mu a$, àто́ттvбна àтò $\theta \omega$ 'ракоs тар' 'I $\pi \pi о к р а ́ т є є . ~ S o ~ G a l e n ~ p . ~ 452, ~$
 fact that $\beta \rho^{\epsilon} \chi \mu a$ and $\beta \rho$ é $\gamma \mu a$ are both found as synonyms of $\beta \rho \epsilon \chi \mu$ ós, it is clear that some words have dropped out of the last half of the Scholion, which we may conjecturally
restore in something like this shape: каì $\beta$ ре́ $\chi \mu a$ [ěvıo ${ }^{\prime 2}$ ס̀̀
 first mistake of $\gamma$ for $\sigma$ is due either to Schol. B himself or his editors, but he is not primarily guilty of the omission, for the Townleianus has $\beta \rho є \chi \mu o ́ \nu: ~ \beta \rho є ́ \chi \mu a ~ a ̀ т o ́ \pi т v \sigma \mu a ~ a ̀ \pi o ̀ ~$ $\theta$ ف́ракоя. In view of the attacks which have been made on the unfortunate Scholiast B, it is worth recording that his colleague has in this case given a less adequate excerpt from their common source, nor should we be led by his words to see the origin of the mistake.

B $\rho \hat{\eta} \gamma \mu a$, which looks like a mere blunder for $\beta \hat{\eta} \gamma \mu a$, is shewn to be right in Hes. by the alphabetical order; but it is not found in the present text of Hippokrates, nor is it recorded by Liddell and Scott.

## A LATIN INSCRIPTION FROM NICOPOLIS.

The inscription printed below is taken from a stone found during the English war-operations near Alexandria in 1801, brought home by Sir Eyre Coote, one of the officers in the English forces, and placed by him in the hall of his country house 'West Park' near Fordingbridge, where it still remains. Part has been published in a volume called $A$ journal of the late campaign in Egypt, by Capt. Thos. Walsh, aide de camp to Sir Eyre Coote (London, 1803, ed. I., see the engraving p. 130). Capt. Walsh seems to have been an accomplished man and interested in antiquities, but his engraving is, naturally, inaccurate and shews only half the inscription. The following copy, made at the request of Dr Mommsen, is, I hope, fairly correct, and as it is too late to be included in the new Ephemeris, may, perhaps, be allowed a place in the Journal of Philology. The stone is a marble cippus, almost perfect at the top, but with the lower part broken off, inscribed on the front and two sides (the back is fixed to the wall), in size about 25 in . high, $29 \frac{1}{2} \mathrm{in}$. across the front (i.e. in the direction of the letters), and 13 in . deep. It is well cut, and in good preservation, except that those who put it up at West Park levelled away an 8th half-line on the front given, in Walsh's engraving, and somewhat damaged the sides. I would here express my thanks to Eyre Coote, Esq., the owner, and C. J. Kennard, Esq., M.P., the present occupier of West Park, for their kindness in allowing and aiding me to copy the stone.

Front.
IMP. CAESARI
L. SEPTIMIO. SEVERO • PERTINACI AVG • PONTIF • MAX • TRIB • POI •II • IMP • III • COS • II • PROCOS • P • P.
5 VETERANILEG. II.TR.FORT.MISSI HONESTAMISSIONE • QVI. MILITARE COEPERVNT • APRONLANO ET PAVLo

8 cos
(QVIBVS ET PERPETVAM)*
(Spectator's) left side.
1 MARI FVSCIANI
TIVS C.F. PVP TERTVLLINVS PARAETONIO
VIVS T.F. COL MAXIMV $S$ CaESAREA
VS L.F. POL APPIANV $S$ CASTR
5 COE II
1 favstiniana
ONIVS L.F. COL VALERIANVS.ANTIOCH.TVB.
?
LIVS T.F. POL ALEXANDER.CASTR.
?
NIVS M.F. COL RVFVS NICOMED.
?
10 . S P.F. POL ISIDORVS THEBES
) AEMILI AMMONI
C.F. COL PRISCILLIANVS CAESAR. SIG

1 AVRELI ANTIGONI IVS M.F. POL CAPITOLINVS मF PRCAS (sic)
15 IVS M.F. POL SARAPAMMON TANI
: Paterniana
vS L.F. POL DIONYSIVS CAS
.......... DIANA
S C.F. POL DIOSCORVS CAS
20 . . ONILVCLANI
L.F. POL ISCHYRION CAS

COJH III
STI MACRONIS
AMMONIVS • ALEX. SIG
atalis
S ? OL DIONYSIVS CAS
.. OL SERENVS CASTR. TESSER
(centuria.).... A
POL • BASSVS. SAMASATÁ. Optio
L. MARCVS KASTRIS

ANTONINVS CASTR.

