The Language of Poetry and the Language of Science: The Latin Poets and 'Medical Latin'

D. R. LANGSLOW

Summary. This paper is intended as a pilot study of the relations between literary, especially poetic, language and technical/special languages in Latin. After an introductory description (**I**) of some existing work on this subject in Greek literature, it offers (**II**) some general observations on the use of technical vocabulary in Latin poetry, both *sensu proprio* and in metaphor, drawing examples for the most part from the field of medicine. It is suggested that the literary use and avoidance of technical vocabulary of different kinds may be a useful critical tool for characterizing poems, poets, genres, traditions. The general hypothesis is developed that in a live metaphor drawn from a technical activity the vocabulary used will usually be authentic, current *uocabula propria*. This would allow a live literary metaphor to serve as linguistic evidence for ordinary technical vocabulary of the period; conversely, attention to known special vocabulary can sharpen appreciation of poetic imagery, even unearth unsuspected metaphors. In the last part (**III**), from a series of examples of the metaphorical use by Latin poets of medical vocabulary, I suggest some possible results, of sociolinguistic and historical interest, of making systematic comparison between literary and technical texts.[1]

I. GREEK POETRY AND SCIENCE

(1) Homer

I BEGIN WITH the Greeks in general because their literature gives some well-known examples of the sorts of contact that may occur between poetry and science; and with Homer in particular both because Homeric language appears to have been of long-lasting relevance in the Greek medical tradition and because, if there may be a trace of poetic colour or even of an analogous tradition in Latin medical literature, then this Homerizing tradition in Greek medical prose deserves to be borne in mind as a possible model.

In the final chapter of *Homerische Wörter* (1950: 308–15), Manu Leumann observed a number of words which occur in the Greek record only — or almost exclusively — in Homer and the Hippocratic corpus. These include both 'homerische Wörter', in Leumann's special sense,[2] such as καταπρηνής[3] 'with the palm down', and other items of Homeric vocabulary, such as the notorious λίπ' [ἐλαίῳ][4] or the temporal conjunction ἦμος used for specifying the time of day, especially sunrise or sunset.[5] Leumann's other examples include: ἄρμενον 'fitted' (Homer) — 'tool' (Hippocrates), γυιόω 'make lame' (Hom.) — 'weaken, reduce' (Hp.), ἐνδυκέως 'carefully' (Hom.) — 'continually' (Hp.), ἰχώρ 'gods' blood' (Hom.) — 'a serous discharge' (Hp.), ὠτειλή 'wound' (Hom.) — 'scar, cicatrization' (Hp.), and a further nineteen words of which he is prepared to venture the same account.

Leumann was in no doubt that these (near-)exclusive agreements in vocabulary reflected a conscious use of epic language by writers of medical prose. He suggested that the Hippocratic writers may have used Homeric words not purely on stylistic grounds but also because of the need to

---

A near-final draft was read by J. N. Adams, D. M. Bain, G. O. Hutchinson, R. G. Mayer and G. D. Williams and has benefited greatly from their perceptive and learned criticism. I should like publicly to thank them for the generous gift of their time and care, and to exonerate them from any responsibility for what follows.

[2] That is, a new word or a new meaning which arises within the bardic tradition by reinterpretation of an earlier form or forms.

[3] Supposedly from κατά in tmesis + adjacent πρηνής. See Leumann (1950: 77–9). So, e.g., *Il.* 16.792 [Ares strikes Patroclus] χειρὶ καταπρηνεῖ. Cf. Hp. *Fract.* 2, 40 [= 3.418, 546 Littré]; *Off.* 4 [= 3.286L] καταπρηνής 'with the palm down'.

[4] *Il.* 10.577, al. ἀλείψασθαι λίπ' ἐλαίῳ, *Od.* 3.466, al. ἔχρισεν λίπ' ἐλαίῳ Cf. Hp. *Mul.* 2.150 [= 8.326L] μύρῳ ... ἀλειφέσθω λίπα, *Mul.* 1.35 [= 8.84L] χρίεσθαι λίπα (apparently adverbial), *Mul.* 2.133 [= 8.288L] χρίσμα δὲ λίπα ἔστω (cf. 145, 147 [= 8.322, 324L]; apparently an indeclinable adjective).

[5] *Il.* 1.475, al. ἦμος δ' ἠέλιος κατέδυ. Cf. Hp. *Mul.* 1.23 [= 8.62L] ἦμος ἥλιος δύνῃ, *Prorrh.* 2.4 [= 9.14L] ἦμος ἠέλιος νεωστὶ καταλάμπει.

supply vocabulary for the new technical language of medicine, 'das Ausdrücksbedürfnis einer neu aufkommenden Fachsprache' (1950: 315).

Leumann himself admitted that all these words are difficult and certainly they seem to be of variable quality as evidence of a relation of dependence of Hippocrates on Homer. 'Homerische Wörter' proper (see n. 2) are probably the best witnesses on this side, but some other individual words — perhaps most famously ἰχώρ (Jouanna and Demont (1981)) — have been challenged as being of no value at all for such an inference. And already in 1957 more general doubts were voiced by C. J. Ruijgh (1957: 85–6), who raised the question whether the 'traits épiques' in Hippocrates (and Herodotus, too; cf. Leumann (1950: 303–8)) should not be explained rather as 'réminiscences de la poésie dactylique', that is, as deriving not directly from Homer but from an intermediate didactic source in epic verse, such as that of the Χίρωνος ὑποθῆκαι, or Καθαρμοί of the Περὶ φύσιος of Empedocles.[6] Indeed, an instance of lexical borrowing by medicine from poetry had been proposed earlier (E. Schwyzer in Deichgräber (1935: 95)) on the basis of an agreement between Hippocrates and Empedocles in the use of the verb ἀΐσσω (ἀΐσσομαι) of the orientation of body parts.[7]

(2) Tragedy

A Leumann-type view of poetic words in technical prose has been taken also of exclusive lexical agreements between Hippocratic writings and Athenian tragedy. Examples include: ἀλέξημα 'defence' and 'remedy', ἀνθέω 'to flower' and 'to become acute', οὐκ ἀτρεμαῖοι and πλάνοι 'deranged, disturbed', πλημμυρίς 'flood tide' and 'congestion of fluid'; some non-

---

[6] On which see Schmid–Stählin (1929: 287–8, 318–9). Contrast van Brock's view (1961: 103–4 n. 8): 'je crois que les "traits épiques" de la langue médicale sont tout simplement des homérismes'. Deichgräber's important chapter (1971: 19–29) on Homer, Hippocrates and Aretaeus modifies and refines but essentially upholds Leumann's position (cf. (4) below).

