

## NOTES ON THE TEXT, LANGUAGE AND CONTENT OF SOME NEW FRAGMENTS OF PELAGONIUS

### 1. INTRODUCTION

The *Ars Veterinaria* of the fourth-century writer Pelagonius has hitherto been known only from the MS. Florence, Bibl. Riccardiana 1179 (*R*), a codex copied in 1485 for Politian from an early (lost) manuscript. Apart from this there have only been some palimpsest fragments from Bobbio.<sup>1</sup>

Recently, however, P.-P. Corsetti has made the remarkable discovery of another manuscript of parts of the work.<sup>2</sup> Corsetti has demonstrated that the MS. Einsiedeln, Stiftsbibl. 304 (514), s. VIII–IX (*E*), which was previously recognised as having a Latin translation of Galen, *Ad Glauconem de medendi methodo* (pp. 4–181), also contains substantial sections of Pelagonius (pp. 182–233). By one of those curiosities of scholarship, E. A. Lowe chose to reproduce part of p. 209 of this manuscript,<sup>3</sup> without identifying the author. The manuscript was also examined in 1857 by Charles Daremberg and transcribed in full for him by Henri de l'Épinois,<sup>4</sup> but on this occasion too the writer went unrecognised.

*E* transmits only a part of the *Ars* as it appears in *R*,<sup>5</sup> but a significant feature is that it provides a number of new passages, some of them previously known from the Greek translation of Pelagonius.<sup>6</sup> Corsetti prints a text of these passages (which occupy some six pages) in his article (49–56), with numerous emendations and annotations (including *testimonia*). He also promises (43) a second article on the significance of *E*.

It remains to be seen what light *E* will throw on the text of Pelagonius. Corsetti has already shown with a brief selection of examples (45) that it allows various gaps in the text of *R* to be filled,<sup>7</sup> that it sometimes supports the Greek translation against *R*, and (most interestingly) that it sometimes agrees with quotations of Pelagonius in Vegetius against *R*. It has usually been assumed that Vegetius made changes to the Latin when drawing on Pelagonius, but it must now be allowed that in at least some cases he had a different text of Pelagonius from that in *R*.

<sup>1</sup> For details of which, see the introduction to K.-D. Fischer's edition (*Pelagonii Ars Veterinaria* (Leipzig, 1980)), x f., xviii f.

<sup>2</sup> 'Un nouveau témoin de l'*Ars Veterinaria* de Pelagonius', *Revue d'Histoire des Textes* 19 (1989), 31–56.

<sup>3</sup> *Codices Latini Antiquiores*, vii (Oxford, 1956), no. 876; cf. Corsetti, 38.

<sup>4</sup> Full details in Corsetti, 36–8.

<sup>5</sup> Beginning at 204; see Corsetti's table of contents, 42.

<sup>6</sup> On the Greek translation of Pelagonius, see H. Hoppe, 'Die Commenta artis medicinae veterinariae des Pelagonius', *Veterinärhistorisches Jahrbuch* 3 (1927), 216–19; id., 'Pelagoniusstudien: I. Die griechische Übersetzung des Pelagonius', *Veterinärhistorisches Jahrbuch* 4 (1928), 1–6. The text of the Greek is scattered throughout E. Oder and H. Hoppe, *Corpus Hippiatricorum Graecorum*, 2 vols. (Leipzig, 1924–7).

<sup>7</sup> For example, at 204.3 the reading of *R* is '...hordeumque pinsitum. uel etiam lactans occiditur', where a noun seemed to be required with *lactans* (see Adams, 'Pelagonius, Eumelus and a Lost Latin Veterinary Writer', *Centre Jean Palerne, Mémoires*, v (Saint-Étienne, 1984), 31 n. 34, suggesting that *catulus* had fallen out of the text). The reading of *E* (of which I have examined a photocopy kindly provided for me by Dr Odo Lang, Stiftsbibliothek, Einsiedeln) is 'hordeum pinsitum uel etiam farina erui et fabae mixta. catulus etiam lactans occiditur'. It is now clear that the scribe of *R* (or a predecessor) jumped from one case of *etiam* to another.

In this article I am concerned with the new passages not preserved in *R*. I offer some notes on textual questions, and on their language, interpretation and content.

The new fragments have a familiar look, and would even without further indications have been attributable to Pelagonius. The most distinctively 'Pelagonian' passage is the section numbered 529 bis by Corsetti, which I discuss in detail below. Here I illustrate briefly a few other cases of 'Pelagonian' Latinity in the fragments.

The phraseology at 530 (*E*) can be closely paralleled at 296 (*R*): 530 'ut, si potest fieri, sudet aut febricula interueniat, quia interuentum [i.e. interuentu] febricule dissoluatur malum'; cf. 296 'ut, si potest febricit, quia interuentu febriculæ dissoluitur omne uitium suprascriptum'. With 505 (*E*) 'uincit omnia medicamina et cito dolores tollit', cf. 427 (*R*) 'oculare uiatorium certissimum, quod uincat et melius sit ab omnibus collyriis et ab omnibus compositionibus'. The word order, syntax and phraseology at 527 (*E*) can be matched by 303 (*R*): 527 'per cornum faucibus infundis per triduum'; cf. 303 'per cornu faucibus infundes per dies septem'.

I stress particularly the Pelagonian features of a significant passage, 230 bis: the 'etymological' use of *lotium* with *lauabis*, a use of *sed*, the epithet *humanum* with *lotium*, the abnormal juxtaposition of *in modum cataplasme* with *inponitur*, and the nature of the *si*-clauses used in combination with the formula *prodesse dicunt* (see below, 3.3 for details of all of these phenomena). 230 bis is significant because (along with a few other of the new passages) it seems to have no equivalent either in the Greek hippiatric corpus or other Latin veterinary texts. It cannot be identified as Pelagonian on any external criteria. But since its Latinity looks authentically Pelagonian, there are no grounds for regarding it as a late or medieval addition to the treatise. For typical phraseology in another of the unparalleled *additamenta* (384 ter), see below, 3.4. Further characteristics of Pelagonian Latinity in the new fragments will be discussed in the body of the article.

## 2. TEXT

There is a significant new long passage (529 bis) on the diagnosis of a horse which is *farcimosus* (suffering from farcy, a manifestation of glanders).<sup>8</sup> Corsetti points out that the Latin corresponds closely to a passage in the Greek hippiatric corpus (*Hipp. Ber.* 3.3–4, *CHG* i.31f.), attributed to an unknown writer Hiero. I return to the question of the relationship between the Latin and Greek below. The Latin text printed (or proposed) by Corsetti can be improved in various places. I begin by printing the Latin (incorporating most of Corsetti's corrections and a few minor regularisations of spelling), followed by the Greek. There will then follow discussion of some textual points.

<sup>8</sup> On which disease, see *Mul. Chir.* 179–81, *Veg.* 1.7; also Apsyrtus, *Hipp. Ber.* 96.3, *CHG* i. 327.17 περιττώματα δὲ λέγεται, ὁ ῥωμαῖστί καλοῦσι φαλκύννα. εἰσὶ δὲ ἐκβολαὶ ἐν τῷ σώματι ὁμοίαι δοθῆσι καὶ μείζονες, καὶ πνέονται καὶ ἐκρηξιν λαμβάνουσιν αὐτόματα. See also Fischer, *Pelagonii Ars Veterinaria*, p. 138, and particularly now, id., 'Genera huius morbi maleos numero VII: eine Infektionskrankheit (*Malleus*) und ihre Unterarten im Spiegel des antiken veterinärmedizinischen Schrifttums', in G. Sabbah (ed.), *Le latin médical. La constitution d'un langage scientifique* (*Centre Jean-Palmerie, Mémoires* x, Saint-Étienne, 1991), pp. 351–65. Some of the terminology at 529 bis is similar to that at *Pel.* 448.1: note 529 bis 'toto corpore quasi tubera farsa lateant' alongside 448.1 'ex ipsis tuberculis [picked up by tubera two sentences later] corpus turget et fistulas faciet caecas'. Glanders is a 'specific, contagious and inoculable disease of the horse family' (G. P. West (ed.), *Black's Veterinary Dictionary*<sup>15</sup> (London, 1985), p. 348). 'Farcy' is a form of the disease in which the skin is involved. 'The lymphatic glands of the affected limb become enlarged, the lymph vessels corded, and usually a chain of farcy buds develops along their course' (*Black's Veterinary Dictionary*, p. 349).

2.1 farcimosum intelle<ge>re non adeo difficile est, quia <e>uidens periculum in eius modi passione intellectum omnibus prehibet. farcimin<a> itaque dicta sunt quod toto corpore quasi tubera farsa lateant. cum itaque equum peruideris cruribus tumidis, auribus flexis, renibus rigidis nec iactu flecti posse, ceruice tensa neque se concutere nec posse inflectere, oculis incertis gerentem se aegro similem, tunc 5 morbum equum contraxisse intelligis. (2) de causis quibus et morbis quod supra scripsimus. disciplina autem cure istius modi est. prima ante omne stabuletur calidissimo loco, uene de ceruice soluantur, post tertium diem de brachiolis sanguis detrahitur et, si res exigerit, post diem quintum a femoribus, ut ex omne parte cum uenae fuerint percusse, omne uirus aut cum sanguine [*sanguis* cod.] exeat aut cum 10 relaxatio corporis ex deminutione sanguinis fuerit facta, cito necare non possit. tunc et cibus et consueta prebeantur, furfures prebeto et cum furfuribus minute molitam faba; aquam tepidam dabis cum uino et oleo et nitro et sulpure et rute semine et baxis lauri adunatis; simul corpus omnem contra pilum fricas, ut fricantes eundem equum et laborent et sudent, inde pellis lanatas maceratas ipsis unctionibus renibus 15 superinponis.<sup>9</sup>

Hiero, *Hipp. Ber.* 3.3–4, *CHG* i.31f.:

τοὺς ἐλεφαντιῶντας καταμανθάνειν οὐχ οὕτως ἐστὶ δυσχερὲς ὅσον εὐμαρές. ἡ γὰρ τούτων ἐπικίνδυνος ἀνωμαλία πᾶσιν ὑπάρχει γνώριμος. ὁπνίκα οὖν ἴδης ἵππον τοῖς σκέλεσιν ὠδηκότα, τὰ ὠτα ἐστῶτα ἔχοντα, τὰ περὶ τοὺς νεφροὺς σκληρότερα καὶ καμψήναι μὴ δυνάμενα, τράχηλον τεταμένον, καὶ μὴ τινάξει αὐτὸν ἢ κάμψαι δυνάμενον, καὶ βλέμμα ἀστατοῦν, τότε γίνωσκε τῷ προλεχθέντι πάθει αὐτὸν 5 κατέχεσθαι. (4) ἡ τοίνυν θεραπεία αὐτοῦ αὕτη· ἐν οἴκῳ θερμῷ ἱστάσθω, καὶ αἱ τοῦ τραχήλου αὐτοῦ φλέβες λυέσθωσαν καὶ μετὰ τρίτην ἡμέραν ἀπὸ τῶν ὤμων αὐτοῦ αἶμα ἀφαιρείσθω. εἰ δὲ χρειὰ καλέσῃ, καὶ ἀπὸ τῶν μηρῶν μεθ' ἡμέρας πέντε, ὥστε ἀπὸ παντὸς τοῦ σώματος τῶν φλεβῶν λυομένων πάντα τὸν τοῦ πάθους ἰὸν σὺν τῷ αἵματι διαφορηθῆναι· τῆς γὰρ τοῦ αἵματος ῥύσεως γενομένης, οὐ ταχέως διαφωνεῖ. 10 τό τε λοιπὸν τὴν συνήθη τροφὴν πρόσαγε, καὶ εἰ κριθᾶς φαγεῖν μὴ βούλοιοτο, ἄλφита δίδου μετὰ κνάμων ἀλησεμένων, ποτὸν δὲ ὕδωρ χλιαρόν, καὶ μετὰ ταῦτα βαλὼν οἶνον, ἔλαιον, νίτρον, ἀσφαλτον, πηγάνου σπέρμα, καὶ δαφνίδας, καὶ ἐψήσας, ὅλον ἀνὰ τρίχα τὸ σῶμα ἀπότριβε τῷ ἐψήματι, μέχρις ἂν ἀποκάμης, εἴτα δέρμασιν ἐρέαν ἔχουσι καὶ βεβρεγμένοις ἐν τῷ αὐτῷ ἐψήματι τὰ περὶ τοὺς νεφροὺς ἐπιδέσμει. 15