[^91](Spectator's) right side.
(centuria) ...IANA

NLIVS ? $\mathrm{F} \cdot \mathrm{PAPIRIVLIANVS} \mathrm{HAI} \mathrm{(rumeto)}$ COH $\overline{\mathrm{V}}$
) CELERIANA
5 M•GABINIVS •M•FIL • AMMONIANVS CASTR(is)
) FL•PHILLIPIANI
T•AVRELIVS •T•FIL•POL•CHAEREMONIANVS•CAST
C•VALERIVS • C •FIL • COL • APOLLINARIS • HIERAPOL ) SEVERIANA
10 M.AVRELIVS•POL•ISIDORVS ALEXANDR $(e a)$
C.POMPEIVS.C.F. POL.SERENVS • KASTRIS
) SERVILI PVDENTIS
P.AVRELIVS. POL PROCLION ALEXANDR
C.IVLIVS.C.F.POL GEMELLINVS CASTRIS

15 P.AELIVS •P.F.POL HERMIAS CASTRIS
T.AVRELIVS.T.F. POL. SARAPAMMON CASTR
T.FLAVIVS T.F.POL.APOLLINARIS CASTR
M.FVRFANIVS •M.F.COL LONGVS PARAETON(io) ) MARINIANA
$20 \mathrm{M} \cdot \mathrm{AVRELIVS} \cdot \mathrm{M} \cdot \mathrm{F}$ POL HERODES CASTRIS COH VI
) OCTAVI AVELLIANI
M. AVRELIVS POL FOCION ALE(xandrea)
M.AVRELIVS POL SARAPAMMON

25 M. AVRELIVS POL GERMANVS ) AVRELI FLAVIANI
L. HAPION •L•F • POL DEMETRIVS
) SECVNDIANA
M.AVRELIVS. POL APOLLOS CASTRIS

30 L.AVRELIVS.L.F.POL CHAEREMONIAN CAS
COH VII
) AELI LTBERALIS
C.VLPIVS C.FIL. COL.SOLON PHILADEL..
? ?
) BAEBI MARCELLINI
35 ?.CORNELIVS.C.FIL•POL•FIRMVS CASTR
M.IVLIVS M.FIL COL CARPOPHORVS
? •R ? ? ? ILIVS L•FH ARN CELER CARTHA . . • (?-gine)
? •IVLIVS C.F POL ISIDORVS CASTRIS
) CLEMENTIANA
40 ? AVRELIVS M.F.POL MA
C.IVLIVS C.F COL SERENVS

MA.....IVS M.F COL

The provenance of the stone can be fairly precisely fixed. Walsh says it was "dug out of the ditch of No. 1 redoubt on May 24, 1802" (a misprint for 1801), and near the ruins of Kasr Kiasera (p. 95). Kasr Kiasera or, as it is now spelt, Kaṣr el-Kayasere, is a Roman ruin on the narrow strip of land between Alexandria and Ramleh, about $3_{4}^{3}$ miles N.W. of the modern town of Alexandria and close to the sea; it was a part, seemingly, of Nicopolis. A description of it is given e.g. in Murray's Handbook, to which one need only add that, in 1801, according to the histories, its walls were high enough to be used as a shelter for troops, notably in the battle of March 21, when Abercromby was killed. "No. 1 redoubt" was 200 yards west of shis ruin, the walls of which were, it is said, used some twelve years ago in building a Khédivial palace near.

The inscription, which needs no explanation, may be compared with C. I. L. 3. 13 and 14, of which the former was put up in 176 to M. Aurelius by the tribunes of the same legion II. Traiana fortis, the latter in 199 to Severus by the Decuriones alares veteranae Gallicae et I Thracum Mauretanae. It itself dates from 194 A.D. For other inscriptions from Nicopolis which mention the same legion see Eph. II. 326 foll. The list of names seems to contain few unknown before. Chaeremonianus has kindred in Xaıprimev (C. I. G. 4736 \&c.), Proclion may be formed from Proclus like Caesarion or $\Gamma a i \omega \nu$ from Gaius (C. I. G. 4931, Philae). For Sarapammon see the Egyptian inscriptions C. I. G. Add. 4716. d., 4832 ; for Focion compare Filippus C. I. L. 3. 1707 , Afrodite 10. 2154 \&c.; for Hapion, ' $\mathrm{A} \pi i \omega \nu$ in C. I. G. 4932 (Egypt); Ischyrion C. I. G. 4700 l. The importance of the inscription in the military history of Roman Egypt is not small. It will, I believe, be treated before very long by Dr Mommsen, but one or two obvious points may be noted. The Egyptian legions seem to have been recruited chiefly from Egypt. Those "born in camp" were generally, if not always, assigned to the tribe Pollia, while their numbers in this inscription suggest something tending to a military caste. The large proportion of Aurelii may perhaps be explained by the fact that Aurelius was emperor in 164, the year when these veterans enlisted (see line 7 , front).

I may, perhaps, be allowed to add that, with the stone, there is kept at West Park a marble bust brought with it from Alexandria. It is beardless, has an "aegis" on the chest, and a lion's skin on the head, and is perhaps the head of a Roman emperor ${ }^{1}$. Walsh gives (Journal, ed. 2, Appendix, p. 133) a list of antiquities found in Egypt and sent home in the care of Capt. T. H. Turner. They are chiefly Egyptian, but include some " oriental Mss," and "two statues, white marble, supposed to be Severus and Marcus Aurelius, found in Alexandria." It would be interesting to know if these are now in any museum, or lying hid in some private house.

## F. HAVERFIELD.

${ }^{1}$ Michaelis has no notice of it.

## NOTE ON EXODUS IX. 31, 32.

1. All over Egypt it is common to raise at least two crops of barley-shitawí and seifí. See Lane, Modern Egyptians, ch. xiv., from which it will be seen that the seifí or summer crop is sown about the vernal equinox or later, and so has no bearing on the text before us. Dr Grant-Bey of Cairo, who has kindly made a series of enquiries for me among natives and Europeans who know the country parts of Egypt, says however that in the Sharkíya district there are sometimes three crops of barley, and about Manșūra and in the Gharbíya even four. What follows refers to the winter crop (shitawí).
2. The date of the harvest varies greatly in different parts of Egypt. From the Rev. Mr Harvey of the American mission Dr Grant got the following dates, applicable to the country south of Cairo:
(a) The barley is in ear from the latter part of February to 15 th March.
(b) The flax is in flower from January 10th and in seed from February 15th.
(c) When the barley is in ear the ears of wheat begin to form, but the grains are in a milky state.