[7] Emp. B 29.1D–K. Hp. Carn. 5.3 [= 8.590L], Epid. 2.4.1 [= 5.122L]. Cf. also Hes. Th. 150 and Il. 23.627f. Ancient associations of Empedocles with Homeric language and medicine include: D.L. 8.57 (Aristotle says that καὶ Ὁμηρικὸς ὁ Ἐμπεδοκλῆς καὶ δεινὸς περὶ τὴν φράσιν γέγονεν), 8.77 (he wrote an ἰατρικὸς λόγος in 600 hexameters); Gal. 10.6 Kühn (De methodo medendi 1.1; he is one of 'the doctors from Italy'). The Suda (Hsch. Mil.) characterizes Empedocles as . . . φιλόσοφος φυσικὸς καὶ ἐποποιός but notes also that he wrote ἰατρικὰ καταλογάδην. Cf. also Arist. Po. 1447b16–18 (Homer and Empedocles have nothing in common except their metre). Bollack (1965–69: I.277ff.) is important on Empedocles and Homeric language and technique; note especially p. 283: 'Les éléments de son art [Empedocles'] proviennent de l'atelier des rhapsodes', and ibid. n. 5: 'Empédocle emploie, et crée sans doute souvent, des mots homériques dans l'acception que M. Leumann a donnée à ce terme'. See now, on Empedocles and Homer, Kingsley (1995: 42ff., 52f.). I owe the last reference to D. M. Bain.

technical vocabulary with the same distribution has also been noticed, such as: δνοφερός 'dark, murky', παραμπέχεσθαι 'to use a cloak of words' and ἐκ νυκτῶν 'after nightfall'. (For references, further examples and discussion see Lanata (1968).)

In such cases it has been inferred by some scholars that the writers of the relatively young scientific prose were borrowing expressive means from literary genres of more solid tradition (Lanata (1968: 30)). This is akin to Leumann's account (quoted above) of Homeric words in Hippocrates as serving both lexical need and stylistic ambition. The approach is in general complementary — if in the case of some words contradictory! — to earlier accounts of the use of technical terminology by the tragedians, which set up a relation of dependence running the other way (notably Dumortier (1935); Miller (1944; cf. 1945); Collinge (1962)). Others again (such as Page (1936), reviewing Dumortier (1935) and Jouanna (1970) reviewing Lanata (1968)[8]) have argued more or less forcefully that there is no relation of dependence either way, that poets and medical writers are drawing their words from the common language. The few generally acknowledged significant instances of agreement between technical vocabulary and tragedy, such as ἔμμοτος of a special kind of plug-dressing (A. *Ch.* 471; see Garvie (1986) ad loc. and on lines 185–6), σπασμός 'convulsion' (S. *Tr.* 805, 1082; see Easterling (1982: Index, *s.v.* 'medical language')) or μεγαλόσπλαγχνος 'with enlarged abdomen' (E. *Med.* 109 metaph.) imply that special and technical languages lend to rather than borrow from the language of tragedy.[9]

(3) Hellenistic Poetry

From Alexandria two centuries later, a third set of supposed contacts between science and (non-didactic) poetry has caught and held scholars' attention: this is 'the employment in poetry of science more as we understand the word nowadays, especially medicine' as part of the Alexandrian 'appeal to scientific and scholarly knowledge for realistic effect' (Zanker (1987: 113)).[10] It is suggested, for example, that the four-layered shield (as opposed to the seven-layered Homeric original at *Il.* 7.220, *al.*) to which

---

[8] Cf. *mutatis mutandis* the published discussions of Scherer (1963), esp. pp. 108–10 and of Dover (1963), esp. pp. 213–14. I owe this reference to Professor Bain.

[9] Although we do not know the *uox propria*, μονορρύθμους δόμους at A. *Supp.* 961 may be a precise, unmetaphorical designation of a type of terraced housing under construction in the Piraeus at the time. See Rösler (1989). I owe this reference to A. Kerkhecker.

[10] Cf. Zanker (1987: 124–7) for a descriptive summary, with further examples and references and, for an instance involving astronomy, Hutchinson (1988: 221, n. 13).

Callimachus compares the Cyclops' eye in the hymn to Artemis (*Dian.* 53) is an allusion to the recent discovery, perhaps by Herophilus, of a fourth layer to the membranes of the human eye. Likewise the position in which Leto gives birth to Apollo and Artemis in Callimachus' hymn to Delos (*Del.* 206–11) is different from that described in the Homeric hymn to Apollo (*h.Ap.* 117–18) and may reflect contemporary obstetrics, again perhaps Herophilean.[11]

Apollonius of Rhodes is held to have achieved contemporary scientific colouring in some descriptive passages of the *Argonautica* by his anatomical precision and by his use of particular words and images. Passages such as the description of the effects of love on Medea's nerves (see Hunter (1989: ad loc.):

> A.R. 3.762–3   [sc. τεῖρ' ὀδύνη] ἀμφί τ' ἀραιὰς
> ἶνας καὶ κεφαλῆς ὑπὸ νείατον ἰνίον ἄχρις,

and of the death of Mopsos from the snake-bite (4.1521–31, including κερκίς 'tibia bone' and ἄφασσεν 'palpated') have been said to reflect knowledge of contemporary science and to presuppose not mere use of a medical glossary but 'eingehende Lektüre eines Spezialwerkes' (Erbse 1953: 190).

(4) Aretaeus

Finally — to end for present purposes in the early imperial period — it seems that a Homerizing tradition established itself in later Greek medical prose. If true, this will have been partly because medicine was closely linked with philology from Hellenistic times to late antiquity (see Wellmann (1931: 1, 58–62, 85) on Erotian; Brock (1961: 206, n. 1), with further literature), partly because of observed Homerisms in Hippocrates. This tradition is exceptionally well represented in Aretaeus of Cappadocia (first century AD: see Kudlien (1963)). He appeals to Homer as an authority (*SD* 1.5.2 [= 39,21 Hude] τέκμαρ δὲ Ὅμηρος); several times he works phrases or lines from the *Iliad* into his text (*SD* 2.13.2, 15 [= 85,24–8, 89,4–5H], *CA* 2.3.14 and 2.9.1 [= 129,15 and 138,25–6H]);[12] and frequently he uses further instances of Homeric vocabulary, such as ἄλκαρ 'remedy', ἠδέ

---

[11] On the uncertainty of the ascription of either of these doctrines to Herophilus, see von Staden (1989: 160–1 and 394–5), with further references.

[12] As other examples of Homer citations, Brock notes (1961: 104, n. 4) that Hp. *Art.* 8 [= 4.98L] includes an unknown line of Homer: ὡς δ' ὁπότ' ἀσπάσιον ἔαρ ἤλυθε βουσὶν ἑλίξιν, and that Galen quotes Hom. *Il.* 22.107 at *in Hp. Epid.* 6 *comm.* 4.10 (p. 203 Wenkebach). On these and other striking examples see Deichgräber (1971: 21ff.).

'and',[13] $\tau\eta\kappa\epsilon\delta\acute{\omega}\nu$ in the sense 'consumption', $\check{\epsilon}\mu\mu\epsilon\nu\alpha\iota$ 'to be', and even $\zeta\omega\gamma\rho\acute{\epsilon}\omega$ in the sense 'restore, refresh', a 'homerisches Wort' not mentioned by Leumann ((1950); see Janni (1967)) and features such as tmesis and apocope (e.g. $\dot{\alpha}\mu\beta o\lambda\acute{\eta}$), in his generally hyper-Ionic prose. (See Ruijgh (1957: 85); Brock (1961: 103–4, 144, 198 ff.); Deichgräber (1971: 19–29).)

I shall say no more on Greek literature now, although I believe that all of the issues alluded to in this introduction deserve renewed attention, some work of synthesis and a general reassessment. The purpose of this brief survey is to make clear that there is reason to believe that in the Greek world at least from the fifth century BC there was a lively two-way relationship between the language of poetry and the language of science, and in particular a Homerizing tradition, direct or indirect, in medical prose. The title of this paper, then, makes obvious sense for Greek litera-ture; what of Latin?