(a) Lines 9–11 *ut ex omne parte cum uenae fuerint percusse, omne uirus aut cum sanguine exeat aut cum relaxatio corporis ex deminutione sanguinis fuerit facta, cito necare non possit*: ‘so that, when the veins have been opened in every part, all the poison either may leave with the blood, or, when relaxation of the body has taken place from the diminution of the blood, it [the *uirus*] cannot quickly kill (the sufferer)’. The *aut ... aut* construction follows *uirus*, which therefore is subject both of *exeat* and of (*necare non*) *possit*. Corsetti proposes *necari* (which would entail making the horse subject of (*necari non*) *possit*), but the introduction of such a change of subject is needless. (*E*)*neco* is the *uox propria* for killing effected by a poison (*uirus* or *uenenum*),<sup>10</sup> and the noun indicating the poison can stand as subject of the verb: cf. Col. 5.8.7 ‘*uirus ... enecat*’.

<sup>9</sup> The manuscript has *regidis* for *rigidis*, *querentem* for *gerentem*, *scripsimos* for *scripsimus*, *tercium* for *tertium*, *negare* for *necare*, *furis* for *furfures*, *minutae* for *minute*, *seminis* for *semine*, *bagi* for *baxis*, *adonatis* for *adunatis*, and *frecas* / *frecantes* for *fricas* / *fricantes*.

<sup>10</sup> See Adams, ‘The Uses of *Neco* II’, *Glotta* 69 (1991), 110–12.

Corsetti has noted that *cum sanguis (exeat)* must be changed to *cum sanguine*, with *uirus* thereby made subject of *exeat*:<sup>11</sup> see Hiero, lines 8–10. ὥστε ἀπὸ παντὸς τοῦ σώματος τῶν φλεβῶν λυομένων πάντα τὸν τοῦ πάθους ἰὸν σὺν τῷ αἵματι διαφορηθῆναι.

The ideas expressed in the *aut...aut* construction can be illuminated from *Mul. Chir.* 4. The first possibility is that poison or infection may depart with the blood when it is released. For this idea, cf. *Mul.* ‘sanguinis detractio, per quam uniuersa corporis uitia et morbi abstrahi possunt’.

Disease in any part of the body ‘corrupts’ the blood, causing ‘tension’, which can only be ‘relaxed’ by blood-letting. For this idea, cf. *Mul.* loc. cit. ‘...sanguis corrumpitur, discurrit per omnia membra et totius corporis languorem infert. per quem incipiet strictura et tensio nasci, per inflationem uenarum. quae strictura et tensio corporis aliter laxari non potest, nisi per sanguinis detractioem’ (cf. Veg. 1.21.3, 1.28.1). The argument is therefore this: either the poison will leave with the blood, or alternatively the blood-letting will at least relax the tension, and slow down the working of the poison.<sup>12</sup>

(b) Lines 11–16 *tunc et cibus et consueta prebeantur, furfures prebeto et cum furfuribus minute molitam faba; aquam tepidam dabis cum uino et oleo et nitro et sulphure et rute semine et bacis lauri adunatis; simul corpus omnem contra pilum fricas, ut fricantes eundem equum et laborent et sudent, inde pellis lanatas maceratas ipsis unctionibus renibus superinponis.*

At this point there are substantial differences between the Greek of Hiero, and the Latin text as punctuated by Corsetti; changes are needed to the Latin. The Greek (*CHG* i.32.7–14 = lines 11–15 above) distinguishes the following stages in the treatment: (1) the animal is to be given certain foods, – κριθαί (barley-corn), or, if it refuses this, ἄλφιτα (barley-meal), with ground beans – and warm water to drink; (2) after that (μετὰ ταῦτα) certain ingredients (οἶνον...δαφνίδας) are to be boiled together (ἐψήσας), and with the resultant liquid (τῷ ἐψήματι) the whole body is to be rubbed against the direction of the hair’s growth (ἀνὰ τρήχα); (3) then skins retaining wool are to be soaked in the liquid and tied to the region of the νεφροί.

In the first stage, the Latin has no distinction corresponding to that made in the Greek between κριθαί and ἄλφιτα, and it is therefore possible that there is a lacuna near *furfures*.

In the Greek the numerous ingredients οἶνον, ἔλαιον, νίτρον etc. are not part of the drink (as καὶ μετὰ ταῦτα after χλιαρόν makes clear), but part of a mixture to be boiled and rubbed on the horse. In the Latin as punctuated by Corsetti, however, the corresponding ingredients are unambiguously part of the drink (*aquam tepidam dabis cum uino et oleo et nitro* etc.). On this punctuation the horse is not rubbed *contra pilum* with any ingredients: it is simply to be rubbed down in general (*fricas, fricantes*). In the final sentence, however, the assumption is clearly made that certain substances for anointing have been used in rubbing the horse: the woolly skins are to be macerated *ipsis unctionibus*. Where are these aforementioned *unctiones* in the Latin text?

<sup>11</sup> Corsetti did not propose the change *sanguis* to *sanguine* in his published article, but he has suggested it to me in a private communication.

<sup>12</sup> Corsetti (private communication) suggests the deletion of the first *aut* as an anticipation of the second. I can see no reason for such a deletion. Two clear alternatives are expressed by means of an *aut...aut* construction. The subject of both verbs in this construction is *omne uirus*, which accordingly comes before the first *aut*. Once *sanguis* is changed to *sanguine*, the sentence makes perfect sense without further alteration. The Greek lacks the theoretical precision of the Latin (see below for details), and does not help much with establishment of the Latin text (except in supporting the change to *sanguine*).

They can be restored to the text by a change of punctuation, and alteration of one word. The use of *simul* which Corsetti's punctuation imposes on the text provides the clue to the error: '... adunatis; simul corpus omnem contra pilum fricas'. *Simul* can only be given here its common classical temporal sense 'at the same time'. *Simul* is used 52 times in the text (*R*),<sup>13</sup> but never with a temporal meaning. It is always local (= 'together'), and is always closely associated with a verb, such as *admisceo*, *misceo*, *commisceo*, *contero*, *decoquo*, *fundo*, *detero*, *contundo*, etc.: ingredients are crushed, mixed, cooked (etc.) together. Sometimes *simul* reinforces the idea contained in the prefix of a verb (e.g. 242 'omnia simul commisceo'; *commisceo* 'mix together' could have stood on its own), sometimes its role is much the same as that of a prefix (e.g. 316 *simul misce* = *commisceo*). It may precede (as often) or follow its verb (e.g. 265 *contrita simul*, 426 *teres simul*, 467 *misces simul*).

In 529 bis *simul* should not be made to start a clause. It goes closely with the preceding *adunatis*, the expression *adunatis simul* meaning 'with X mixed together'. A comma should be placed after *simul*.

The ingredients *cum uino* ... *adunatis simul* now have to be dissociated from the drink of warm water, and converted into the *unctio* with which the horse is rubbed down. Where Corsetti's text has *cum* + ablative (*uino* etc.), the Greek has καὶ μετὰ ταῦτα. *Cum* + abl. is inappropriate as a complement of *fricas*, and *cum* must be corrupt. Therefore place strong punctuation after *dabis*, and change *cum* either to *tum*, or, better, *tunc* (the usual adverb in the text):<sup>14</sup>

aquam tepidam dabis; tunc uino et oleo et nitro et sulphure et rutae semine et bacis lauri adunatis simul, corpus omne contra pilum fricas.

'Give warm water to drink. Then mixing together wine and oil..., rub (with that) the whole body against the direction of the hair'.

This text corresponds closely to the Greek, though there is one respect in which the Greek is more precise: Pelagonius has nothing corresponding to ἐψήσας. Perhaps <et decoctis> should be inserted after *simul*.

2.2 384 bis *potio aestualis*. *apii folia feris cateris oua teris herba conumba teris; hec misces et ex apa potionabis*.

**potio aestualis:** so *E*, but change to *aestiualis*. Three times in *R* a recipe is introduced by *potio aestiua* (371, 374, 466), and the phrase also occurs in the body of the text (373 *potionem facis aestiuam*). But the classical *aestiuus* is replaced by *aestiualis* at 395 (*potio aestiualis*). The same alternation is found in the *Mulomedicina Chironis* (971, 976 *potio aestiua*, 971, 979 *potio aestiualis*; MS. *extibalis* in the second case). *Aestiualis* is rare and late.<sup>15</sup> The suffix *-alis* was used in colloquial Latin to augment various earlier adjectives (e.g. *uernalis* = *uernus*, *hibernalis* = *hibernus*).<sup>16</sup> The obvious analogies which might have motivated *aestiualis*, *uernalis* and *hibernalis* are *hiemalis* and *autumnalis*. Note here the following recipe (384 ter), headed *item hiemalis potio*, and for *aestiualis* and *hiemalis* in juxtaposition, cf. Hipp. Lat. *Aer.* p. 15.2 Gundermann 'postea uero quae inter occasum aestiualem sunt et hiemalem'. The misspelling *estualis* [*sic*] also occurs in *E* at 374 (where *R* has *aestiua*).

<sup>13</sup> Cf. now in *E* 524 *decoquis simul*.

<sup>14</sup> In *R* *tunc* occurs 28 times, *tum* only once, in a quotation of Columella (21.2).

<sup>15</sup> *TLL* I.1108.5ff.

<sup>16</sup> See in general G. N. Olcott, *Studies in the Word Formation of the Latin Inscriptions* (Rome, 1898), p. 227. For *hibernalis*, see *TLL* VI.3.2684.50ff.; for *uernalis*, see Pel. 454.

There remain a number of obscurities in this passage. What is *conumba* (for which see also 407 bis)? Does *cateris* conceal the verb *teris*?