The difference between upper and lower Egypt is about 35 days.
3. Rev. Dr Lansing of Cairo visited the region of Zoan in the first part of May, 1880, and found the farmers reaping barley while the wheat was nearly ripe. But he was told that the crops were at least a fortnight later than usual.
4. I have before me an Arabic letter to Dr Grant-Bey from a farmer in the district of Kalyúb, a little north of Cairo. The following is a transcript of part of it.

"The barley is in ear in the beginning of January, and the flax blooms in the middle of January, and the seed is found in it in the beginning of April. When the barley is in ear the wheat is green herbage ; but the seasons vary as I told you."

As the date when the flax blooms is almost the same in this statement as in Mr Harvey's it is plain that Mr Harvey is thinking of an earlier stage of the seed capsule, when he speaks of February 15 th, than the native writer has in view when he says that the bize or seed-grains are found in the beginning of April. On the other hand it is pretty plain that Mr Harvey's statement about the barley refers to the full ear, when harvest is about to begin. The letter of the native farmer gives what we want, for he speaks of the state of the barley when its ear is formed, but not that of the wheat. And at that time the flax is in flower, which appears to determine the sense of :בּבְ:.

W. ROBERTSON SMITH.

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[^0]:    ${ }^{1}$ Compare for instance Mr Cope's
    
    
    
     חє $\rho \sigma t_{5}, \mathrm{~T} \tilde{\eta} \lambda \epsilon \phi$ os, Suidas. He is omitted in Wagner's collection, Fragm. Trag. Gr. vol. III. We learn from Poet. II 5 , that his subjects and characters were neither above nor below the level of ordinary, every-day, life and character. To the same effect it is stated in Poet. xxII 1, that his style was low or humble, $\tau \alpha \pi \epsilon \iota \nu \dot{\eta}$, and devcid of all poetical ornament. Gräfenhan, ad loc. II 5. Id. ad Poet. XxII 1, 'qui humili dictione imitabatur vulgares mores.' To Suidas' list of 10 tragedies
    must be added the Mavópó $\beta$ ovios, de Soph. E1. 15, 174 b 27, oLov ó K $\lambda \epsilon \circ \phi \hat{\omega} \nu$
     quoted in illustration of a mode of argument."
    ${ }^{2}$ On the form $M \alpha \nu \delta \rho \delta \beta o \lambda o s$ see Meineke F. C. G. 5, p. 44. Letronne, Mém. de l'Institut, Acad. des Inscrip-
     with $\Theta$ có $\beta$ oùos, and concludes that, as the first half of the word is found in a number of Asiatic Greek names (e.g.
     $\delta \rho o s$ or Mávoj $\alpha$ must have been the name of some Phrygian or Carian deity. Fiok, Personennamen, p. 53, connects the name with $\mu \alpha \nu_{\delta} \rho a=$ fold.

[^1]:    ${ }^{1}$ See Sir A. Grant's note on Eth. Nic. vi. 13, 3.

[^2]:    ${ }^{1}$ In an ordinary writer one would be tempted to bracket the clause $\epsilon v$
     interpolation partly because of its inconsistency in point of form with what follows, and partly because we have an 'Aptartrtos-doubtless the same book-later on in the list. Dio-

[^3]:    ${ }^{1}$ II. II. 681, xvi. 233. The Pelasgians of Mysia (II. 11. 840-43) may also have been a genuine people.

[^4]:    ${ }^{1}$ 1. 171. Pherekydês (Frag. 111) the older contemporary of Hêrodotos, is the first writer who agrees with Homer.

    2 The other passages in which Minôs is mentioned are ; II. xIv. 450 (where his grandson Idomeneus fights among the other Greek heroes), Od. xi. 322,

[^5]:    ${ }^{1}$ Cf. especially Od. Ix. $391-3$, which shows how common iron implements must have been.
    ${ }^{2}$ Philologische Rundschau xv. 1881. Thus, he urges, the Pæan is known both as a prayer and as a song of victory (II. I. 472, xxil. 391) ; so, too, are the hyporkhêma (II. xvir. 597), the Hy-

[^6]:    ${ }^{1}$ Adolf Michaelis, De Auctoribus quos Horatius in libro de Arte Poetica secutus esse videatur (Kiel, 1857), thinks

    > the maxims of Horace's treatise too lucid to have proceeded from Alexandria.

[^7]:    1 This is Preller's convincing interprotation of the passage: see Orelli's Horace, Excursus iv to the de Arte Poctica.
    ${ }^{2}$ I follow Acron in explaining com-

[^8]:    munia to mean unclaimed. Quamdiu a nullo sunt acta vel dicta, singulis aeque patent: ut domus aut ager sine domino communis est.

[^9]:    ${ }^{1}$ He may be transcribing, but hriefly and carelessly, from the same treatise as that used by Terentianus Maurus 2181 foll., Marius Vietorinus p. 80 (Keil), and Plotius Sacerdos p. 517. The fullest account of the matter is that of Victorinus. Igitur iambicum metrum ne propter angustam brevitatem sui pedis, videlicet in tria tempora coartati, verba plura excludendo minus apte aut metrum pangeret aut sensum exprimeret, placuit conditoribus adscito spondeo et quae ex eo per divisionem tempora gignuntur per dipodias id scandere...Trimetri igitur iambici acatalectici genera sunt quattuor: quorum prius tragicum, dehinc comicum et iambicum, post satyricum habebitur. Et tragicum quidem, cuius in versu erunt dextri spondei, sinistri iambi, id est disparibus pares subditi: huius exemplum

    Musae Iovem laudate concentu bono.
    Comicum autem quod anapaestum et tribrachyn praedictis admiscet, ut
    agite agite quid dubitatis agiles dare choros.