II. SCIENTIFIC AND SPECIAL VOCABULARY IN LATIN POETRY

At first sight the presence in poetry of scientific and, more generally, technical and special vocabulary is a promising topic for Latinists, too. It is common to find in modern commentaries on the Latin poets references to, say, 'the language of medicine' or 'the language of the law' as the source of this word or that usage. Consider just two medical examples, to which we shall have cause to return more than once: first, R. D. Brown's comment on Lucretius' image of love as a disease:

> Lucr. 4.1068–72   ulcus enim uiuescit et inueterascit alendo
>   inque dies gliscit furor atque aerumna grauescit,
>   si non prima nouis conturbes uulnera plagis
>   uulgiuagaque uagus uenere ante recentia cures
>   aut alio possis animi traducere motus:

[With nourishment the festering sore quickens and grows chronic. Day by day the frenzy heightens and the grief deepens. Your only remedy is to lance the first wound with new incisions; to treat it in its early stages with promiscuous attachments; to guide the motions of your mind into some other channel, (transl. R. Latham, slightly modified).]

'for sheer concentration of imagery and intensity of language the passage has few rivals among other ancient versions of the love-sickness theme; . . . the -*sco* verbs of 1068f. . . . are probably chosen to mimic the drily accurate

---

[13] $\check{\eta}\delta\acute{\epsilon}$ and $\check{\alpha}\lambda\kappa\alpha\rho$ are in Galen's *Hippocratic Glosses* (19.75.7 and 19.102.8K). I am grateful to Professor Bain for this information. In using these words, then, Aretaeus may have been following Hippocrates rather than Homer directly.

style of medical discourse' (Brown (1987: 209, 210)); and, second, Paolo Fedeli's note on these lines of Propertius:

> Prop. 1.1.25–7   aut uos, qui sero lapsum reuocatis, amici,
> quaerite non sani pectoris auxilia.
> fortiter et ferrum saeuos patiemur et ignes:

'AVXILIA: nel senso di *remedia* si tratta di un termine del linguaggio medico . . .; d'altronde anche *ferrum* ed *ignis* al v. 27 sono vocaboli del linguaggio medico' (Fedeli (1980: 83)).

While such isolated ascriptions are common in modern commentaries, it is much rarer to find a developed general account of poets' attitudes to, and use of, technical and special language;[14] it is rarer still to find in discussions of Latin special and technical languages any account at all of their occurrence in (non-didactic) poetic texts.[15] I offer now under these two headings some provisional observations and working hypotheses, in the belief that the use and avoidance by poets of special vocabulary may have much to teach us both about the poet and his work and about the terminology of the special subject or technical discipline in question.

(5) The use and avoidance of technical vocabulary *sensu proprio*

It is well known that some subjects are simply not admitted to high poetry. A good example is human anatomy in Virgil. Note the striking conclusions of J. N. Adams (1980b: 59): 'Virgil's men are anatomically shadowy. . . . They are without genitals and buttocks, and largely without internal organs. The nose is unmentionable, as is the hip and skin. In some cases the technical term for the body part seems to have been unpoetic (*coxa, nasus*). Certain areas, whatever the terminology available, were not considered fit to mention.'

Even if a subject is deemed acceptable, its proper vocabulary may not be admitted to a literary work. This applies to many subjects, including anatomy, pathology and parts of therapeutics, which concern us especially today, and particularly, though not only, to serious poetry. Even

---

[14] Mayer (1994) is one recent exception: see esp. pp. 17–18, 19–20 and Index, *s.vv.* 'legal terminology', 'medical analogy / terminology', 'technical terminology avoided'.

[15] The work of I. Mazzini on medicine in Latin poetry is an important exception, even though his concern is with medical *ideas*, rather than language. See Mazzini (1988) on Lucilius, Lucretius, Catullus and Horace; (1991a) on Horace; (1992a) on Plautus; and (1990) on the pathology of love, in Alfonso *et al.* (1990), to which Dr R. K. Gibson drew my attention. Note also Migliorini (1990) on medical terminology in Persius. Dr G. D. Williams alerted me to Menière (1858), a still useful collection of medical passages in Latin poetry from Ennius to Martial, though with little on the form of expression.

here, however, technical and special words are to be found *sensu proprio*, and I begin by mentioning some of the factors which favour their admission.

In an acceptable subject area, especially formally striking words may be admitted *sensu proprio*. Consider the following examples of special words, three from Propertius[16] and three from Lucan:

Prop. 3.12.12   ferreus aurato neu *cataphractus* equo [*scil.* laetetur tua caede]
Prop. 3.14.8   et patitur [*scil.* femina] duro uulnera *pancratio*[17]
Prop. 3.22.27   at non squamoso labuntur uentre *cerastae*[18]
Luc. 1.426   et docilis rector monstrati Belga *couinni*[19]
Luc. 3.222   nondum flumineas Memphis contexere *biblos*[20]
Luc. 10.318   excepere tuos [*scil.* lapsus, Nile,] et praecipites *cataractae*.

These instances illustrate well the fondness of special vocabulary for the end — more rarely the beginning — of the line;[21] the admission of the tetrasyllables at line-end (*pancratio* and *cataractae*) seems further to highlight the specialness of the vocabulary.[22] The examples from Lucan are from among those called 'technical terms' by Bramble (1982*b*: 541–42). Ideally, I think, one would draw a distinction between technical terms, which belong to a τέχνη, special words belonging to the language of a group, such as soldiers' language, and more or less isolated exotic words denoting items of foreign culture. Of the examples above, I suppose that *pancratium* (e.g.) is in principle a technical term of sport, while *cataracta* is an exotic word for a foreign object, but my remarks about form and line placement apply to all these words equally and, in their contexts, they all share a further artistic function, that of evoking a picture of an exotic world[23] rather than of a technical discipline. In other cases technical vocabulary may be used to evoke the associated special activity or field

[16] See Fedeli (1985: ad locc.); Tränkle (1960: 113, 122).
[17] Very rare in our Latin record, and only here in verse, but probably a familiar word given its metaphorical use already at Var. *Men.* 519.
[18] Recalling Virg. *G.* 2.153–4 'nec rapit immensos orbis per humum neque tanto | squameus in spiram tractu se colligit *anguis*', but bringing with *cerastae* a more exotic flavour. Lucan (9.716) and Statius (*Theb.* 11.65) follow suit, both at line-end, the latter with a Greek ending (*cerasten*).
[19] Possibly recalling Virg. *G.* 3.204 '*Belgica* uel molli melius feret *esseda* collo', but with a more exotic edge.
[20] Said to be the only occurrence of the word in Latin literature, but note the attractive proposal of R. G. M. Nisbet (1978: 96–7) to read *nouae bibli* at Catul. 22.6.
[21] In Prop. 3.14 evocative special words close also lines 1 (*palaestrae*), 2 (*gymnasii*), 6 (*trochi*) and 7 (*metas*); line 11 begins with *gyrum*.
[22] I owe this observation to G. O. Hutchinson.
[23] Compare D. N. Sedley's remarks in this volume, pp. 238–44, on Lucretius' use of Greek words in non-philosophical contexts for exotic authenticity. Professor Petersmann makes a similar observation on the effect of special vocabulary in Lucilius, in this volume, p. 301.

of knowledge. This is often so especially in didactic poetry. So, for instance, the exotic names of the examples chosen by Lucretius of strong-smelling substances are intended to suggest to the audience not their far-off place of origin but the stock-in-trade of the local *pharmacopola*:

> Lucr. 4.123–5   praeterea quaecumque suo de corpore odorem
> expirant acrem, *panaces absinthia* taetra
> *habrotoni*que graues et tristia *centaurea* . . .