For *apa* Corsetti proposes *sapa*, but an alternative possibility is *aqua*: cf. *Mul. Chir.* 377 ‘*ex ea aqua cotulas II...potionabis*’.<sup>17</sup>

2.3 530 bis *adpetere curare debetis ut cibitur* [i.e. *cibetur*], *ut frequentius dentes moueat, ne maxille obdormiant, sed frequenter ei inosam manus mittatur aut uirga sanguinea, ut moueat maxillas et dentes; tamdiu in usu rem [spem Corsetti] uiuendi habet quamdiu rumicauerit aut manducauerit*.

(a) **Adpetere** cannot be right. But for the construction (and position) of **curare**, cf. 51.1 ‘*curare autem debes ut reliqua pars corporis aliis potionibus nutriatur*’ (*curare* precedes *debes*; the *ut*-clause dependent on *curare* follows *debes*; note too that the context, as at 530 bis, concerns feeding).

*Adpeto* and its derivatives are used consistently in veterinary Latin of appetite for food or drink (e.g. *Pel.* 403 ‘*cibum et aquam audius appetunt*’; cf. 34.2, 60.2 twice, 404, *Veg.* 1.4 (*appetentior*), 2.122.1 (*appetentia*), *Mul. Chir.* 431 (*appetiet*)). It is out of the question to take *curare* as dependent on *adpetere* (= ‘seek to take care’ or the like); what is needed is a derivative of *appeto* which can be associated with *cibetur*.<sup>18</sup> Perhaps *appetenter* (cf. *appetentior* (*bibendi*) in Vegetius above): ‘you should take care that he takes food with appetite’ (alternatively *appetentiā*). But it is a serious problem that there is such a separation of *cibetur* from its (apparently) associated word.

(b) For **inosam manus** Corsetti proposes *in os ramus*, and he may be right. Professor Jocelyn suggests to me *aut manus mittatur aut...*, which also seems possible.

**Sanguinea** (*uirga*) also needs correction. *Sanguineus* means either ‘bloody’ or ‘blood-coloured’, but neither sense would suit a stick. Vegetius, discussing tetanus, writes at 2.88.15 ‘*fustes quoque uel de salice uel de robore in os mittunt, ne maxillarum usus indormiat*’. He may have had our passage of Pelagonius before him; of particular note is the verb *indormiat* (of jaws, *maxillae*), corresponding closely to Pelagonius’ *obdormiant*. *Fustes...de salice* shows that *sanguinea* should be changed to *salignea*.

2.4 481 bis *lutium humanum coctum ad testas siue lapides molares feruentes mitte; in eodem lutio et tepefacto coleos foueto*.

It is odd to have *tepefacto* preceded by *et*. The means of heating the *lotium* are described in the previous sentence. *Ita* for *et* would give the required sense, though there is no precisely similar example of *ita* in *R*.<sup>19</sup>

### 3. LANGUAGE AND CONTENT

3.1 I begin with some observations on the long passage 529 bis, quoted in full earlier. It is likely to have formed part of one of the introductory epistles, which in the original treatise (and to a certain extent in the version preserved in *R*) were placed

<sup>17</sup> I owe this idea to H. D. Jocelyn, who when reading the passage for the first time in my presence without his glasses on saw *apa* as *aqua*.

<sup>18</sup> *Cibo* is used both as an active = ‘feed’ (e.g. *Mul. Chir.* 287 ‘*apio uiride uel lactuca cibabis*’) and as a middle = ‘take food’ (e.g. *Mul. Chir.* 406 ‘*qui enim hoc uitio tenebitur, si coeperit non cibari*’). See *TLL* III.1037.46ff. (*de bestiis*).

<sup>19</sup> An anonymous reader suggests that *et* might be deleted.

at the start of chapters. A tell-tale indication is the long sentence (3–6) ‘cum itaque equum peruideris...intelligis’ describing the symptoms of the disease. Lists of symptoms are characteristically found in epistles,<sup>20</sup> often indeed in phraseology with structural similarities to that here. *Peruideo* (referring to the observation of symptoms) occurs just once elsewhere, in an epistle, in the same form, in the same construction (a *cum*-clause), and in the same sort of context: 183.1 ‘cum opisthotoni signa peruideris, sperabis roboris passionem’. For the structure and phraseology of the expression (4) ‘renibus *rigidis nec iactu flecti posse*’, cf. 267.2 (epistle) ‘aures *rigidae nec flecti possunt*’. The negative complement in the above two passages, consisting of *nec* + *posse* + infinitive, is a commonplace construction in lists of symptoms in epistles. There is another example in 529 bis (4f.): ‘ceruice tensa neque se concutere *nec posse inflectere*’. Cf. in *R* 33.1 ‘nec eleuare altius ceruices poterit’, ib. ‘nec se uolutare poterit’ (for the reflexive construction, with the pronoun juxtaposed with the negative, cf. 529 bis above), 183.2 ‘nec stare possunt’, 210.2 ‘nec ambulare potest’, 267.2 ‘collum extensum est nec incuruari potest’ (cf. 529 bis ‘ceruice tensa...nec posse inflectere’), ib. ‘nec aperire os aut oscitari potest’, ib. ‘cauda ipsius erecta est nec se incuruare potest’ (again the reflexive construction).

Pelagonius regularly comments in epistles on the problems of diagnosing the condition in question, as in the opening sentence of 529 bis (1–2).<sup>21</sup>

In this same sentence a subtle link with other epistles is offered by the idiom *non adeo difficile est*. The construction might be classified as an incomplete correlative construction. The effect of *adeo* is to intensify the adjective (= ‘very’). The construction is a common one, especially characteristic of colloquial texts (e.g. Petron. 42.3 ‘homo bellus, tam bonus Chrysanthus’).<sup>22</sup> There are two other examples in Pelagonius, both of them in the negative form *non adeo* + adjective (+ *esse*), and both in epistles: 24.3 ‘sin autem non adeo est macilentus’, 163 ‘cura...non adeo sit necessaria’.<sup>23</sup>

The explanation of the etymology of *farcimina* given in the second sentence of 529 bis (2–3) would be most appropriately placed at the start of a chapter, i.e. in the epistle. There is nothing precisely comparable in the extant epistles, but note the way in which the disease under discussion is named in an epistle at 363: ‘nam hunc morbum peritissimi huiusce artis mulomedici lethargum appellant’; cf. the heading to the epistle 183: ‘ad eos quibus membra deficiunt, quod mulomedici foria appellant’.

It is worth noting the manner in which various instructions are expressed at 529 bis (8f.): ‘uene de ceruice *soluantur*, post tertium diem de brachiolis sanguis *detrahitur*’. Pelagonius often seems to have used different types of imperatives or imperative-substitutes in coordination, though scribal inconsistency makes it impossible to be certain what verb-form he used in any given case. There is only one place in *R* in which, as here, a third-person passive subjunctive and a third-person passive indicative are associated, and that is in an epistle: 141.2 ‘hic...calore *curatur*, aut in calido stet aut contra focum aut aqua calida *foueat*’.

<sup>20</sup> Cf. 33.1, 34.2, 47, 140.1, 183, 210.2, 267.2, 287.

<sup>21</sup> Cf. 34.3, 139, 183 (note §2 ‘sed in his tam similibus signis passionum sunt [tanquam] tamen quaedam longe separata atque aliena, quae facilius poteris recognoscere, si diligentior fueris’), 210.1, 267.1, 287.

<sup>22</sup> See Adams, *The Vulgar Latin of the Letters of Claudius Terentianus* (Manchester, 1977), p. 56.

<sup>23</sup> Cf. (for negated examples) Lact. *Mort.* 15.6 ‘Maximianus libens paruit per Italiam, homo non adeo clemens’, *Mul. Chir.* 182 ‘cibum non tam libenter sumet nec potum’, 328 ‘si esuriet, non tam uehementer uexabit’, 431 ‘cibum non tam libenter appetiet’.

This passive subjunctive construction is itself disproportionately common in epistles. There are only 37 instances in *R*, 8 of them in a quotation of Columella (43), a fact which points to the literary influence lying behind Pelagonian usage. Of the remaining examples, 11 are in epistles or probable epistles.<sup>24</sup> It is of note that one of the cases taken over from Columella (6.30.6) at 43.1 is in the same verb-phrase (*uenae soluantur*) as that in the present passage. That may be a coincidence, but Pelagonius does occasionally revert to expressions which he had first admitted in quotations of Columella: note 258 'tunc si armus in causa fuerit, *in piscinam eum, ut natet, dimitti placet*', and compare the earlier extended quotation of Columella at 43.3 (= Col. 6.30.7), containing the words 'et cum ambulauerit, *in piscinam mitti conuenit, ita ut natet*'. Phrases taken from Columella are to be found in a number of epistles: e.g. 1.1 'equos circo sacrisque certaminibus quinquennes usque ad annum uigesimum...', = Col. 6.29.5.<sup>25</sup> In our passage *si res exigerit* can also be paralleled in Columella (cf. 7.3.12, 7.3.16, 11.2.71), but it was something of a cliché.<sup>26</sup>

*Itaque* occurs twice in two sentences at lines 2–3. There is only one other example of the word in the work, in the probable epistle 450.2. Various such sentence connectives are restricted to epistles: e.g. *igitur* (0.2, 163; also 1.4 from Columella), *ergo* (216.1, 448.2).

I mention finally a subtle difference between the Greek and Pelagonius' version which perhaps reveals something about Pelagonius' expected readership. Hiero, when recommending the rubbing down of the horse against the direction of the hair, uses a plain imperative, followed by a second-person verb, thereby implying that the addressee may himself carry out the treatment: ὄλον ἀνὰ τρίχα τὸ σῶμα ἀπότρυβε τῷ ἐψήματι, μέχρις ἂν ἀποκάμῃς (the addressee is imagined as rubbing until he is exhausted). Pelagonius, however, introduces unspecified persons other than the addressee who are to toil until they break into a sweat: 'corpus omnem contra pilum fricas, ut *fricantes* eundem equum et laborent et sudent'. Such phraseology would be particularly at home in an epistle addressed to an upper-class horse owner who would not have carried out menial tasks himself. Various extant epistles are addressed to just such persons as this (e.g. 24, to Festianus, 163, to Astyrius, who owned race horses).

I move now to the relationship between the Latin of Pelagonius and the Greek.

There is one respect in which the Greek is vaguer and less focused than the Latin. Pelagonius, as noted above, distinguishes two possible consequences of blood-letting: either the *uirus* will depart with the blood, or relaxation of the tension will slow down the action of the poison. The Greek makes no such distinction. Hiero first says that when the veins are opened all over the body, the *ίός* (= *uirus*) of the affliction will pass away with the blood: p. 32.5f. = 9f. above ἀπὸ παντὸς τοῦ σώματος τῶν φλεβῶν λυομένων πάντα τὸν τοῦ πάθους ἰὸν σὺν τῷ αἵματι διαφορηθῆναι. The next sentence (introduced by γάρ) merely offers a further explanation of what has preceded: when a flow of blood has taken place, the animal will not quickly die: τῆς γὰρ τοῦ αἵματος ῥύσεως γενομένης, οὐ ταχέως διαφωνεῖ. There is thus nothing corresponding to Pelagonius' description of the effects of *relaxatio*. Pelagonius' account is sharper and more theoretically based.