[^10]:    ${ }^{1}$ Acron on v. 311. Menander cum iam fabulam disposuisset, etiam si nondum versibus adornasset, dicebat se tamen iam complesse. "Und wenn's euch Ernst ist, was zu sagen, Ist nöthig Worten nachzujagen?"

[^11]:    2 The ancient commentators here and Philargyrius on Eclogue 9. 35 agree in referring the words nonumque prematur in annum to the nine years spent by Helvius Cinna in the composition of his Zmyrna.

[^12]:    ${ }^{1}$ Quo vitio minime tenebatur. Suetonius, Roth, p. 298.

[^13]:    ${ }^{1} 1$ Epist. 19, 23.

[^14]:    ${ }^{1}$ It is to be observed that Plato speaks first of a cycle of $\phi o \rho \dot{\alpha}$ and áoopla, then of éjovia and $\dot{\alpha} \phi o p i a$, lastly of $\alpha \mu \epsilon \iota \nu \hat{\nu} \nu \omega \nu$ каl $\chi \epsilon \iota \rho o ́ \nu \omega \nu ~ \gamma \epsilon-$ $\nu \epsilon \sigma \epsilon \omega \nu$. These variations seem to me to shew that he had no very clear idea as to the working of his theory.

[^15]:    ${ }^{1}$ The word $\stackrel{\omega}{\omega}$ seems to me hardly capable of translation in Aristotle and is retained only to identify the quotation. In Plato, of course, it is very important.
    ${ }^{2}$ Hermann, Indices Lectionis, 1839;

[^16]:    ${ }^{1}$ This interpretation, which I think is right, is founded on a passage of Theon Smyrnaeus (De Arithm. c. 31. pp. 43-45 of Hiller's ed.). Theon there shows that the diagonal ( $5 \sqrt{ }{ }^{2}$ ) of a square, of which the side is 5 , is so nearly 7 that 7 may be taken as the rational diameter ( $\dot{\rho} \eta \tau \eta ̀ \eta$ סıá $\mu \epsilon \tau \rho o s$ ) of the figure. d $\rho \iota \theta \mu \mathrm{ol}$ dimò is an ordinary expression of Greek mathematicians for "the square of." The words éкало̀े $\mu \dot{\epsilon} \nu \dot{\alpha} \rho \iota \theta \mu \omega \hat{\omega}, \ldots \delta \delta \in \in \hat{\nu} \nu$ are therefore translated "a hundred squares of the rational diagonal of 5 , minus 1 each ( $100 \times$ $(49-1)=4800)$ or of the irrational diagonal minus two $(100 \times(50-2)=$ 4800." The passage in Theaet. 147 D

[^17]:    1 A cube, he goes on to say, has 12 edges, 8 cormers and 6 sides and $12,8,6$ are in harmonic proportion: cf. Simplicius in Ar. de Anima, 409 b. 23
    
     $\pi a \rho a ́ \delta o \sigma v$, followed by the same explanation. See also Böckh. Philol. 87.
     (Gorg. 508 A ) and Aristotle's d $\rho \iota \theta \mu$ òs lodikts loos (Magn. Mor. I. 1) both refer to 8 , the Pythagorean symbol of justice.

[^18]:    ${ }^{1}$ є̇ $\tau \epsilon \rho о \mu \dot{\eta} \kappa \epsilon \iota s$. This means specially oblongs of which one side is greater by unity than the other.
    ${ }^{2}$ Zeller Ph. Gr. I ${ }^{2}$. p. 253 n.

[^19]:    3 The merit of this number is that it is said by Anatolius (Theol. Arithm. p. 41) on authority to be the period of the metempsychosis.

[^20]:    ${ }^{1}$ This is attributed to Philo, but Schneider rightly points out that Philo only calls $50 \tau \hat{\eta} s \tau \hat{\omega} \nu$ ö $\lambda \omega \nu \nu \bar{\gamma} \boldsymbol{\epsilon} \epsilon \sigma \epsilon \omega s$
    á $\rho \chi \dot{\eta}$, without reference to Plato.
    (Vita Mosis.int. 666. в. ed. Paris, 1640.)

[^21]:    1 The operation may be put also in this way, $(3 \times 4 \times 5)\left(1^{3}+2^{3}+3^{3}+4^{3}\right)=$ 6000.
    ${ }^{2}$ Cf. Theon Smyrn. De Mus. c. 45 , p. 102 ed. Hiller) $\dot{o} \delta \epsilon{ }^{2} S \tau \epsilon \lambda \epsilon \iota o s, ~ \grave{\epsilon} \pi \epsilon \iota \delta \grave{\eta}$
    
    
    

[^22]:    $\tau 0 \hat{s}$ रovê̂ $\iota \iota$. I owe this quotation to M. Tannery's article on Plato's number in Ribot's Révue Phil. for 1876. The same writer seems to take $\dot{\alpha} p \mu o \nu i a$ as I do, but alters the text and is otherwise violent to the last degree. The number which he selects is 2700 .
    ${ }^{3}$ A perfect number is one which is

[^23]:    equal to the sum of its divisors as 6 $(=3+2+1), 28(=14+7+4+2+1)$,
    $+2+1$ ). See Eucl. ix. 36 and the last def. to Bk. VII.