Genre, too, is clearly highly relevant to the admission of technical vocabulary. The more conversational genres — comedy, satire and epigram — show apparently in their lower registers no constraints on the admission *sensu proprio* of banal technical vocabulary that is not to be found in epic (or, usually, in lyric or elegy), such as that relating to disease and its treatment; indeed, such vocabulary seems here to be actually cultivated for its vivid 'lowness'. A wonderful example from Martial illustrates also the points I was making about form by occupying the whole of the first half of the hexameter:

> Mart. 10.56.5   *enterocelarum* fertur Podalirius Hermes.

But, formal fireworks apart, in the first book of *Sermones*, Horace can make (apparently[24]):

> Hor. *S.* 1.5.30–1hic oculis ego nigra meis collyria lippus
> illinere.

a straightforward statement about his treatment of his perennial eye-disease, using 'ordinary' special vocabulary in its primary sense; both the theme and its vocabulary were unthinkable in Latin epic.

The relevance of genre to the admissibility of technical vocabulary is seen most clearly in the use for the same object of different referring-expressions in different types of poetry. A well-known case is that of *hippomanes*, the name of '(1) one or more medicinal herbs (Theocr. 2.48); (2) a small black growth on the forehead of a newborn foal, which is normally eaten by the mare (Arist. *h.a.* 6.22, 577a9 and 8.24, 605a2); (3) a thin fluid that runs from the sexual organs of the mare in these circumstances (6.18, 572a20)' (Mynors 1990: 225). Virgil admits the word, in sense (3), in the *Georgics*:

> Virg. *G.* 3.280–3   hic demum *hippomanes* uero quod nomine dicunt
> pastores, lentum destillat ab inguine uirus,

---

[24] Beware the common metaphorical use of *lippitudo* in satire to denote intemperance and debauchery (e.g. Hor. *S.* 1.3.25, Pers. 2.72, 5.77: cf. Bramble (1974: 35ff.)); not that I see any point to so understanding it here.

> hippomanes, quod saepe malae legere nouercae
> miscueruntque herbas et non innoxia uerba,

but avoids it, in senses (1) and (2),[25] in the *Aeneid*:

> Virg. *A.* 4.513–16   ... quaeruntur ...
> pubentes herbae nigri cum lacte ueneni;
> quaeritur et nascentis equi de fronte reuulsus
> et matri praereptus amor.

Naturally the subject matter of didactic poetry will have obliged the poet more often to confront special and technical vocabulary *sensu proprio* and to decide whether to use it or to allude to it. Ultimately, however, the taste of the individual poet was a more important factor than the genre of his composition, so that, to take an extreme case, Lucan's epic admits many more names of species of snake than does Virgil's didactic passage on reptilian pests in *G.* 3. 414–39. Virgil introduces in the second line of this section some colour from special vocabulary, again at the end of the line:

> Virg. *G.* 3.414–15   Disce et odoratam stabulis accendere cedrum
> galbaneoque agitare grauis nidore *chelydros*.

but he uses no other exotic snake-name in this catalogue[26] and avoids, for example, Nicander's *chersydrus* (*Ther.* 359 ff.), preferring a paraphrase in line 425:

> Virg. *G.* 3.425   ille malus Calabris in saltibus anguis.

Virgil proceeds in a similar way in his section on diseases: he announces the subject, gives early on some authentic technical colour but subsequently avoids medical terms:

> Virg. *G.* 3.440–1   Morborum quoque te causas et signa docebo.
> turpis ouis *temptat scabies*.

The contrast with Lucan could hardly be stronger. Lucan shows no restraint at all in his remarkable catalogue of African snakes in Book 9.700–33. Seventeen exotic, jewel-like names form a serpentine pattern through 28 verses. Two names are Latin (720 *natrix, iaculus*), fifteen Greek; three have appeared in earlier Latin poetry (*aspis, cerastes, chelydrus*[27]); four have appeared in earlier Latin prose (*dipsas, draco, haemorrhois, natrix*);

---

[25] *Pace* Ernout (1956: 13, n. 2) who sees sense (3) at *A.* 4.515–6. Cf. Sharrock (1994: 72–3). Ovid avoids the word in sense (3) at *Med.* 38 *nocens uirus amantis equae*.

[26] Compare, in tragedy, Seneca's avoidance of snake-names in the 'catalogue' at *Med.* 681–705. I owe this reference to Dr Hutchinson.

[27] The last only in poets and Celsus 5.27.8; Celsus deals with the treatment of snakebite in 5.27.3–10.

ten occur first in Lucan.[28] Virgil is typically restrained, even in a didactic poem; Lucan is characteristically unrestrained, especially for a writer of epic.[29] Lucan returns momentarily to didactic mode a hundred lines later, when the snakes catalogued at 700ff. are taking it in turns to fall on the Roman captains in good Homeric fashion. Paulus falls prey to the species which kills without poison by hurling itself spearlike through its victim, picking up a didactic gloss and etymology on its way:[30]

> Luc. 9.823   torsit et inmisit — iaculum uocat Africa — serpens.

Another general factor affecting the use of technical vocabulary *sensu proprio* was allusion. I distinguish two types: first — and I have to be tentative here — that in which a Latin author imitates a Greek model. Rarely a technical anatomical or disease term is used apparently *sensu proprio* in high poetry. In such cases the usage is likely to be essentially literary, rather than technical. So, for example, when Virgil uses *stomachus* of the oesophagus:

> Virg. *A.* 9.698–700   uolat Itala cornus
> ... *stomacho*que infixa sub altum
> pectus abit,

he is probably conscious not of Latin technical prose usage (Cels. 4.1.3, *al.*; André (1991: 76, 131)) but rather of Homeric usage, as, for example, in:

> *Il.* 17.47–8   ... κατὰ στομάχοιο θέμεθλα
> νύξ[ε].

A similarly striking use of a body-part term in epic is that of *musculus* 'muscle' by Lucan describing the death of Sabellus from the bite of the snake called *seps*:

> Luc. 9.771–2   ... femorum quoque *musculus* omnis
> liquitur.

Again, there are plausible literary models in Homer (e.g. *Il.* 16.315, 324) and Apollonius Rhodius. Indeed, the Greek μυών 'muscle' occurs in Apollonius' account of the snakebite that kills Mopsos:

---

[28] Three are not in Plin. *Nat.*: *ammodytes, chelydrus, parias*; three are not in Nic. *Ther.*: *ammodytes, parias, prester*. Presumably Nicander was modified by Aemilius Macer (cf. the end of (9) below), Lucan's direct source at this point; see the *commenta Bernensia* on Luc. 9.701.

[29] On the question of genre and the contacts between epic and didactic poetry, with reference to Lucan's Catalogue of Snakes, see Lausberg (1990). I owe this reference to Dr Hutchinson.

[30] I shall say no more here about the formal conventions of didactic poetry and technical prose (the gloss, the programme, the etymology, the paragraphing, the forms of address to the reader, the list of physical requirements in the successful practitioner of the art, etc.); on these see Hollis (1977: xvii–xix *et passim*; Index, *s.v.* 'didactic tradition').