When Pelagonius translates a Greek source, he usually does not include his own theoretical observations.<sup>27</sup> On the contrary, his translations of Apsyrtus often lose the

<sup>24</sup> 24.3, 24.4, 34.1, 44.2 (twice), 141.2, 269.2, 363 (3 times), 448.1.

<sup>25</sup> Full details will be found in my article 'Pelagonius and Columella', forthcoming in *Antichthon*.

<sup>26</sup> *TLL* V.2.1460.30ff.

<sup>27</sup> A minor exception to this general rule seems to be found at 34.3, where Pelagonius refers to the diagnosis of fever 'from the veins'. The source Apsyrtus, at least as preserved in the Greek



theoretical (or anatomical) precision of the original.<sup>28</sup> It is therefore highly unlikely that Pelagonius was here translating a Greek source which had the same wording as that preserved in the extant *hippiatrica*. Either Hiero was translating Pelagonius himself, and in the process losing the precision of his source; or both Pelagonius and Hiero were using a common source, with Pelagonius at this point remaining more faithful to the original.

Another oddity in the Greek is found in the opening words: τοὺς ἐλεφαντιῶντας καταμανθάνειν οὐχ οὕτως ἐστὶ δυσχερὲς ὅσον εὐμαρές, 'not so difficult as easy'. The Latin of Pelagonius has the idiomatic construction *non adeo difficile est* (see above). In the Greek the correlative construction is completed, but with a pleonastic absurdity. It is possible that Hiero had before him a Latin source with the colloquial idiom *non adeo difficile*, and that he attempted (without conspicuous success) to complete the correlation.

The Greek which corresponds to Pelagonius' '*renibus rigidis nec iactu flecti posse*' is also odd: p. 31.22f. = 3 above τὰ περὶ τοὺς νεφροὺς σκληρότερα. 'The area around the kidneys' is rather hard (cf. line 15 τὰ περὶ τοὺς νεφροὺς ἐπιδέσμαι, = Pel. 'renibus superinponis'). There is no obvious place in an account of farcy for mention either of the kidneys, or of 'the parts around' the kidneys. Pelagonius has not used *renes* here in its classical sense, but in a late meaning foreshadowing that reflected in the Romance languages (see below for details). Pelagonius' phraseology is explicable (once one allows for the late usage), that of Hiero is difficult to explain. It is possible that Hiero, confronted by the new use of *renes* in a Latin source, but failing to recognise it, and naturally puzzled by a description of the 'kidneys' as 'rigid' and impossible to 'bend', attempted to paraphrase what he took to be the implication of the passage.

Clearly Pelagonius has not used Hiero, or a Greek source with the same wording as Hiero as he survives in the Greek hippiatric corpus. There are hints that, on the contrary, Hiero was using a Latin source. Could that source have been Pelagonius himself? That possibility cannot be ruled out, but there is one place where the Greek offers a detail additional to that in the Latin: p. 32.11 = 13 above ἐψήσας, picked up by p. 32.13f. = 15 above ἐν τῷ αὐτῷ ἐψήματι. The weight which one attaches to this item will depend on whether one accepts the addition <et decoctis> after *simul*.

Perhaps Pelagonius and Hiero were drawing on a common source, conceivably written in Latin. Hiero may have been using Pelagonius, but Pelagonius was not using Hiero.

Hippiatric Corpus (*Hipp. Ber.* 1.8, *CHG* i.3.10–13), does not mention veins. The Greek does, however, refer to various other parts of the body used in diagnosis. Pelagonius has made a minor addition: see Adams, 'Notes on Pelagonius', *CQ* 40 (1990), 530. Alternatively, the version of Apsyrtus in the Hippiatric Corpus at this point may not retain the original wording.

<sup>28</sup> This is a topic in itself, with which I shall deal elsewhere in detail. I offer just one illustration here. At 141.2, discussing the causes of *dysuria*, or *stranguria* (the two conditions are not adequately distinguished), Pelagonius says that it may arise 'interdum et nimio otio, descendens enim acrior umor urinam prohibet'. This is an allusion, of a type very rare in the text, to the theory of humours (cf. 152.2, a passage based on Apsyrtus), but what is the point of the remark? To find out it is necessary to go to the source (Apsyrtus, *Hipp. Ber.* 33.5, *CHG* i.166.23–167.3): ἔσθ' ὅτε δὲ καὶ διὰ τὸ ἐστάναι καὶ μὴ γυμνάζεσθαι γεννᾷ χυμοὺς δριμυτάτους, οἵτινες φερόμενοι ἐπὶ τὴν κύστιν δηγμὸν παρέχουσι τῇ διόδῳ τῆς οὐρήσεως, καὶ διὰ τοῦτο στραγγουριᾷ. The inactivity generates sharp humours (which Pelagonius fails to point out). These humours are carried to the bladder (not mentioned by Pelagonius) and cause pain in the passage of urine (again not mentioned by Pelagonius), which in turn causes strangury. Pelagonius' 'descendens enim acrior umor urinam prohibet' is so truncated as to be incomprehensible without the Greek; Apsyrtus presents a coherent physiological theory, the precision of which is entirely abandoned in the Latin.

I turn finally to some linguistic points arising from 529 bis.

**quia <e>uidens periculum in eius modi passione intellectum omnibus prohibet [i.e. praebet]:** *intellego* in the previous clause is technical, = 'diagnose' (cf. e.g. Col. 7.5.6 '(scabies) sic intelligitur', Pel. 256.1 'stremma, quam sic intelligimus').<sup>29</sup> *Intellectum* (*praebere*) is clearly the nominal correspondent to the verbal usage ('offers (the means, chance of) diagnosis'). This new example of *intellectus* throws light on an earlier passage in *R* and now *E*: 210.2 'ille autem, qui splenicus est, uentrem *sine intellectu* maiorem gerit'.<sup>30</sup> *Intellectus* must be technical, = '(means of) diagnosis'. The horse which is *splenicus* has a *uenter* which is more distended than the norm, but not so much that it is able to be diagnosed as such. The *equus splenicus* contrasts with the *tympaneticus*, which has blatant distension of the *uenter*: 210.3 'uenter quidem *crescit*...et frequenter etiam *extensione*<sup>31</sup> *ipsa et tumore intestin<or>um* per meatum stercoris rumpitur'.

The example of *intellectus* at Pel. 210.2 is classified by *TLL* VII.1.2091.30f. under the general heading 'generatim: ... exempla selecta ... praeualente notione actus', but a category of specifically medical examples could be set up. See also *Mul. Chir.* 132 'de febricitantibus. intellectus et cura febricitantium omnium, qui sunt ungulae rotundae'.

Pel. 210 is an epistle; this use of *intellectus* was 'Pelagonian', and its presence at 529 bis supports the argument above that the passage was originally an epistle.

**renibus rigidis nec iactu flecti posse:** these words form a unit: the *renes* are stiff, and cannot be bent. It would of course be meaningless to speak of the kidneys (*renes*) as incapable of being bent: clearly *renes* has changed meaning. The semantic development of the word as it passed into the Romance languages allows one to establish the sense roughly here. *Renes* does not survive in the sense 'kidneys',<sup>32</sup> but shifts its reference from the internal organ to the neighbouring external parts, i.e. 'loins, haunches, upper part of the leg around the hips and base of the spine, small of the back', even 'the whole back': cf. OFr. *reins*, = 'lombes, bas de l'épine dorsale et la région voisine'.<sup>33</sup> Note *Gloss. Reich.* 2748 'coxa [= 'thigh', not 'hip'] uel a renibus usque ad genua': the thigh extends from the *renes* at its upper point to the knee at its lower. Of a horse *renes* seems to indicate the upper part of the rear leg, roughly the hindquarters. That is the approximate meaning at 267.2, a passage which is translated from the Greek of Apsyrtus. Apsyrtus (*Hipp. Ber.* 34.1, *CHG* i.177.23–5), speaking of tetanus, says that the victim sinks down and cannot get back up on its hind legs, but sits up like a dog on its front legs: ἀναπεσὼν δὲ ἐγείρεσθαι πάλιν τοῖς ὀπισθίοις ἀδυνατεῖ, ἀλλ' ἀνακαθίζει ὡς κύων τοῖς ἐμπροσθίοις. Pelagonius describes the symptom slightly differently: he focuses attention not on the raised front part of the body, but on the depressed rear part: 'de posterioribus se difficile elevant, sed a renibus subsidunt' ('they find it difficult to get up on the rear legs, but instead sink down on the haunches' [lit. '(starting) from the haunches']). The kidneys of a horse

<sup>29</sup> Cf. *TLL* VII.1.2097.79ff. for a small collection of examples.

<sup>30</sup> Cf. the Greek translation of the passage at *Hipp. Ber.* 38.9, *CHG* i.202.7, containing ἀνεπαίσθητος, which is classified by LSJ, s.v. ἀνεπαίσθητος 2 under the active meaning of the adjective = 'not perceiving'.

<sup>31</sup> An anonymous reader plausibly suggests *ex tensione* for *extensione*. For the phrase *ex tensione*, cf. *Mul. Chir.* 316.

<sup>32</sup> See W. von Wartburg, *Französisches etymologisches Wörterbuch* X.251; it was \*renio which generated the words for 'kidneys'.

<sup>33</sup> *FEW*, X.248, and 251 on the semantic development of the word.

lie under the last few ribs.<sup>34</sup> The rib cage extends slightly less than half-way along the length of the back of the animal measured from the base of the neck to the root of the tail.<sup>35</sup> *renes* in its literal sense 'kidneys' could therefore have no conceivable place in a description of a horse sitting on its haunches.

The new sense of *renes* is found at Nemes. *Cyn.* 112, of a dog: 'sit ... renibus ampla satis ualidis diductaque coxas' (the bitch should have strong haunches, and be wide at the hip). It is also well represented elsewhere in Pelagonius. The epistle 216, for example, has the heading '<d>e lumbis et de renibus et de coxis et de gambis'. No great importance should be attached to these words, which may not even have been written by Pelagonius. But the first sentence of the epistle proper has *lumbi* and *renes* juxtaposed (216.1 'congruum est ut de lumbis et de renibus apud claritatem tuam pauca dicamus'), and the rest of the chapter is phrased in such a way as to suggest that *lumbi* and *renes* are used virtually as synonyms. The addressee Festianus and his horses have similar ailments (216.1). Festianus sometimes has an affliction of the *renes* (§1 'nudum frequenter inspeximus *renibus dissolutum*'; *dissolutus* = 'weakened').<sup>36</sup> When Pelagonius moves on to the horses, *lumbi* is the word which he prefers. The sort of injury he has in mind can befall the animal when it carries an excessive weight, or when it jumps a ditch and its rear feet sink down: 216.2 'equi plerumque lumbos nimio pondere laedunt aut si fossam transcenderint et posteriores pedes resederint'.

In various other places Pelagonius speaks of the *renes* as being washed (65, 146.2), rubbed down (384), smeared (386.1), covered in various ways (217, 224). He must have had in mind an external part of the body. Note later in our passage 'inde pellis lanatas maceratas ... renibus superinponis'.