[^24]:    ${ }^{1}$ See also Tibetan tales by Schiefner and Ralston, pp. 29-36 and Introduction pp. xxxix-xlii.

[^25]:    ${ }^{1}$ I.e. four arising out of his own conduct, and ten which he had been commissioned to refer.

[^26]:    ${ }^{1}$ By gazing intently on some object until a kind of mesmeric trance is produced. See Childers s, v. kasino.

[^27]:    ${ }^{1}$ Whose business it is to see that every one does his or her duty.
    ${ }^{2}$ For the idea of a treasure giving power, cp.Benfey'sPanchatantra,Vol. I, p. 320, Vol. II, p. 178; the 39th Já-
    taka, page 322 of Rhys Davids' translation; and my translation of the Kathá Sarit Ságara, Vol. r, p. 126.
    ${ }^{3} \mathrm{Cp}$. Weckenstedt's Wendische Märathá Sarit Ságara, Vol. r, p. 126.
    ${ }^{3}$ Cp. Weckenstedt's Wendische Märchen, p. 25.

[^28]:    ${ }^{1}$ This was pointed out to me by Prof. Cowell. I find however that I
    had long ago noted it in my copy of Rhys Davids' Buddhist Birth Stories.

[^29]:    ${ }^{1}$ It would be easy to parallel the "caput arsisse ferunt multorum in conspectu" of Livy from Indian Tales. In the 45th Taranga of the Katha Sarit Ságara, a flame having the brilliancy of ten thousand suns issues from the

[^30]:    head of the Bráhman Kála. In Burnouf's Lotus de la Bonne Loi, p. 4, we have a similar flame darting forth from the circle of hair between the eyebrows of Buddha.

[^31]:    1 The force of quoque must not be forgotten. It refers to the preceding illustrations of free-will action in men and animals. It means "in atoms as well as in human beings."
    ${ }^{2}$ Is motibus "for their movements" i.e. for the movements of the atoms, or "for our movements"? "For their movements" though less plausible is

[^32]:    ${ }^{1}$ So far as we know, no ancient authority speaks of a third. Cf. Plutarch, De Plac. Ph. 1. 23. 4.' Etikovpos ס̀vo elò
     кãd̀ $\pi a \rho \epsilon ́ \gamma \kappa \lambda \iota \sigma \omega$. Plutarch repeats this at r .12.

[^33]:    ${ }^{1}$ At p. 319 Professor Sellar says: "A secret faculty in the atoms, distinct from their other properties, is assumed. Thus he says

    > At primordia gignundis in rebus oportet naturam clandestinam cæcamque $\begin{array}{ll}\text { adhibere. } & \text { I. } 778-9 . "\end{array}$

[^34]:    and that 1. 778-9 means, as Mr Munro has shewn, merely that the atoms must not possess any secondary qualities such as colour, the expressions used by Professor Sellar are not consistent with Lucretius' system. His atoms possess no properties apart from those which he assigns them; figure, perfect hardness, \&c. and also FreeWill. How then can we find room within the rigid four walls of Epicureanism for anything like a vital agency, either as working in Nature or as finding expression in the laws of Nature? Instead of this, how often does Lucretius tell us that the origin and the maintenance of the world and its life

[^35]:    is due to a mere coincidence among the atoms?
    ${ }^{1}$ See Journal of Philology, Vol, xi. p. 46, and note, where all the refer-

[^36]:    ences to fatum are collated. Cf. especially v . 309 , 310 , where fati finis, "the limits of fate", evidently refers to the same thing as naturae foedera.

[^37]:    ${ }^{1}$ Throughout this paper account is taken, in statistics and elsewhere, of extant tragedies only, exclusive of fragments. The inclusion of the fragments would have made no difference to the result, but the nature of the questions investigated is such that disturbance in the order of words vitiates for the present purpose the

[^38]:    1 The adverb $\mu a{ }^{\lambda} \lambda \alpha$ ought perhaps to be regarded as an exception to this rule, as it is elided regularly before the word which it qualifies. This, however, as will be seen hereafter, may be justified on general principles, and

[^39]:    ${ }^{2}$ Excluding $\sigma a ́ \phi a$ and $\tau a ́ \chi a$ as to which see below.

[^40]:    1 I make here a wide allowance for inadvertence on my part，or difference of opinion on particular cases．The
    true figures are approximately 360 to 10.

[^41]:    ${ }^{1}$ See however what is said below as to ${ }^{\epsilon} \mu \boldsymbol{\mu}$.

[^42]:    ${ }^{1}$ Both admit of the very simplest corrections- $\epsilon \mu \hat{\eta} \delta \dot{\eta}-\eta ँ \kappa \epsilon \iota s \sigma^{\prime} \mu$.

[^43]:    ${ }^{1}$ Three, perhaps the only three, elisions of $\xi \in{ }^{\prime} \nu \in$ (Soph. O. C. 577, 824, 1206) are followed one by $\epsilon \xi \omega$, the others by the conjunction $\epsilon$ l. Perhaps
    the final vowel was not quite elided but merged in the succeeding vowel or diphthong.

[^44]:    ${ }^{1}$ Cp. Soph. Ai. 1122, O. C. 647, 1746, afterwards cited.
    ${ }^{2}$ We may compare the case of the adverb $\mu \dot{d} \lambda a$, which is almost always elided. Nearly all these elisions are
    before a verb, or adjective, or adverb with which $\mu \alpha{ }^{\prime} \lambda \alpha$ enters into combination, and many occur in set phrases, such as $\mu \mu^{\prime} \lambda^{\prime} \alpha \hat{v}, \mu \mu^{\prime} \lambda^{\prime}$ at̂ts. ou $\mu \dot{d} \lambda a$ is elided in Aesch. Pers. 384.