A.R. 4.1519–21   ... αὐτὰρ ὁ [the snake] μέσσην
                       κερκίδα καὶ μυῶνα ...
                       σάρκα δακὼν ἐχάραξεν.

It is perhaps worth adding, however, that *musculus* 'muscle' occurs only here in Latin verse and is not found in prose before Celsus, who wrote only a generation or so before Lucan. It is inviting to speculate that Lucan at this point in his borrowed desert sequence (Hutchinson (1988: 353)) is imitating Apollonius not only in making reference to this part of the body but also in using a word with contemporary scientific flavour; the effect of Lucan's *musculus* would then be comparable to that supposed for Apollonius' κερκίς. A similar view may be taken of other Latin poetry.[31] The general hypothesis — of a Roman version of Alexandrian scientific realism in Latin poetry — may deserve further attention and may yield an important qualification to the general rule that technical vocabulary *sensu proprio* is avoided in high poetry.

The second, much clearer, type of allusion is when a special word admitted by an admired predecessor could be echoed by being copied,[32] especially in the same position in the line,[33] and perhaps accompanied by another special word from the same lexical field. So, for example, the line-opening *hippomanes* is the clearest of the echoes of Virgil *G.* 3.280–3 (quoted above) in these lines of Tibullus and Propertius:

Tib. 2.4.58   *hippomanes* cupidae stillat ab inguine equae,
Prop. 4.5.17–18   et in me
                   hippomanes fetae semina legit equae.

Similarly, given its gender, number and place in the line, *elleboros* in Columella's continuation of the *Georgics* is surely consciously evoking his model and inspiration: compare

Col. 10.17   sed negat [sŏlum] *elleboros*, et noxia carpasa succo
with   Virg. *G.* 3.451   scillamque *elleboros*que grauis nigrumque bitumen;

and note that elsewhere Columella prefers the Latin synonym *ueratrum* (6.32.2, 6.38.3, 7.13.2). Again, given the rarity of the word in Latin litera-

---

[31] E.g. the simile of the panting stag in: Hor. *Carm.* 1.15.31 '[quem tu, ceruus uti] *sublimi* fugies mollis *anhelitu*', where *sublimis anhelitus* corresponds to the Gk μετέωρον πνεῦμα (or ἄσθμα), the medical expression for shallow, panting breath, and may be a deliberate medical touch, perhaps comparable in effect with Apollonius' neuro-physiological description of Medea in love (3.762–3, quoted in (3) above). See Nisbet and Hubbard (1970) on Hor. *Carm.* 1.15.31.

[32] Or alluded to by the context and the use of another special word from the same lexical field. I am thinking of, for example, Luc. 1.426 or Prop. 3.22.27: see above, nn. 18, 19.

[33] On the snake *chelydrus*, for example, note Mynors (1990: 244): 'V[irgil] bequeathed the word to numerous successors, who gratefully use it to end their hexameters'.

ture, it is tempting to believe that *centaurea* 'knapweed' signals that Lucretius' strong-smelling substances:

> Lucr. 4.124–5   panaces absinthia taetra
>   habrotonique graues et tristia *centaurea*

are being echoed by Virgil in a different context:

> Virg. *G.* 4.270   Cecropiumque thymum et graue olentia *centaurea*;

and that both passages are intended to be heard in Lucan's description of the snake-repellent mixed by the Psylli[34] to protect the Roman camp in Book 9:

> Luc. 9.918   et *panacea* potens et Thessala *centaurea*,

a passage which contains a potent mixture of eleven exotic ingredient names in six lines.

In general, then, especially in one of the 'higher' genres, a poet's use of special/technical vocabulary *sensu proprio* will serve one or more of at least three purposes: (a) to display his learning and simultaneously to evoke an exotic, far-off world (or a special activity closer to home); (b) to share his enjoyment of the sound of the special word, this receiving formal expression in the predilection of items of special vocabulary for the end, or beginning, of the line; (c) to recall the work of a revered predecessor by the use of a striking special word. Special vocabulary *sensu proprio* is avoided in high poetry if either its form or its meaning is held to be banal or otherwise unsuitable; in particular cases the tastes of the poet were of greater consequence than the genre of his work for the means of expression.

On the other hand, if a technical object is to be mentioned but its proper name is formally or otherwise inappropriate, it is referred to by means of a paraphrase: the term and its meaning remain instantly recognizable but the everyday name of the banal object is avoided. H. D. Jocelyn (1969*a*) has commented on a few examples in Ennius' tragedies, such as *prolato aere* (*scen.* 2 Jocelyn [= 16V], for *scuto proiecto*), *me huic locabas nuptiis* (*scen.* 127J, for *nuptam locabas*) and *sub armis* (*scen.* 232J [= 262V], for *(in) armis*).[35] No different in terms of linguistic intent are those to be found in Horace, *Epistles 1*,[36] such as *ciuica iura* (*Ep.* 1.3.23, for *ius ciuile*), *curule . . . ebur* (*Ep.* 1.6.53–4, for *sella curulis*) and *consulta patrum* (*Ep.* 1.16.41, for *senatus consulta*); in Propertius, e.g. *praetexti . . . amictūs*

---

[34] Cf. Cels. 5.27.3B–C; Plin. *Nat.* 7.14–15.

[35] With reference to legal matters, however, Ennius appears generally to use the proper terms; see Jocelyn (1969*a*: Index, *s.v.* 'legal language').

[36] Usefully collected by R. G. Mayer (1994: Index, *s.v.* 'technical terminology avoided').

(3.15.3, for *toga praetexta*) and *arma . . . de ducibus . . . recepta* (4.10.2, for *spolia opima*); or in Juvenal, such as *caeduntur . . . mariscae* (2.13, for *secantur ficus*), *uectetur* (4.6, for *gestetur*) and *torret quarta dies* (9.17, for *male habet quartana febris*).

Lucan's practice in respect of disease names is especially instructive.[37] He avoids these Greek words altogether, in striking contrast with his admission of Greek names of species of snakes and of the exotic plants and minerals used in the snake-repellent (9.700–33 and 916–21: see above). Even some common Latin disease words are paraphrased by Lucan, presumably to heighten the effect of the expression. So, for example, he avoids *rabiosus* (or *rabidus*), writing instead:

> Luc. 6.671   spuma canum *quibus unda timori est,*

unda timori, juxtaposed and so ordered, presumably intended to recall ὑδρο-φοβ-. He avoids even the old Latin phrasal term *ignis sacer*, although both Lucretius and Virgil employ it in their respective accounts of the plague. Lucan uses a paraphrase for this skin condition in his plague passage but so orders the words as to give a clear signal of the intended, 'underlying', form, notwithstanding the syntax of the noun phrases:

> Luc. 6.96–7   *ignea . . . sacro* feruida morbo
>   pestis.

This very avoidance of ordinary terms for the banal subject of disease afforded an opportunity for poetic effect and inventiveness. Virgil clearly intends *melancholia* to be understood as the root of Heracles' madness in:

> Virg. *A.* 8.219–20   hic uero Alcides furiis exarserat *atro*
>   *felle* dolor.