In other veterinary texts too *renes* often signifies an external part.<sup>37</sup> It is difficult to pin down the sphere of reference of the word with much precision in any one passage, but the sense 'hindquarters, top part of hind leg', would seem to be roughly appropriate. The *Mulomedicina Chironis*, for example, describing the symptoms of tetanus, writes (316): 'cuius commissurae in ambulandum a neruis crepitant extensione neruorum totius corporis, unde et ilia dura et tensa a renibus habebit' (the flanks of the horse are hard and stiff 'from the *renes*'). *Black's Veterinary Dictionary* s.v. 'Tetanus', 798 notes: 'In the majority of cases, the tail and hindquarters are affected. The tail is held out stiffly quivering, and muscles of the quarters can be felt either hard and board-like, or rippling under the flat hand' (my italics). Vegetius, drawing on this passage of the *Mul. Chir.*, offers a particularly clear description of the symptoms: 2.88.1 'et ideo distendit et erigit caudam, et eam flectere aut mouere non possit, dura ilia, astricti *renes*' (surely the quarters). In connection with *Mul. Chir.* 316 (above), 462 is also worth noting. Again the subject is tetanus. Oder's text runs: 'primo a coda prenditur. *codam feriet ad renibus rigidam*'. As the text stands, the sense would have to be that the horse strikes its tail against the quarters (with *ad* taking the ablative rather than accusative). But the symptom is surely that described above: the animal holds its tail out stiffly. *Ad* should be changed to *ab*, thereby introducing the same phrase as that at 316 (*ab renibus*), and *feriet* to *feret*: the horse will carry its tail in such a way that it extends rigid from the hindquarters. With the

<sup>34</sup> See *Black's Veterinary Dictionary*, pp. 435f.

<sup>35</sup> See the diagram in *Black's Veterinary Dictionary*, p. 97.

<sup>36</sup> For this sense of *dissolutus*, see *TLL* V.1.1496.73ff., citing numerous examples.

<sup>37</sup> There is a transitional case as early as Col. 6.30.4: 'nam oleum immixtum uino supra ilia et *renes* infunditur'. The oil mixed with wine is poured 'over, above the *renes*'. The reference must be to the external part located over the kidneys. It would be no great shift for *renes* to be used of that external part.

tense of *feret* compare *habebit* (*a renibus*) at 316. And for *caudam ferre*, see *Mul. Chir.* 719 ‘sunt autem, qui aut mobiles caudas aut prauas ferunt’.

Also illuminating is Pel. 146 (‘prodest et aqua calida renes fouere’), where *renes* translates ἰσχία ‘haunches’ in the source Apsyrus: *Hipp. Ber.* 33.2, *CHG* i.165.6 βοηθεῖ δὲ καὶ ἡ τοῦ θερμοῦ ὕδατος κατάντησις διὰ τῶν ἰσχίων γινομένη. The sentence of Pelagonius was in turn rendered thus in the Greek translation: *Hipp. Ber.* 33.20, *CHG* i.173.18 συμβάλλεται δὲ μετὰ τοῦτο καὶ θερμῷ ὕδατι τὰς ψύας τοῦ ζῶον ἀπαντῆσαι (ψύα = ‘muscles of the loins’).

Another significant passage is at *Veg.* 2.69.1, where injury to the muscles *sub renibus* caused by a fall is described: ‘saepe musculi, qui sub renibus sunt, uexantur ex casu’. As a result, ‘renes obdurescunt et contrahuntur’.<sup>38</sup> The corresponding passage in the source (*Mul. Chir.* 481) uses not *renes* but *tergus*: ‘tergus durum et constrictum habebit’. It may be deduced from this that the *renes* were loosely speaking a part of the back. Various other passages, in which *renes* is juxtaposed and contrasted with such words as *dorsum* and *spina*, show that the *renes* were clearly distinguishable from the back and spine as a whole: e.g. *Mul. Chir.* 218 ‘super totum tergus et renes’ (cf. *Veg.* 1.42.5), 238 ‘oleo calido et pice liquida *renes et totum tergus* perfricare oportet’, = *Veg.* 1.52.3 ‘pice liquida et oleo calido *renes et totam spinam cum dorso* perfricare oportet’, *Mul. Chir.* 342 ‘in parte renum usque ad mediam spinam’ (cf. *Veg.* 2.105.3; on the treatment of tetanus).

The evidence gathered here establishes that the *renes* of a horse could be seen as part of the back; they were muscular; they became hard when the horse was affected by tetanus; they were movable; they were at the rear of the animal; and from them the tail extended. The new example of the word in Pelagonius (associated with *iactu* and *flecti*) is a decisive indicator of its sense.

A horse affected by chronic farcy usually shows ‘swelling of one or more limbs, more frequently a hind one’ (here note *cruribus tumidis*).<sup>39</sup> ‘The lymphatic glands of the affected limb become enlarged, the lymph vessels corded, and usually a chain of farcy buds develops along their course’.<sup>40</sup> Buds in the groin may be the size of a hen’s egg. In the hind leg of a horse there are some lymph glands on the back of the leg, a little below the stifle, and another set up high in the groin.<sup>41</sup> The idea in our passage of Pelagonius is presumably that the pain of the farcy buds in the groin makes the animal unwilling to move.<sup>42</sup>

*Iactu* (*flecti*) does not seem to be paralleled, but the verb *iacto* is used to describe vigorous movement of a limb. It was applicable to animals, including the horse (cf. ‘toss’): e.g. *Virg. Aen.* 11.638ff. ‘quo sonipes ictu furit arduus *altaque iactat* / uulneris impatiens arrecto pectore *crura*’. *Iactus* (though it is a derivative of *iacio*, not *iacto*) is the nominal correspondent to this use of the verb (for further examples of *iacto*, cf. *TLL* VII.1.52.9ff.; note too *Col.* 6.30.9 ‘si caudam saepius iactant’, *Pel.* 210.2 ‘sternutat frequenter et caput dolore ipso iactat’, *Mul. Chir.* 246 ‘priora genua iactat’, 806 ‘pedes ad usum iactat’; cf. too *Curt.* 4.15.16 ‘(equi) crebra *iactatione* ceruicium ... iugum ... excusserant’).

**istius modi:** never in *R.*

<sup>38</sup> The symptoms described would fit inflammation of the muscles of the quarters. See *Black’s Veterinary Dictionary*, p. 514: ‘Inflammation of muscle, or myositis, may arise as the result of injury through kicks, blows, falls, etc... The muscles affected are held relaxed... When handled, they contract and become hard to the touch’ (my italics).

<sup>39</sup> See *Black’s Veterinary Dictionary*, p. 349.

<sup>40</sup> *Black’s Veterinary Dictionary*, loc. cit.

<sup>41</sup> Information from Dr J. R. Baker, Department of Veterinary Pathology, University of Liverpool.

<sup>42</sup> As suggested to me by Dr Baker.

I take now some miscellaneous points in the order in which they come up.

3.2 227 bis *ad ozenas, id est malandriadem. panem in aceto acri infundis ita ut se soluat, cum porris sectibus [= sectiuis] quibus capita tuleris tere et panno lena et inpone et liga ita ut non cadat; post triduum solue et de aceto erugine mixto laua. summe prodest.*

**panem...infundis:** for this expression, see in *R* 188.1, 260.

**ita ut se soluat:** for the medio-passive use of the reflexive construction in Pelagonius, cf. 24.2 'mane paululum *se subsiccet*', 111 'sinito uti ferueat paulisper, ut *se animet*', 347 'ne...in morbum *se conuertat*', 384 'calefactionem, quae cum *se strinxerit*', 386.1 'ut omnia se diligenter *commisceant*', 386.1 'facis medicamen, quod cum *se astrinxerit*'. *Se soluere* is well attested.<sup>43</sup> For the type of structure found here (imperatival verb, followed by *ita ut* + reflexive verb), cf. 242 'siccās comburito, *ita ut* paulatim *se in loco mundo insumant*'.

**cum porris sectiuis quibus capita tuleris:** *tuleris* here serves as the past tense of *tollo* (= 'remove'), not *fero*, a common usage in later Latin.<sup>44</sup> It is found elsewhere in Pelagonius: 65 'sanguinem de palatio cum *tuleris*', of blood-letting; for *tollo* used thus, cf. 24.4 'sanguis de matrice tollatur'. For *tollo* with dative (of disadvantage), cf. 88 'tolles illi uentrem'.

**liga ita ut non cadat:** for the instruction to 'tie on' something 'in such a way that it does not fall' in a medical context, cf. *Phys. Plin. Bamb.* 83.42, which is printed as 'uessicam porcinam recentem...*ita fascias; ne lauetur*' by Önnersfors,<sup>45</sup> but *lauetur* can be emended to *labatur* on the evidence of the use made of the passage by the late ninth-century Anglo-Saxon work 'Bald's Leechbook', 2.41 'bind it [a new pig's bladder] on so that it will not slip off' (translated by M. Deegan).<sup>46</sup>

**ita ut non:** this classical form of the negative consecutive construction is found elsewhere only at 122, in a passage of magical content which may have been incorporated verbatim in the text by Pelagonius or an editor from a source: 'peduculos tres humanos, *ita ut non* eos nomines...mittito'. Otherwise the later (Imperial) consecutive use of *ne* for *ut non* is preferred (44.1, 256.3, 269.3, 292).<sup>47</sup>

**de aceto...laua:** this use of *de* (roughly from Apuleius onwards) can loosely be classed as 'instrumental',<sup>48</sup> but it is remarkably pregnant, with various ideas present. The instrumental idea is no more than implied by the context. The full implication of the phrase might be expressed 'wash (with) (some *acetum*) (taken) from (a larger amount of) *acetum*'. While the notion of source / provenance is explicitly expressed by *de*, partitive and instrumental ideas are implied. There is a hypothetical quantity of *acetum*, from which some is taken, and by means of that the washing is done.

<sup>43</sup> See L. Feltenius, *Intransitivizations in Latin* (Uppsala, 1977), p. 127.

<sup>44</sup> See e.g. E. Löfstedt, *Philologischer Kommentar zur Peregrinatio Aetheriae* (Uppsala, 1911), pp. 183f., J. Svennung, *Untersuchungen zu Palladius und zur lateinischen Fach- und Volkssprache* (Uppsala-Leipzig-The Hague-Paris, 1935), p. 543n., V. Väänänen, *Introduction au latin vulgaire*<sup>3</sup> (Paris, 1981), p. 222 with bibliography.

<sup>45</sup> A. Önnersfors (ed.), *Physica Plinii Bambergensis* (Hildesheim-New York, 1975).

<sup>46</sup> See T. O. Cockayne (ed.), *Leechdoms, Wortcunning and Starcraft of Early England* (London, 1864-6), ii. 250. See further J. N. Adams and Marilyn Deegan, 'Bald's Leechbook and the *Physica Plinii*', forthcoming in *Anglo-Saxon England*.

<sup>47</sup> Cf. J. B. Hofmann and A. Szantyr, *Lateinische Syntax und Stylistik* (Munich, 1965), pp. 641f., Svennung, *Unt.*, p. 513 on the later construction, attested from Celsus and Columella onwards.

<sup>48</sup> For which usage, see e.g. *TLL* V.1.62.18ff. (a mixed bag of examples), Hofmann-Szantyr, p. 126, H. Ahlquist, *Studien zur spätlateinischen Mulomedicina Chironis* (Uppsala, 1909), p. 78.