[^45]:    ${ }^{1}$ This example is subject, however, to some doubt as to the reading. See
    ${ }^{2}$ See the place cited in the previous note. the Addendum to my larger edition.

[^46]:    ${ }^{1}$ The Medea affords good illustrations of Rule 2. Contrast 901, 969, 1029 , with $88,117,1000$.

[^47]:    ${ }^{1}{ }^{\text {ön }} \tau^{\prime}, \tau o \tau^{\prime}, \pi o \tau^{\prime}, \tau \iota \nu^{\prime}, \tau\left\langle\nu^{\prime}, \nu_{\nu}^{\prime}\right.$, and $\tau a ́ \chi^{\prime}$
    Auctor Rhesi. " $\tau$ ' has been introduced ${ }_{a} \nu(138,560)$ are admitted even by the by conjecture in 464 .

[^48]:    ${ }^{1}$ Appendix VII. to vol. IV. of the 2nd ${ }^{2}$ Of these Forchammer is the edition. Bishop's favourite aversion.

[^49]:    ${ }^{1}$ See the remarks of Callicles in the
     ăvōpa roûtov ท̀ $\beta$ l $\beta \lambda \iota o \nu$ סlé $\phi \theta o \rho \in \nu$ "H

[^50]:    ${ }^{1}$ This passage is supposed to refer to Euripides by Fritzsche, Comment. ad 1. 1. This, if true, is the only passage in which Euripides is represented
    as a Socratic by a contemporary : and I confess the reference seems to me as doubtful as that to Aeschylus in the choral lines immediately preceding.

[^51]:    ${ }_{1}$ We are told that this line did not appear in the first edition of the play. But only a year elapsed between the two performances, and in the year 422 there was no question of a $\gamma \rho a \phi \eta$ $\dot{\alpha} \sigma \in \beta \in \mathfrak{l}{ }^{\prime}$ as against Socrates.
    ${ }^{2}$ In Symp. 193 A is an allusion to an event which occurred B.c. 385. But according to one at least of his biographers, Aristophanes died shortly after the acting of the second Plutus, which was produced b.c. 387.
    ${ }^{3}$ Plato's admiration for the poet's genius is traditional, as appears from

[^52]:    ${ }^{1}$ With one exception, if he was 'a great scholar,' the wellknown Richard Dawes.

[^53]:    ${ }^{1}$ Philosophische und Vermischte Schriften，Band n．

[^54]:    ${ }^{1}$ The passage in Aesch. Suppl. 784, where äфикरov seems to have this active sense, is now admitted by all edd. to
    be corrupt. Dind. suggests ä $\theta$ ckтovalii alia.

[^55]:    ${ }^{1}$ Fritzsche，I find，has proposed this transposition，but he has not deduced
    the necessary inference that a line after el $\pi \epsilon \nu$ is lost．

[^56]:    1 The following note of Bentley＇s is given by Kuster in his edition of Aristoph．1710．＂Elegans hujus loci sententia plane obfuscata est a men－ dosa lectione．Ego，inquit，hoc opina－ tus sum（Dinum sc．Jovem expulisse） propter huncce Dinum．＇Quid，malum，

[^57]:    ${ }^{1}$ These are variously enumerated by Buddhist authors. Burnouf, in his translation of the Saddharma Pundarika, gives two lists. The first is from the Saddharma itself, a Northern Buddhist work, and runs as follows:-

    1, gold; 2, silver ; 3, lapis-lazuli ; 4, crystal; 5, red pearls; 6, diamond; 7, coral. The second is from a Southern Buddhist source ; 1, gold; 2, silver; 3, pearls; 4, all kinds of precious stones; 5, lapis-lazuli ; 6, diamond ; 7, coral.

[^58]:    ${ }^{1}$ The commentator tells us that the Bráhman was called Vedabbha because he knew a spell named Vedabbha-Ve-

[^59]:    ${ }^{1}$ Founded on a paper read before the Oxford Philological Society, Feb. 1882.

[^60]:    ${ }^{1}$ These passages sufficiently dispose of the assertion of Schömann (Schediasma de Epicuri Theologia, Opusc. vol. 4, p. 346) that $\lambda \dot{\gamma} \gamma \varphi$ 日є $\theta \rho \eta r o u$ s

[^61]:    1 The words $\kappa \alpha \tau^{\prime} \dot{\alpha} \rho \iota \theta \mu \delta \nu$ are used in a different connection in an unpublished Herculaneum roll (no. $19 \pi \epsilon \rho l$ ai $\sigma \theta \eta \sigma \epsilon \omega s$ ) where, by comparing the Oxford copy (p. 5), the Naples unpublished copy (col. 3) and the (now very

[^62]:    ${ }^{1}$ Many editors have put the semicolon after the clause " sed imaginibus r.perceptis," instead of before it; but this is objectionable, firstly because it makes it necessary to alter the text by the insertion of que or some other conjunction after cum; and secondly, because in Cotta's paraphrase in § 105,
    the corresponding clause, "eamque esse ejus visionem ut similitudine et transitione cernatur," is connected grammatically with what follows, and not with what precedes. Hirzel and Mayor are right, therefore, in putting the main stop before "sed imaginibus."