The juxtaposition and order of *atro felle* are close to the Greek term; the choice of Latin words[38] and the enjambement keep the banal special vocabulary at the appropriate distance from epic narrative.[39]

Two Ovidian couplets illustrate 'low' and 'high' lexical tactics in successive lines, the pentameter being strikingly more high-flown than its hexameter, the first on gout and rabies:

---

[37] And appears to constitute an exception to Braund's (1992*b*: xlvi) generalization about Lucan's admission of technical terms avoided by other epic poets.

[38] On *ater*, see André (1949: 387): 'terme spécifiquement épique', but cf. p. 220 below; on *fel* vs. *bilis*, Nisbet–Hubbard (1970: 172) *ad* Hor. *Carm.* 1.13.4.

[39] So, too, perhaps, *G.* 3.497 *sues . . . angit* for ὑάγχη, a form of angina.

Ov. *Pont.* 1.3.23–4   tollere nodosam nescit medicina *podagram*[40]
nec *formidatis* auxiliatur *aquis*,[41]

the second a stricture against the use of *lana sucida* (wool with its natural grease):

Ov. *Ars* 3.213–14   *oesypa* quid redolent, quamuis mittatur Athenis
demptus ab immundo *uellere sucus* ouis.

Although in a humbler genre, perhaps in an Alexandrian mode, Ovid departs completely from the form of the Greek term *hydropici* in:

Ov. *Fast.* 1.215   sic *quibus intumuit suffusa uenter ab unda.*

Perhaps because he is taking the patient's point of view, Horace alludes to the same disease by means of another of its symptoms, avoiding its name, in the Letter to Florus:

Hor. *Ep.* 2.2.146–7   si tibi nulla sitim finiret copia lymphae,
narrares medicis,

lymphae for 'water' heightening the non-technical allusiveness of the patient's self-observation. We shall see (in **(6)** below) the Horatian passages in which this disease is given its proper Greek name. These last four examples illustrate also how the verse epistle — possibly elegy as a whole — partakes of the lexical conventions of more and less exalted forms (cf. Axelson (1945: 26, 143)).

The absence from epic — and usually lyric and elegy, too — of Greek names of diseases can result only partly, if at all, from avoidance of Greek *tout court*, since we have already, in this brief survey, seen numerous examples of Greek technical polysyllables. Poets' avoidance of the words *melancholia, hydrops, hydrophobus* and the like, in their primary meaning, reflects above all their tendency to paraphrase mundane vocabulary.

In the extreme case, of course, mundane special vocabulary is suppressed altogether, even if the semantic field is central to the topic of the poem. A good example of this is Propertius' poem about Cynthia's illness (2.28), in which there is no word for disease and Cynthia's condition has

---

[40] Cf. Lucian, *Trag. (Podagra)* 143 ἢν οὔτε Παιὰν φαρμάκοις νικᾶν σθένει. The word seems to be very rare in verse: Tib. 1.9.73, probably following Catul. 71.2, 6; Virg. *G.* 3.299 of animals and 'softened' by being in the plural, and satire (Hor. *S.* 1.9.32, Juv. 13.96). It is several times avoided in prose (e.g. Cic. *Fam.* 6.19.2, *Brut.* 130 *dolores pedum*, Plin. *Ep.* 1.12.4 *pedum dolor*). This, and Lucian's choice of theme for his paratragedy, indicates the intrinsic 'lowness' of the condition and *its* proper name. I owe this observation to Dr Hutchinson.

[41] Surely to be understood as hydrophobia, rather than as dropsy, the elements of the Greek compound being rendered as at Plin. *Nat.* 28.84 'si *aqua* potusque *formidetur* a morsu canis'. Cf. Scholte (1933: ad loc.).

to be inferred from oblique hints in *affectae* (line 1), *pericula*[42] (15, 46) and *saucia* (31).[43] The absence in Propertius of words to do with disease when disease is the theme is a natural corollary of the constant metaphorical use of disease words when the subject is love. This observation brings us to consider next the use of special vocabulary in metaphor in Latin poetry.

(6) Technical vocabulary in metaphor

It is above all in metaphorical usage that special and technical vocabulary is to be found in Latin poetry (with the qualified exceptions of didactic and the conversational genres). If, in the use of a technical word in its primary meaning, the poet is aiming in part to impress his audience through sound, in a metaphor he wants to affect his listeners with meaning, with a striking comparison of a target domain with a source domain. The poet here naturally uses normal vocabulary (*uocabula propria*) in order to depict the source domain as clearly and directly as possible; for the image to succeed, to engage rather than alienate the audience, the source domain must be familiar and authentic, both in content and in form.[44]

Accordingly, from Lucretius' straightforward use of authentic Greek terms in his simile of the apothecary's composition:

> Lucr. 2.847–9   sicut *amaracini* blandum *stactae*que liquorem
> et *nardi* florem, nectar qui naribus halat,
> cum facere instituas, . . .

I infer not, with W. Goethe, that the poet was a doctor, nor, with T. P. Wiseman (1974: 19–22), that he was a *pharmacopola* (although these are of course not to be excluded) but that his audience were sufficiently familiar with the substances and their names for the comparison to be illuminating rather than the reverse.

In order to gain an impression of the *reverse* effect, we may contrast, for instance, T. S. Eliot's 'suggestive analogy' for his theory of the depersonalization of the poet: 'I therefore invite you to consider, as a suggestive analogy, the action which takes place when a bit of finely filiated platinum

---

[42] Admittedly, *periculum* is occasionally found meaning roughly 'illness' (e.g. Plin. *Nat.* 23.48; perhaps Cels. 7.26.5H. 5.26.1C.) but I do not believe that it is to be so taken here.

[43] The same is true, I think, of Ov. *Am.* 2.13.1 and 2.14.3–5, where he is speaking of an abortion.

[44] D. N. Sedley notes (below, p. 237, n. 28) that Lucretius, while rejecting *harmonia* as a philosophical term, admits it at 4.1248 'where he may feel that his need for the musical metaphor leaves him no option'. Lyne (1989: *passim*, esp. e.g. 165–8) gives excellent illustration from the *Aeneid* of the power of words proper to what he calls 'business prose' when used metaphorically to evoke their source domain for poetic effect.

is introduced into a chamber containing oxygen and sulphur dioxide' (Eliot (1932 [1917]: 17)). This analogy is suggestive only to those with some knowledge of chemistry. Indeed, Eliot proceeds to explain it in detail before applying it to his theory of poetry; presumably he did not expect his average reader to find it helpful without further explanation. On the other hand, given the required amount of shared knowledge of the source domain, between author and reader, the analogy stands only to gain in strength from the writer's use of ordinary technical language and his avoidance of literary, or layman's, paraphrase. Any banality or 'lowness' attaching to certain types of special vocabulary used *sensu proprio* is nullified by artful semantics. As Gregory Hutchinson puts it in a slightly different context (1988: 227), '[s]uch [*scil.* 'low'] material in similes, as in metaphors, has a very different resonance from such material when it is the direct subject of discourse'.

It is for these reasons, I suggest, that we find special vocabulary in poetic imagery, and that we can infer that it is vocabulary of some currency in the source domain. So it follows that, for example, *hydrops* (Gk ὕδρωψ 'dropsy; sufferer from dropsy') owes its famous appearance in Horace, *Odes 2*, to the fact that it is used metaphorically, for avarice (and, perhaps, the avaricious man[45]):

> Hor. *Carm.* 2.2.13–16   crescit indulgens sibi dirus *hydrops*
> nec sitim pellit, nisi causa morbi
> fugerit uenis et aquosus albo
>   corpore languor.