For such uses of *de* in Pelagonius, cf. 153 'rosmarinum decoque et *de calida ipsa* testes foueto', 433 'altera die *de faeno Graeco, sed cocto*, cum lana fomentabis'. *Lauro* usually has a plain ablative complement in Pelagonius (10 times in *R*), but cf. in *R* 456 'cum de posca prius pedes lauaueris', 457 'cum prius de posca pedes laueris'; in the new fragments note 230 bis 'de <e>odem lotio calces eius lauabis'.

**summe prodest:** *summe* nowhere in *R*. Contrast 10, 328 *satis prodest*, 388 *uehementer ...prodest*; *prodest* on its own, e.g. 313.

3.3 230 bis *item aliud. faba si in lotio humano quoquatur et in modum cataplasme inponitur et de <e>odem lotio calces eius lauabis sed calido, prodesse dicunt*.

**si...prodesse dicunt:** the vast majority of conditional clauses in the text of Pelagonius express either the causes of an affliction (e.g. 233 'si a rota uexauerit') or its symptoms (e.g. 12 'si coeperit de incertis pedibus claudicare'). Here a threefold conditional would appear to describe the method of treatment. There is, however, an interesting parallel at 211.2 '*prodesse etiam ferunt, si deambulent inter pigmentarios*'. The main clause *prodesse ...ferunt*, complemented by a *si*-clause, corresponds to *prodesse dicunt* in our passage; it follows that the comma after *calido* is correct,<sup>49</sup> and that the *si*-clause should be taken as a complement to *prodesse dicunt*. There are various other equivalents or correspondents to *prodesse dicunt* in the text: 268.4 *prodesse dixerunt*, 269.1 *prodesse dixerunt*, 284.2 *prodesse adseuerant*, 269.1 *prodesse memoramus*, 146.2 *dicendo prodesse*. Without exception these expressions form part of a longer sentence (as distinct from a short summarising sentence in themselves). In most cases *prodesse (dicunt etc.)* precedes the dependent or subordinate construction, but note 284.2 'herbam thymum tritam et datam cum uino prodesse adseuerant'.

But problems remain. The protasis of the condition begins with a present passive subjunctive verb (*coquatur*), then switches to a present passive indicative (*inponitur*), and ends with a future active (*lauabis*). There are no parallels for this type of variation of tense, mood and voice in *si*-clauses elsewhere in the text, at least in *R* (31.1 'si omnis diligentia adhibita fuerit et cibaria largissima suppedient', 130 'si fortior fuerit strofus et uenter non facit' are not parallels).

One solution might seem to be to delete *si*, and to take *coquatur*, *inponitur* and *lauabis* as three differently expressed coordinated directives. Pelagonius (or at least the manuscripts of Pelagonius) freely mixes imperative verb-forms or equivalents in coordination or in parallel clauses: e.g. 12 *mittitur / dato*, 13 *mittito / stabuletur / dato*, 37 *detrahe / coneris / misce / infundes*. At 442 two present passive subjunctives (*stabuletur, abstineatur*) are followed by a future passive indicative (*sustentabitur*), and at 218 a present passive indicative (*soluuntur*) is followed by a present passive subjunctive (*curetur*), but again no precise parallel can be cited for the present alternation.

It is the parallelism of 211.1, and the way in which equivalent expressions to *prodesse dicunt* are incorporated in longer sentences, which support the retention of *si*. The inconsistency of mood, voice and tense in the conditional clause is not particularly difficult. Though the clause is headed by *si*, in effect it expresses directives. In directives throughout the text the third-person present passive indicative, present passive subjunctive and future active are interchangeable. It is also worth stressing that variations in the form of coordinated verbs found in the manuscripts of a technical text do not necessarily accurately reflect the practice of the author. Scribes

<sup>49</sup> In Corsetti's text the comma which he correctly adopted has been obliterated in the printing.

were liable to alter the mood, tense or voice of verbs, particularly those which had an explicit or implied imperatival function. There is, for example, a great deal of inconsistency between *R* and *E* in imperatival verb-forms, as will become clear when *E* is edited.

**si in lotio humano quoquatur et in modum cataplasmae inponitur:** it may seem odd that *in modum cataplasmae* should be associated with *inponitur*. In the passage immediately preceding this in *R* (230) and also in 230 (*E*) the same phrase *in modum cataplasmae* is associated with *coque(s)*, and *inpone*, expressing a later stage in the treatment, is coordinated with *coques*: 'ypopanacem [*opopanacem E*] cum farina hordeacia coques [*coque E*] in modum cataplasmae et impone'. Such phraseology seems to be standard: a substance is cooked, made, rubbed etc. into the form of a *cataplasma*: cf. 260 'teres in modum cataplasmae et alutae inducito', 448.3 'subigitur, ut sit in modum cataplasmae'.

*In modum cataplasmae* might therefore seem to go better with *coquatur*, and it is tempting to think that *et* has been displaced. However, there is one place in *R* where *in modum cataplasmatitis* is associated with an equivalent verb to *impono*: 414 'hunc melle commixto oculo clauso in modum cataplasmatitis superimpones'. The phraseology therefore looks authentically Pelagonian.

**de <e>odem lotio ... sed calido:** this use of *sed* is typical of Pelagonius, and is found often in technical prose: cf. e.g. 240 'stercus caninum, sed liquidum cum acrisimo aceto permisce', 335 'alumen, sed scissum, cum melle decoquis' (also 18, 41, 82, 433). The implication is usually: 'but X, [not its opposite or alternative Y]': there is an implied contrast with a contrary alternative. At Theod. Prisc. p. 208.5, for example ('lauacris tunc uti conueniet, sed marinis'), *non dulcibus* is implied after *marinis*; the alternative to sea-water baths would be fresh-water baths. At Anthimus 18, p. 11.1 ('uulua porcina et ipsa optima est, sed elixa'), understand *non assa* ('boiled, [not roasted]'). At Pel. 240 above *non durum* must be understood (for *stercus durum* see e.g. Veg. 2.119.1, 2.121.1), and at 335, *non liquidum* (for *alumen liquidum* as one type, see Plin. *N.H.* 35.184). *Sed calido* must therefore imply *non frigido*. The force of the idiom is to highlight *calido*: = 'but make sure that it is hot, not cold'. It should be noted that at 335 (see above), *E* has *sed non scissum*. The negative is not normal at this point in the idiom, and *E* can be assumed to be in error here.

The pregnant use of *sed* illustrated above should be compared with the full form of expression seen at *Mul. Chir.* 406: 'scrophae sanguinem, *sed nouellae, non uetulae*'.

**lotio ... lauabis:** *lotium*, a rather vulgar word,<sup>50</sup> is common in Pelagonius and veterinary Latin. It occurs 8 times in *R*, once (448.2) in a probable epistle. In the new fragments, cf. *ib.* 'in lotio humano quoquatur', 481 bis 'lutium humanum coctum ad testas siue lapides molares feruentes mitte; in eodem *lutio* et tepefacto coleos foueto'. There is a coarse element in the excretory terminology of veterinary Latin (see below), which must reflect the horse doctor's and owner's tendency not to mince words when dealing with bodily functions. However *lotium*, both in the new passages and in *R*, is not used in phrases meaning 'urinate' (contrast, e.g. Veg. 1.17.4 'si uolentes emittere lotium non sinantur'; also *Mul. Chir.* 461); it indicates an ingredient in concoctions or the like (cf. *TLL* VII.2.1683.26ff.). In a number of places, as once in each of the new passages 230 bis and 481 bis, it retains something of its etymological sense 'liquid for washing': cf. e.g. in *R* 294 'inde cum usta ceciderint, *lauato lotio* humano', 348 'prius *lotio* humano calidam commisce et ... *lauas*', 448.2 'ista *lotio lauari*'; this usage is as old as Cato (*Agr.* 157.10). Note too the expression *lotium humanum* both

<sup>50</sup> See Adams, *The Latin Sexual Vocabulary* (London, 1982), pp. 246–8.

in *R* and the new passages. The use of *lotium* in the new fragments is therefore in accord with that previously known from *R*, and distinctively ‘Pelagonian’, in that neither Vegetius nor the *Mul. Chir.* places the same restriction on the word.

3.4 384 *ter item hiemalis potio. caricas n. VIII, nuclei himina ita ut neicleus tollas, dactulos VIII, piperis grana LXI, laridi uetustissimi*<sup>51</sup> *pondo I, fabe iminam separatim coques, porro fasce unum, uinu uetus; omnia in olla coques cum uino et postea teris in mortario et sic triduo potionabis.*

**nuclei himina ita ut neicleus tollas:** *neicleus* = *nucleos*. *Nucleus* could indicate the kernel of a nut (removed from its shell or casing; *nux* is the whole nut),<sup>52</sup> or the seed of the pine cone (removed from the cone, *nux* (*pineae*)). The distinction between *nux* and *nucleus* (in reference to the pine) is particularly clear at Col. 12.5.2: ‘*tum etiam exemptis nucleis ipsas nuces pineas uacuas numero quinque uel sex incendunt*’; also Pel. 205.2 (*R*) ‘*nucibus pineis, id est nucleis leuigatis*’.

The phraseology of Pelagonius above is therefore odd: one might have expected a lexical distinction to be expressed between the nut and the kernel, which is to be removed. The *ita ut*-clause can be taken as an afterthought, designed to make it absolutely clear that the *nuclei* should be *sublati* (‘a *hemina* of nut kernels, but make sure that the kernels are removed (from their shells)’). The singular (common in Pelagonius) is that type of collective singular which is well attested in botanical terms (e.g. *faba*; or, for the collective singular of *nux*, cf. 40 ‘olei cyprini lib. s., portulacae et nucis amarae selib.’).<sup>53</sup> *Ita ut*-clauses in Pelagonius are often rather repetitive, merely adding precision to the directive which immediately precedes: e.g. 26 ‘*perunguendum est oleo primum rutato, ita ut omne corpus perunguas*’ (cf. 151.1, 152.1, 242).

**separatim:** hitherto not attested in our text of Pelagonius, but note now in the new passages 523 *separa* ... = *separatim*, 530 *partim* = *separatim*.

**et postea teris in mortario et sic triduo potionabis:** cf. 260 ‘*et postea in mortario teres*’. For *triduo potionabis*, see 192; for *sic triduo*, see 84, 459.2, and for *teres* coordinated with *potionabis*, see 117. 384 *ter* is one of the *additamenta* to which there is nothing corresponding in the Greek translation of Pelagonius. The Latinity of its last sentence certainly looks authentic.

3.5 481 *bis lutium humanum coctum ad testas siue lapides molares feruentes mitte: in eodem lutio et tepefacto coleos foueto; postea uinum et acitum per pinnam inducis.*

**lutium humanum coctum ad testas siue lapides molares feruentes mitte:** Corsetti (50) cites the similar passage *Mul. Chir.* 486: ‘*loteum uetus putridum in uaso adicito et in eo lapides molares feruentes dimittito*’.<sup>54</sup> The second clause *in eo...dimittito*,

<sup>51</sup> Presumably for *uetustissimi*: for *laridum uetustissimum*, see Marc. Med. 9.68.