[^63]:    ${ }^{1}$ Philod. $\pi \epsilon_{\rho} i \quad \theta \epsilon \omega \hat{\omega} \nu \delta a \gamma \omega \gamma \hat{\eta}$, Nap. Col. 14. But it would be unfair to
    make Epicurus responsible for all the inanities of Philodemus.

[^64]:    ${ }^{1}$ Lucretius, though he does not use the word loovoula, lays great stress on the thing, in this application ; e.g. 2. 569 sq. " Nec superare queunt motus itaque exitiales | perpetuo, neque in aeternum sepelire salutem, | nee porro rerum genitales auctificique | motus perpetuo possunt servare creata. | Sic aequo geritur certamine principiorum |
    ex infinito contractum tempore bellum," etc. (Cf. also Lucr. 2. 522, on the distribution of animals.) By the auctifici motus we must understand the accretion of constituent atoms to a body in the process of growth; and by the motus exitiales, their excretion or separation from it in the process of decay.

[^65]:    1 This objection is urged by Cotta in Cic. N. D.: e.g. $\S 68$ " sint sane ex atomis; non igitur aeterni. Quod enim ex atomis, id natum aliquando est;... et si ortus est deorum, interitus sit necesse est." And more in detail, § 114: " nee tamen video quomodo non vereatur iste deus beatus ne intereat, cum sine ulla intermissione pulsetur agiteturque atomorum incursione sempiterna, cumque ex ipso imagines semper affluant." Munro, on Lucr. 5. 152 , gives a string of similar objec-

[^66]:    1 Except the Volumina Herculanensia, in which I hope to shew that many traces of it are to be found. Had Diogenes been our only authority on Epicureanism, we should have known nothing of the declinatio atomorum. This is enough to shew how little completeness is to be expected in such popular summaries.
    ${ }^{2}$ Lucr. 5.155.
    ${ }^{3}$ Zeller (Stoics and Epicureans, Eng. tr. p. 466 n .) is alone in translating $e x$

[^67]:    ${ }^{1}$ P. 148: "assuming then, as we apparently may, that either Epicurus himself or some of his followers ac-
    knowledged a divinity of a more spiritual type, distinct from those of the intermundia," etc.

[^68]:    ${ }^{1}$ Cf. Cic. N. D. 1. 73: "quid est in physicis Epicuri non a Democrito?" etc.
    ${ }^{2}$ The doctrine of $\pi a \rho \dot{\ell} \gamma \kappa \lambda \tau \sigma \iota s \dot{a} \tau o ́ \mu \omega \nu$ is a typical instance. Epicurus had two reasons for introducing this doctrine. It was needed partly in order to bring the atoms into contact, as the necessary complement of their motion in downward parallel straight lines under the action of gravity, this account of their motion being probably

[^69]:    adopted by Epicurus in deference to the criticism of Aristotle, that Democritus had not explained to what force the indiscriminate motions of his atoms were due (Ar. Metaph. 1. 4.985 b. 19, and 1071 b. 32 : De Caelo 3.2. 300 b .8 ) : and in the second place, the declinatio was needed as a means of saving for ethical purposes the principle of free will and human responsibility. (Lucr. 2. 251-293 : Cic. N. D. 1. 69.)

[^70]:    ${ }^{1}$ See Plut. Plac. 1. 7. 13: Sext. Emp. adv. Math. 9.19 : Cic. N. D. 1. 120 : Clem. Alex. Strom. 5. 85.
    ${ }^{2}$ Hegel (Hist. Philos. ed. Michelet, pt. 2, Opp. xiv. 507, commenting on D. L. x. 139) says the Epicurean gods (or one class of them) are a universal or ideal of humanity, formed by a conflux of like images [presumably coming off from individual men.] He explains the second part of the passage thus :". Theils sind sie (andere) das vollendete Menschenförmliche, .. was entsteht aus dem continuirlichen Zusammenfluss der gleichen Bilder auf eins und

[^71]:    ${ }^{1}$ It must have been to avoid a similar misconception that the authority quoted in Plut. Plac. 1. 7. 15 (see
    above) specified al o $\mu o t o \delta \eta \tau \epsilon s$ as a fourth kind of imperishable being, by the side of $\tau \dot{\alpha}$ äто $\mu \alpha, \tau \delta \kappa \epsilon \nu \partial \nu$, and $\tau \grave{\partial} a ̈ \pi \epsilon \iota \rho о \nu$.

[^72]:     are quoted from Epic．ad Herod．，ap．
    

[^73]:    ${ }^{1}$ Duening, on Metrodorus, p. 42, asks the same question, and admits

    The explanation which he does suggest is most inexplicable.

[^74]:    1 The same subject is apparently discussed in $\pi \epsilon \rho \mathfrak{\epsilon} \boldsymbol{\cup} \sigma \epsilon \beta$. pp. 114-5.
    ${ }^{2} \dot{\rho} \nu \mu \beta$ оу $\omega \mu \epsilon \nu$ оs seems to be one of the few words rightly restored by the Naples editor. He reads the next word $\dot{\alpha} \pi a \nu a \rho \iota \sigma \tau \dot{\eta} \tau \omega s$, " without his breakfast"!-a state of things, as he

[^75]:    ${ }^{1}$ tò̀ al̂̂va needs explanation.