The same account may perhaps be given of *hydropicus* in another of Horace's warnings against over-indulgence:

> Hor. *Ep.* 1.2.33–4   ... atqui
> si sanus noles curres *hydropicus.*

The occurrence of these words tells us further that they had at least equal currency with the Latin expression, which is Celsus' only term for dropsy, *aqua inter cutem.*

It would go well beyond the scope of this essay to attempt any kind of systematic discussion of Latin poetic imagery based on special and technical vocabulary; I would, however, offer at this stage three general observations of a provisional nature.

First, it is clear that disease is both common and versatile as a source domain for metaphor — versatile in the sense that it is regularly applied to

---

[45] The sufferer can properly be the subject of *pellit*, with an abrupt change of subject as, for example, at Cels. 3.15.6. Or we may accept Peerlkamp's *pellas*; see Nisbet and Hubbard (1978: ad loc.).

several target domains, notably vice[46] and love[47] but also literary style[48]. This versatility may be taken to indicate that — not surprisingly — disease was a familiar subject with a familiar vocabulary. This is in keeping with poets' general avoidance, noted in (5) above, of disease words *sensu proprio*.

Second, given a versatile source domain, such as disease, and the poet's need to explore various metaphorical approaches to central themes (target domains), such as love, metaphors may come to interact in fruitful and suggestive ways. One such instance, centred on the theme of love, and involving the metaphors of disease, medical treatment and soldiery, may have caught Ovid's attention. I have in mind simply that the whole conception of the *Ars amatoria* and, especially, the *Remedia amoris* seems inspired by the metaphorical accounts of love as a disease (cf. Pinotti (1988: 16)) and of medicines as soldiers in the battle with illness.[49] It is as if in these poems Ovid is offering an *ars medicinae* of a new order for the treatment of love, the poet being no longer a soldier in the service of love but the dispenser of remedies — rational remedies in which magic no longer plays a part[50] — which will join battle with love.

[46] Especially in satire, continuing a tradition going back to Plato by way of the diatribe and Cynic and Stoic philosophy. See Bramble (1974: 35, nn. 2, 3) with numerous examples, including, e.g., Hor. *Ep.* 1.1.33 '*feruet* auaritia ... pectus, ... (35) laudis amore *tumes*'. A possible unnoticed medical instance at Hor. *C.* 3.24.48–9 'aurum et *inutile* | summi materiem mali'?

[47] Note e.g. Prop. 1.1.26–7 (quoted at the beginning of (II) above), 2.14.19 hoc sensi *prodesse* magis', 3.24.18 '*uulnera*que ad sanum nunc *coiere* mea' and Ov. *Met.* 1.523–4 'ei mihi quod nullis amor est sanabilis herbis | nec prosunt domino quae prosunt omnibus artes' [Apollo is speaking]. This image, too, has a long tradition in both Greek (cf. S. *Tr.* 445, 491) and Latin (cf. Enn. *scen.* 254 'Medea animo aegro, amore saeuo saucia'). For collections and discussion of the countless examples, both Greek and Latin, and further references, see e.g. Svennung (1945), La Penna (1951), Flury (1968), Müller (1980), Mazzini (1990). Note that Lanata (1966) proposes the converse account — the drawing of terms of pathology from poetic love language — of the Hippocratic use of πῦρ, ἄση, ἀνίη, words already in Sappho of the torments of love.

[48] Note in verse e.g. Catul. 44, and Pers. 1.76–8 'uenosus liber Acci ... uerrucosa ... Antiopa', with Migliorini (1990: 61–5), and see Bramble (1974: 36–7).

[49] For the wars between disease and medicine, note e.g. Man. 2.902 '*bella*que morborum caecis pugnantia telis'; Cels. 6.6.31A 'si uero scabri oculi sunt, ... potest *militare*: id quod habet' ... (Löfstedt (1990), *contra* Flury (1990)). Diseases have *impetus* (*TLL* VII 1.604.79ff., 608.36ff.), they *occupant* (*TLL* IX 2.386.29ff.), they *temptant*; the doctor must fight (Cels. 3.12.2, 6.6.37A *pugnandum est*), a disease is *expugnandus* (Cels. 3.15.4; *TLL* V 2.1811.30ff.); medicine may be defeated (Cels. 3.27.4A; 5.26.1C *uicta* [ars]) or the disease may be (Cels. 3.22.8 *euincitur morbus*; *TLL* V 2.1042.77ff.).

[50] Note Ovid's three express rejections of magic, at *Ars* 2.99–107, *Rem.* 249–90 and *Med.* 35–42. Sharrock (1994: 50ff.) argues brilliantly that the first two of these passages at any rate should not be taken at face value, since there are features of the language of magic in the language that Ovid uses to denounce magic. Cf., however, Wilhelm (1925: 158–9) on Ovid as *medicus aeger* in *Pont.* 1.3, and Pinotti (1988: 15–24) on properly medical, especially empirical, aspects of the *Rem.*

Third, many of the more prominent metaphors which recur in Latin poetry appear early in Roman literature; most are to be found already in classical or Hellenistic Greek literature (see nn. 46, 47), whence they were perhaps imitated in the first place. Some, of course, notably those of the *foedus amoris* and the *militia amoris*, received a peculiarly Roman development; (see Reitzenstein (1912); Spies (1930); Paludan (1941); Benediktson (1977: 347)). In order, however, to keep an old metaphor alive, a poet must introduce new elements from its domain, so that we find, for example, fresh figurative use of legal terminology in the parody of a humiliating peace-settlement that Propertius puts into Cynthia's mouth:

> Prop. 4.8.74   accipe quae nostrae *formula legis* erit

and at the end of Cornelia's speech from the grave (4.11) before the imaginary court (lines 19–22):

> Prop. 4.11.99   *causa perorata est,*

or, again, of soldiers' jargon in Ovid:

> Ov. *Ars* 1.131–2   Romule, militibus scisti dare *commoda* solus!
> haec mihi si dederis *commoda*, miles ero,

technical and special language unparalleled in poetry (cf. Fedeli (1965), Hollis (1977) ad locc.).

Tentatively to summarize so far: (i) technical vocabulary *sensu proprio* is avoided by the Latin poets — with the obvious but qualified exceptions of writers of didactic and satire — if its subject does not fit the aesthetics of the poem or of the poet, or if it is formally uninteresting; (ii) if reference is made to the thing whose *uox propria* is avoided, it is by means of a paraphrase, the form of which is more or less reminiscent of the ordinary expression; (iii) conversely, quite ordinary items of special vocabulary are the norm in metaphor.

These general statements, based on a limited amount of close reading, are at this stage no more than working hypotheses. They may appear obvious and uninteresting, but they merit systematic testing since they will apply in varying degrees to various texts, poets, genres, traditions and hence promise to yield a critical tool (in principle quantitative) not only to Latin poetry but to literary language generally. On the one hand, further study of the admission to literary texts of technical vocabulary *sensu proprio* will bring out formal and thematic aspects of the aesthetics of individual poets and poems; on the other hand, an increased sensitivity to the existence of special uses of apparently ordinary words may in the best case, according to the prediction in (iii) above, sharpen and enrich our reading of imagery — even uncover unsuspected metaphors — in well-

known texts.[51] Conversely, in lexicography, literary use of technical vocabulary, especially in metaphor, may prove to be a valuable supplementary source of information on the ordinary words in current (educated) use relating to various special and technical activities. In the final section of this paper I should like to illustrate with reference to medicine this last general prediction of the relevance of poetic imagery to special lexicography. This section, no less than **(I)** and **(II)**, offers merely a few examples of the phenomena discussed, examples drawn from only a small sample of the relevant texts in verse and prose.