<sup>52</sup> For the senses of the word, see J. André, *Lexique des termes de botanique en latin* (Paris, 1956), pp. 220f.; *Oxford Latin Dictionary*, s.v. *nucleus*, 1.

<sup>53</sup> On such collective singulars, see, e.g., Svennung, *Unt.*, p. 169.

<sup>54</sup> The Greek passage (*Hipp. Ber.* 49.3–4) cited by Corsetti along with *Mul. Chir.* 486 is rather less precise: *CHG* i.226.4–6 *εἰ δὲ μὴ παύηται, πυρία οὖρον θερμῶ παιδικῶ, ὑποτιθεῖς μύλιντας λίθους πεπυρωμένους, ἕως ὑπὸ τῶν λίθων οἱ μῆροὶ ἰδρώσουσι*. At *Mul. Chir.* 486 the hot millstones are unambiguously placed in urine (to create steam). Does the Greek mean that the millstones are placed in οὖρον παιδικόν; or, as a second process, are the heated stones placed under the horse on the ground, to make it sweat; or are the heated stones on the ground under the animal sprinkled with οὖρον παιδικόν to fumigate the belly? In connection with this third possibility, note the process clearly stated at Veg. 2.79.16 (a passage derived from *Mul. Chir.* 456



containing the local complement *in eo*, suggests that the sense of the Pelagonian passage from *siue* is 'or put hot *lapides molares* [into the *lotium*]' (cf. Veg. 2.71.2, based on *Mul. Chir.* 486).<sup>55</sup> The sentence is carelessly phrased; *mitto* is used without a local complement. For this usage, cf. 315 'calida uulnera fomenta et sic puluerem mitte', 328 'frigidum fiat et sic absinthium mitte', and particularly *Mul. Chir.* 523 'unum lapidem candentem mittito [*sc. in lotio*]' (similar context; see n. 55).

The first clause *lutium humanum coctum ad testas* is problematical. The first clause of *Mul. Chir.* 486 above refers to the putting of *lotium* 'in a vessel' (*in uaso adicito*). *Testa* might possibly signify an earthenware vessel: the word occurs elsewhere in medical Latin of such a vessel used in the heating of ingredients: e.g. *Phys. Plin. Bamb.* 76.2 'scohem cypressi in testa noua calefactum', *Phys. Plin. Flor.-Prag.* I.9.18 'senectus serpentis feruenti testa usta'. The meaning of the imperfectly phrased sentence might be: 'human urine [is] heated [i.e. by fire] in earthenware vessels – or put hot millstones [in the *lotium* as an alternative means of heating]'.<sup>56</sup>

On this view the (locative) use of *ad* would be rather curious. There is a category of examples of *ad* in recipe literature in which the *ad*-expression (= 'in, on, at') defines the site at which a process (such as heating) is carried out, though it tends to take on a secondary instrumental idea as well (= 'by means of'): e.g. Cato, *Agr.* 81 'ita coquito *ad ignem*',<sup>56</sup> Apic. 3.2.5 'siccabis *ad solem*', Pel. 335 'alumen ... cum melle decoquis *ad lentos carbones*'.<sup>57</sup> *Ad testas* would be similar to, but a slight extension of, this normal (locative > instrumental) form of expression. It would refer not to the place *at* which, but to the thing *within* which the heating is carried out. There would again be an instrumental idea loosely present, in that the *testae*, heated (by fire), could be regarded as the more immediate source of heat. For a revealing expression, note Apicius 4.2.1: 'ad ignem lenem uel *ad aquam calidam* coques'. The first phrase belongs to the normal type (= 'at, on' > 'by means of'). The second expression indicates a substance (water) *within* which the ingredients to be cooked are contained (a bain-marie); that substance is by implication acted on by the primary heat source. Apicius passes easily from the usual type of expression to its extension.

For another example of *ad* accompanying a noun designating a container in which a process is carried out, see *Mul. Chir.* 822 'conterito ad mortario marmoreo pistello plumbeo' (MS. *contineto ad mortaria marmoreo*). Buecheler's emendation *conterito*

or Pel. 151, and by them from Apsyrtus, *Hipp. Ber.* 33.8, *CHG* i.168.23–169.3: 'ut animalia a collo usque ad pedes inuoluantur de sagis suppositisque carbonibus uiuis addito castoreo suffumigentur, ut totum uentrem testiculosque eorum castorei fumus uaporet' (the animal is completely covered, hot coals are placed beneath it, then *castoreum* (a secretion of the beaver) is put on the coals so that the *uenter* may be fumigated by the steam of the *castoreum*). Note too Veg. 2.113.2 (based on *Mul.* 380–1, where there are textual difficulties) for much the same process: 'lapides molares non minus pondera V in ignem imponuntur, animalis caput copulatur ad pedes; cum bene canduerint, sub eius naribus apponuntur et perfusi oleo suffumigant os nares et oculos'.

<sup>55</sup> For this means of fumigation, see *Mul. Chir.* 523 'lapides molares plures candefacito. ubi bene calebunt, caput operito et uas plenum loteo adponito, unum lapidem candentem mittito, ita facito ex his omnibus omnes de loteo uapores ut equo in os eant' (= Veg. 2.28.5).

<sup>56</sup> This and a small number of other examples, some as early as Vitruvius, are quoted at *TLL* I.525.70ff. Note too Veg. 4.4.11 'aliqui uero II lib. ex uinaceis ad focum torrent'; also the similar idiom at Pel. 85.2: 'intepescat *contra focum* potio'.

<sup>57</sup> See further (e.g.), Pel. 384, 386.1 (*ad lentos carbones* in both cases). At Veg. *Mul.* 3.22.2 ('haec ad carbones lentis uaporibus decoquuntur') *lentis* should surely be changed to *lentos*. Examples of this kind, which are transitional between the meanings 'on/at' and 'by means of', will in their turn have provided the starting point for the development of a purely instrumental use of *ad*, as exemplified by Veg. 4.5 'melius creditur, si *ad acutam cannam* exseces ranulam'. For this usage, see Hofmann–Szantyr, op. cit. (n. 47), pp. 127, 220 (with literature).

for *contineto* is likely to be right, given the reference to a mortar and pestle; but he also needlessly deleted *ad*, proposing an ablative *mortario marmoreo*. Oder (retaining *contineto*) prints a neuter plural *mortaria marmorea*, but it is usual to have *mortarium* in the singular in such contexts. I should prefer *ad mortario marmoreo* (= accusative, but with omission of *-m* and merger of *ō* and *ū* as *o*).<sup>58</sup>

On this interpretation of *ad testas* a sharp point would be given to *siue*, in that two alternative methods of heating would be contrasted: fire acting on earthenware containers, or hot millstones dropped into the liquid.

A second possibility is that *testas* indicates heated sherds put, like the millstones, into the urine. For this method of heating, see Col. 7.5.9 'item uetus hominis urina testis candentibus inusta'. *Ad* would be a case of that locative usage ('heated on sherds') seen above at Pel. 335 (*ad lentos carbones*) and elsewhere, but again the locative sense would merge into an instrumental idea: 'human urine [is] heated on [> 'by means of'] sherds [which have been placed in it] – or put [in] hot millstones [as an alternative to the sherds]'. I would favour this second interpretation of *ad testas*, on the grounds that the noun is in the plural: more than one sherd would be needed, but surely not more than one vessel.

**coleos foueto**: there is no example of the vulgar *colei* = *testes*<sup>59</sup> in *R* (*testes* 5 times; cf. especially 65 '*testes aqua calida foueto*', 153 '*de calida ipsa testes foueto*'; now note 524 bis *tumore testium*). It is of course possible that the scribe of *E* (or a precursor) substituted *colei* for *testes*, given that such practical texts were not sacrosanct in the sense that the text of, say, Virgil, was.<sup>60</sup>

There is, however, no reason to suspect the authenticity of *coleos*. Corsetti points out (45) that the adjective *coleatus* has now turned up in an expansion of the text provided by *E* at 404, where *R* obviously has a lacuna: '*detrachito uentremque et crura pluribus punctis uirito [= inurito]; si coleatus est, testis adimidio [= testes adimito] clausumque ...*'. It is particularly interesting to note that this passage is taken from the lost Latin veterinary writer also used by Eumelus.<sup>61</sup> The lost writer was a correct classiciser,<sup>62</sup> yet he was apparently not averse from admitting *coleatus*.<sup>63</sup> If he did indeed use the adjective,<sup>64</sup> there is no reason why his follower Pelagonius should not have used this noun.

There are moreover various other coarse terms in *R* (see above, on *lotium*). *Merda* = *stercus* occurs at 135.1, and also in the *Mulomedicina Chironis* (268, 989) and even Vegetius (2.8.4).<sup>65</sup> The fact that Vegetius was prepared to take the word over from *Mul. Chir.* 268 shows that H. D. Jocelyn<sup>66</sup> was mistaken to use its presence at

<sup>58</sup> So Ahlquist, op. cit. (n. 48), p. 61.

<sup>59</sup> Adams, *The Latin Sexual Vocabulary*, pp. 66f.

<sup>60</sup> For lexical variation between the two manuscripts, note e.g. 218 *laeserit R*, *uexauerit E*, 234 *stercore R*, *fimo E*, 254 *foueri R*, *fomentari E*.

<sup>61</sup> On whom see my article, cited above, n. 7. The new sentence provides an example of connective *-que*, which is rare in Pelagonius but a very distinctive mark of the passages quoted from the lost writer (Adams, op. cit. (n. 57), p. 11).

<sup>62</sup> Adams, op. cit. (n. 57), p. 14.

<sup>63</sup> This new attestation of *coleatus* is of some interest. Previously the word was found only in Pomponius (40, 69) and a gloss (*CGL* II.103.28). In Pomponius it has the appearance of a humorous coinage (Adams, op. cit. (n. 59), pp. 20, 66–7), but it now becomes likely that the word had some currency at a subliterary level.

<sup>64</sup> There are of course two alternative possibilities: either a scribe may have introduced *coleatus* for something else, or Pelagonius himself may have put it into the quotation. If the latter, we are still left with Pelagonius as a writer prepared to admit basic sexual terminology. I cannot convince myself that a scribe would have introduced an unusual word like *coleatus*.

<sup>65</sup> Adams, op. cit. (n. 59), p. 233.

<sup>66</sup> Review of K.-D. Fischer, *Pelagonii Ars Veterinaria*, in *LCM* 7.4 (April, 1982), 58.

Pel. 135 as an indication that the passage did not belong to the original treatise. Moreover Pelagonius not only freely uses the coarse verb *meio* 'urinate' (e.g. in epistles at 140.1, 3 times, and 141.1; 18 examples in total in *R*, or 19 if one accepts the expansion of the text at 153), a verb which is rigorously avoided in polite prose (including that of Vegetius, who replaced it by *mingo* when he came across it in his source the *Mulomedicina Chironis*),<sup>67</sup> but he always has it in the secondary form *meiare* (a remodelling of *meiere* on the analogy probably of *cacare*), which survives in Romance and was no doubt a basic vulgarism.<sup>68</sup> Another basic excretory term which turns up in *R* is *caco*, but it is only in headings (302.1, 308.1).<sup>69</sup>

The impression should not, however, be given that Pelagonius' excretory and sexual terminology was exclusively coarse or vulgar. There is sometimes a polite character to his sexual allusions. Twice he has the euphemistic and scientific expression *loca naturalia* (152.1, 162), which in various forms had been used previously by Celsus and Columella. The second example is in a passage based on Columella (6.30.4), who was no doubt his model for the use of the phrase.<sup>70</sup> Three times he has *ueretrum* (157, 205.5, 237), a euphemism which was highly favoured in medical and veterinary writings from Scribonius onwards.<sup>71</sup> Another euphemism which he uses is *anus* (5 times).