[^76]:    ${ }^{1}$ In 1．8，we must begin by discard－ ing the Naples reading CTEP€MNION， which must be due either to a＂sovra－ posto＂that has since dropped off，or to unusual carelessness on the part of the transcriber．The original is here quite clear，and gives тоוс $\theta €$ $\qquad$ ． N ．
    ${ }^{2}$ Cf．Lucr．5．153：＂Sedes quoque （of the gods）nostris sedibus esse dis－ similes debent，tenues ceu corpora eorum．＂

[^77]:    ${ }^{1}$ The Oxford facsimile disposes of the too ingenious кג̉入voiót ${ }^{2} \eta$ s of the Naples edition.

[^78]:    * The thick type denotes the English mss collated by Mr Swainson in my edition.

[^79]:    * 'Mus.' denotes the consensus of the ass in the Biitish Museum.

[^80]:    ${ }^{1}$ Combining this passage of Lucretius with the strange Excreante of Gloss. Phillipps I think it possible that Lucretius alluded to a current, though ridiculous, etymology of excetra quasi excreata 'the spat-out,' i.e. the creature killed by spittle. Excreante might thus represent an original excreata. It can

[^81]:    ${ }^{1}$ Arrian does not distinctly name the city.

[^82]:    ${ }^{1}$ I have somewhere seen them identified.

[^83]:    ${ }^{1}$ See Pihan, Exposé des Signes de Numération etc. pp. 25-41, 162-168.
    ${ }^{2}$ C. I. G. Vol. II. no. 2919, p. 584. Franz, Epigr. Gr. p. 347.

[^84]:    ${ }^{1}$ Printed by Stephanus in the $A p p$. Glossariorum to his Thesaurus.
    ${ }^{2}$ For Bœotia generally, see Franz Epigr. Gr. App. II. ch. 1, p. 348. C.I.G. Vol. 1. nos. 1569, 1570. For Arcadia, Lebas and Foucart, Insscr. de Pélop. no. 341 e. A Rhodian inscription, dated by Mr Hicks about 180 в. c., will
    be included in the forthcoming volume of British Museum Inscr. One from Erythrae, near Halicarnassus, cir. b.c. 250 in Révue Archéol. 1877, Vol. 33, p. 107 sqq. Vide Curtius in Bursian's Jahresb. for 1878.
    ${ }^{3}$ See Ritschl, Die Alexandrin. Bibliotheken, pp. 90, 100, 123 n.

[^85]:    ${ }^{1}$ See, for instance, Nesselmann, Algebra der Griechen, pp. 74-79. Cantor, Math. Beitr. pp. 115-118. Vorles. 1. pp. 101-107. Friedlein, Zahlzeichen, p. $9 \S 12$ etc.
    ${ }^{2}$ The ordinary forms of the Phoenician numerals are upright strokes for units: a horizontal stroke for 10: \& for 20 and $|<|$ for 100. See Pihan supra cit. and Schröder Phönik. Spr.
    ${ }^{3}$ Madden, Coins of the Jews, p. 67. Also Dr Euting's letter quoted by Hankel Zur Gesch der Math. p. 34.

[^86]:    ${ }^{1}$ Hitzig, Die kleinen Propheten p. 378 sqq., cited by Cantor, Vorles. 1. p. 87.
    ${ }^{2}$ Cf. Siegfried's Philo p. 330.
    ${ }^{3}$ Ewald and Nordheimer, in their Hebrew grammars, both state, without more, that the Hebrew alphabet was used for numerals "after the Greek fashion," and that this style does not appear till a late time.

    4 The later Hebrew alphabet has 5 final forms (cf. Greek $\sigma$ and s), which were also used for the numbers 500 900. But the square Hebrew characters, which alone have finals, did not come into use till the 1 st or 2 nd century

[^87]:    ${ }^{1}$ See the charts appended to Kirchhoff Zur Gesch. des Griech. Alphabets, 3rd Ed., and pp. 157- 160 of the text. Such transeripts as that in Hicks, Gr Hist. Inscr. no. 63, p. 117 sqq., are misleading. Theoriginal of this (see Rhein. Mus. 1871, p. 39 sqq.) has neither $\eta$ nor $\omega$. Obs, that the Ionic alphabet was not adopted in Athens till 403 в.c. though it was in use in Asia some 60 years earlier.
    ${ }_{2}^{2}$ The Greek $\sigma d \dot{ } \nu$, Herod. I. 139,

[^88]:    ${ }^{1} \mathrm{Mr}$ R. S. Poole showed me the Ptolemaic coins at the British Museum.

    2 It will be remembered that the Jewish evidence begins also with coins.
    ${ }^{3}$ Now at Leyden, no. 379. Sec

    Robiou, quoting Lepsius in Acad. des Inscr. Suj. Div. 1878, Vol. Ix.

    4 The $\kappa$ on some coins of Ptolemy I. (Soter) and the double signs AA, BB, etc. on those of Arsinoe Philadelphi are of doubtful signification.

[^89]:    ${ }^{1}$ C.I. G.Vol. Iv. pt. xxxix., no. 6819.
    , No. 6804 was clearly not written at the dates which it mentions.

    2 C. I. G. Vol. II. no. 2655, Franz, Epigr. Gr. p. 349.
    ${ }_{3}$ The Levantine inscription no.6819, mentioned in a previous note, and many more have the numerals in their alphabetic order, e.g. $\overline{\eta \kappa}, \overline{\zeta \kappa}$ for $28,27$. The coins of Ptolemy II., mentioned in

[^90]:    ${ }^{1}$ (Since the above was in print I have found that Bekker has made the same remark, Hom. Bl. ii. 37, but the Edd. have strangely ignored it).

[^91]:    * 1. 8. Quibus et perpetuam is given in Walsh's print, but has now been cut off. The names of the soldiers of cohort I. must have begun on the lower part of the front.