There is a euphemistic omission of a word for 'penis' at 140.1: 'frequenter sane et uult *meiare* et uidetur quasi posse, sed non *meiat*. nam et *summittit*, quasi *meiet*, et *se sic tendit*'. Apsyrtus is the source (*Hipp. Ber.* 33.1, *CHG* i.164.9): *προβάλλων τὸ αἰδοῖον, καὶ κατὰ σταλαγμὸν προιέμενος, καὶ ἔμφασιν ἔχων μέλλοντος οὐρεῖν*. Pelagonius has used *summitto* elliptically, with no object equivalent to *aïdoïon* (but contrast 157 'si equus *ueretrum* *summissum* habuerit').<sup>72</sup> *Se tendit* too (with the general *se* standing for a more specific noun such as *ueretrum*) is a familiar type of euphemism.<sup>73</sup>

**per pinnam inducis:** *penna* with *per* found nowhere in *R* (*de penna* 3 times, *pennā* once); nevertheless the instrumental use of *per* with other nouns is common (e.g. *per cornu*).

3.6 482 *tunc cre[a]tam cum stercore bubulo et cimino ex posca coquis et uteris usque ad sanitatem.*

**ex posca coquis:** *ex posca* nowhere in *R*; *de posca* at 456, 457, otherwise plain ablative. For this use of *ex*, cf. e.g. 397 'coques ex aqua', and from an earlier period, Cels. 2.33.5 'ualentior...ad id omnis farina est ex mulso quam ex aqua cocta'.<sup>74</sup>

**uteris usque ad sanitatem:** *usque ad sanitatem* 9 times in *R*, but not with *uteris*.

3.7 495 *item alio genere malagmam quadrigarium. adipis colate p. II, resine terebinthine pondo trea, olei p. II, mollybdine p. III, galbani – I, eruginis – I.*

<sup>67</sup> Adams, op. cit. (n. 59), p. 246.

<sup>68</sup> For details, Adams, op. cit. (n. 59), pp. 245f. It is worth noting that in the heading to c. 24 (§302) in *E mingunt* is found where *R* has *meiant*. Nevertheless there are no grounds for supposing that the scribe of *R* was responsible for the introduction of *meiare*: note 308 (*E*) 'qui sanguinem aut cacant aut *meiant*' (so *R*).

<sup>69</sup> Details in Adams, op. cit. (n. 59), pp. 231–3.

<sup>70</sup> Details in Adams, op. cit. (n. 59), pp. 60f.

<sup>71</sup> Adams, op. cit. (n. 59), pp. 52f.

<sup>72</sup> For ellipse of such an object, see Adams, 'A Type of Sexual Euphemism in Latin', *Phoenix* 35 (1981), 124.

<sup>73</sup> Adams, op. cit. (n. 59), p. 46.

<sup>74</sup> See *TLL* IV.926.54ff., V.2.1113.58ff., Ahlquist, op. cit. (n. 48), pp. 82f., Mary E. Milham, 'Case and Prepositional Usage in Apicius', *Glotta* 39 (1961), 286. The usage was idiomatic in recipes.

**item alio genere malagmam:** *alio genere* is used a number of times in headings in *R* attached to a noun (339 *emplastrum alio genere*), as an adverbial (201 *alio genere sic facies*), or absolutely (411). In the new passages note 496 *alio genere ad neruorum dolores*, 498 *malagma alio genere*, 502 *malagma cruda alio genere*.

3.8 501 *malagma marmorosus. spume argenti p. II, resine terebinthine lib. I, galbani p. II, uirole p. II, manne turis p. II, resine Colofonie p. I, opoponacis Afre lib. I, propolis Attice lib. I, iris Illice lib. I, uisc<i> p. III, ysopi Attici silibram, merum crasti lib. I, ammoniaci silibram, stimi p. II, cardamomi libram semis, adipis taurine – II, cerusse p. III, ce<rae> pondo II.*

Corsetti notes that *marmorosus* must be corrected to *ad marmorosus*. He also points out (48) that the adjective *marmorosus* is attested here for the first time in Latin; it was previously known as a loan-word in Apsyrthus: *Hipp. Ber.* 53.1, *CHG* i.238.15 *μόνω δὲ ἡμιόνω τοῦτο συμβαίνει, ὃν δὲ οὐ ῥάδιον, ἵππος δὲ οὐ γίνεται μαρμαρωσός, ἀλλὰ ποδαγρός* (cf. *Hipp. Ber.* 130.10). Latin loan-words are not uncommon in later Greek veterinary writings.<sup>75</sup>

It should also be noted that this attestation throws new light on the meaning of *marmor* in the veterinary language. The heading of the corresponding passage in the Greek translation of Pelagonius reads (*Hipp. Par.* 865 = *Hipp. Ber.* 130.40): *μάλαγμα πρὸς τοὺς ἀλγοῦντας τὰς ὠμοπλάτας*. Thus the condition affects the shoulder-blade, *ὠμοπλάτη* (*scapula*). Hitherto *marmor* in veterinary Latin has been thought to signify a condition of the knee (*Mul. Chir.* 110, 592) or foot (*Mul. Chir.* 620, 621).<sup>76</sup> Like the etymologically more transparent *ossilago* (for which see, for example, *Mul. Chir.* 35), *marmor* must have indicated forms of exostosis, a condition which may be defined as ‘an outgrowth of rarefied bone tissue upon the surface of a bone’.<sup>77</sup> Two common types are ‘ring-bone’, that is ‘any bony exostosis affecting the interphalangeal joints of the horse’s foot, or indeed any bony enlargement in the same region’,<sup>78</sup> and ‘sidebones’, that is ‘ossification of the lateral cartilages of the horse’s foot’.<sup>79</sup> The identification of *marmor* (*in pedibus*) with ring-bone or sidebones is virtually certain for *Mul. Chir.* 620–1. *Marmor* in the knee must refer to an exostosis in the carpometacarpal joint.<sup>80</sup> As corresponding terms Greek had both *πῶρος* and *μάρμαρον* (note particularly Apsyrthus, *Hipp. Ber.* 10.2, *CHG* i.57.8f. *οὐ μόνον γὰρ ἐπιφέρουσι πῶρον τὸν λεγόμενον μάρμαρον, ἀλλὰ καὶ ἡ ὅπλῃ αἰτιᾶται*; cf. Apsyrthus, *Hipp. Ber.* 53.1, 113.1). Given Apsyrthus’ use of the Latin loan-word *μαρμαρωσός*, it is possible that *μάρμαρον* as used by Greek veterinarians was a calque on Lat. *marmor*.

The new example of *marmorosus* (if the heading is authentically Pelagonian) suggests that *marmor* had a wider sphere of reference than might have been supposed:<sup>81</sup> it seems to have been capable of denoting an exostosis found in places other than the foot and knee. The new evidence highlights the hazards of imposing

<sup>75</sup> For a comment on Latin usage in a Greek veterinary writer, see n. 8.

<sup>76</sup> See in general on the conditions in question Fischer, *Pelagonii Ars Veterinaria*, 124 (on 278), M. Skupas, *Altgriechische Tierkrankheitsnamen und ihre Deutungen* (Hanover, 1962), pp. 32f.

<sup>77</sup> *Black’s Veterinary Dictionary*, p. 102; cf. 281, s.v.

<sup>78</sup> *Black’s Veterinary Dictionary*, p. 697.

<sup>79</sup> *Black’s Veterinary Dictionary*, p. 731.

<sup>80</sup> See Fischer, loc. cit.

<sup>81</sup> It is possible, as an anonymous reader suggests, that the Greek translator misread *marmorosus* as if it were *arma* or a derivative. What such a derivative might have been is not clear to me, but I would agree that the headings both in Pelagonius and the Greek translator are not to be relied on.

specialised meanings on pathological terms which have only a limited attestation in extant veterinary texts. Nodules of new bone can form on the spine of the scapula as a result of trauma, particularly if this is repeated.<sup>82</sup> Our passage must refer to a condition of this type, perhaps caused by a part of the harness.

3.9 505 *malagma de axungia et calce, Pelagoni. axungie ueteris contundito lib. I et calois [i.e. calcis] quod sufficit, et sic inponito; triduo ligatum sit. uincit omnia medicamina et cito dolores tollit.*

**triduo ligatum sit:** 'let it remain tied on for three days': for the phraseology, cf. *Phys. Plin. Bamb.* 83.42 'per triduum sit ligata[m]'.

3.10 509 *aliut malagma. cere lib. I, galbani – II, resine terebinthine – II, hammoniacy lib. I, olei ciprini quod sufficit. hec coquito extra ammoniacum, contundito et subigito reliqua. cum cocta fuerint, in mortario terescant [= teres et] inde inter manus subigito et facito magdalia et, cum necesse fuerit, uteris.*

**contundito et subigito reliqua:** three times in the new passages in *E reliqua* is used in the neuter plural (of ingredients): cf. 522 'arida contundis, reliqua quoques', 530 'riliqua [sic] una misceto'. Yet in the whole of *R* this neuter plural usage is nowhere found. *Reliquus* occurs only once, and then in the feminine singular (51.1 *reliqua pars corporis*).

**inter manus subigito:** *inter manus* only here; cf. 44.2 'haec omnia manu subigito'.

3.11 528 *de uerucas pecorum. uerucas pecorum sic amputabis. eruginis II, calcis III, fecte IIII decoquis et sic uteris; tabescunt uerruce. si minus, seta caballina religabis; excidunt ueruce. experiundo certum sum.*

**de uerucas pecorum:** *pecus* is a variant for *equus / iumentum / animal*, and is common in the work (more than 20 examples in *R*): e.g. 115 (epistle) 'sollicito tibi de singulis curis pecorum'.

**experiundo certum sum:** cf. 185.3 'nos experiundo scimus...'.

#### 4. CONCLUSION

The new fragments display a Latinity in many respects typical of that already found in the existing text. The long passage 529 bis has a variety of mannerisms found in Pelagonius' epistles as transmitted by *R*. Of particular linguistic interest are the use of *coleus* and the light it throws on an aspect of the veterinary language; the new sense of *renes* as demonstrated by the association of the word with *flecti*; various prepositional usages characteristic of technical registers; and the evidence which the new adjective *marmorosus* seems to provide for the sense of the previously attested technical term *marmor*. We have also noted a few idioms and usages not otherwise attested in Pelagonius (e.g. *summe, separatim, per pinnam, ex posca, reliqua, inter manus*). That is only to be expected, as any text will show a scattering of unique usages. Nevertheless there is a warning to be extracted from these new attestations: linguistic abnormalities cannot be used as evidence for the non-Pelagonian authorship of a particular passage unless they occur in profusion.

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<sup>82</sup> Information from Dr Baker.