III. THE LATIN POETS AND MEDICAL LATIN

Study of medical vocabulary in the poets[52] has, I believe, a contribution to make in return to our knowledge of the history of Latin medical discourse. It follows from the generalizations of **(5)** and **(6)** above that consistent use of a particular item of medical vocabulary in poetic imagery implies that the word was current and familiar in its ordinary, non-metaphorical medical sense. There are three immediate and important consequences of this inference, which bear on the history of medical Latin and more generally on republican Roman social, literary and intellectual history. These concern: (i) the date of the widespread diffusion at Rome of Greek and Latin medical terms; (ii) the relationship between the language of technical Latin medical prose and educated colloquial usage in medical matters, in the late Republic and early Empire; (iii) the question of the date of origin — indeed, of the very existence — of specialist discourse on medicine in Latin. I deal with each in turn in **(7)**, **(8)** and **(9)** below.

(7) The figurative use of medical vocabulary in Plautus

A first, and very simple, implication of the transferred use of medical words in Latin verse is that there was at Rome a high degree of familiarity with Greek and Latin medical vocabulary from an earlier date than is often supposed.

---

[51] A possible minor example: *caruisse* 'to be *cured of* at Hor. *Ep.* 1.1.42; cf. Cels. 2.15.1, 3.21.6, Larg. 38, 122.

[52] And, to be sure, in non-medical prose also, above all in Cicero and Seneca. While the bibliography on medicine in Seneca is considerable, little has been done on Cicero; for references see Mazzini (1988: 50, n. 7; 1991a: 101, n. 8). A useful collection of other special vocabulary in Seneca's letters is in Summers (1910: xlii–xlix). I owe this reference to G. D. Williams.

It is striking that a number of medical expressions make their first appearance in Plautus, or other early republican verse, used figuratively as well as literally. Greek γλαύκωμα 'cataract'[53] appears first in Plautus in a phrase meaning something like 'pull the wool over his eyes', declining as a first-declension noun and with Latin -ū- for Greek -ω-:

> Pl. *Mil.* 147–9   ei nos facetis fabricis et doctis dolis
> *glaucumam* ob oculos obiciemus eumque ita
> faciemus ut quod uiderit ne uiderit.[54]

Similarly, *stomachus* is found first meaning 'annoyance, vexation' and *stacta* standing for the bouquet of wine, or a lovely woman:

> Pl. *As.* 422–3   quin centiens eadem imperem atque ogganniam,
> itaque iam hercle
> clamore ac *stomacho* non queo labori suppeditare.
> Pl. *Cur.* 101–2   tu mihi *stacta*, tu cinnamum, tu rosa,
> tu crocinum et casia es, tu telinum.
> Pl. *Mos.* 309   cum *stacta* accubo.

Plautus attests also humorous *Latin* medical expressions, implying a certain currency to the terms *sensu proprio* at an earlier date. So, *lippitudo* 'inflammation or watering of the eyes' occurs already in Plautus not only in its primary sense but also used figuratively to mean the opposite of *oculus* 'darling':

> Pl. *Poen.* 393–4   huiius amica mammeata, mea inimica et maleuola,
> oculus huiius, *lippitudo* mea, mel huiius, fel meum,

showing, incidentally, a use that is not attested for its Greek equivalent ὀφθαλμία.[55]

While this is a strikingly early instance of the figurative use of a disease-name, I admit freely that *lippitudo* is hardly a technical term of the sort that presupposes a public familiarity with any form of medicine or medical language; it was quite probably an ancient homely word for a common

---

[53] On the history of the meaning of γλαύκωμα see Marganne (1993: 101). I owe this reference to Professor Bain.

[54] I owe this reference to Professor Adams.

[55] While ὀφθαλμός has a use similar to that of Latin *oculus* ('a person or thing as precious as the eye'), the only attested metaphorical use of the disease term ὀφθαλμία and derivatives has to do with coveting, so ὀφθαλμιάω at Hyp. *Fr.* 258, Plb. 1.7.2, 2.17.3, 31.21.1.

Other examples of relatively early figurative use of medical terms include: Lucil. 764M *'aquam* te in animo habere *intercutem'* (*sensu proprio* at Pl. *Men.* 891); Laber. *com.* 1 'quid est ius iurandum? *emplastrum* aeris alieni' (*sensu proprio* at Cato *Agr.* 39.2); Lucr. 4.528–9 'praeterea radit uox fauces saepe facitque | *asperiora* foras gradiens *arteria* clamor' (playing on the name of the trachea); Cael. *Fam.* 8.14.4 (50 BC) 'persuasum est ei [Appio censori] censuram lomentum aut *nitrum* esse'.

affliction. There may be a more telling example of this type of humorous medical Latin in the diagnosis performed by Palinurus in *Curculio*:

Pl. *Cur.* 236–40   PA. sed quid tibi est? CAPPADOX lien enicat, renes dolent,
pulmones distrahuntur, cruciatur iecur,
radices cordis pereunt, hirae omnes dolent.
PA. tum te igitur *morbus* agitat *hepatiarius*.
(240)   CA. facile est miserum inridere.

If the text is right, the reaction of Cappadox ('It's easy to mock the afflicted.') and the fact that this disease term occurs only here make it likely that *morbus hepatiarius* is a comic nonce-formation.[56] Such expressions depend for their comic effect on familiarity with established types, so that *morbus hepatiarius* might be taken to suggest two things: one is the audience's familiarity with Latin phrasal lexemes of the type *morbus articularis, morbus comitialis, morbus regius*, etc.; the other is the currency of Greek ἧπαρ 'the liver', or ἡπάτια 'liver (as a dish)' (Lucil. 310M), the latter a more suitable base for a comic formation.[57]

Accounts of medical Latin — or of the reception by Latin writers of Greek medical words — generally begin with Cato's *De agricultura* (*c.* 160 BC)[58] but the presence of these words with transferred meaning already around 200 BC presupposes close familiarity with the primary meaning of the words and hence argues strongly for a much earlier establishment and widespread diffusion of medical words at Rome (contrast Rawson (1985: 170)). How long does it take for a borrowed technical term to become usable in a play in a transferred or metaphorical sense? Did a mass of Greek medical terms, whether or not introduced by practising medical men, become current in Plautus' middle age, in the period in which Rome acquired her first Greek public doctor, Archagathus, in 219 BC (Hem. *Hist.* 26, Plin. *Nat.* 29.12)? Or had they been current already for generations,

---

[56] Acidalius, followed by several others, put line 244 CA. *lien dierectust.* PA. *ambula. id lieni optumumst.* after 239 so that the *inrisio* of line 240 consists not in the diagnosis but in the suggested cure. See Thierfelder (1955).

[57] Late in the day, I find that Thierfelder (1955) has taken exactly this view of this passage; he gives a good summary history of the textual criticism. It should be noted, however, that Mazzini (1992a: 90–2) takes the symptoms, the diagnosis and the term *morbus hepatiarius* quite seriously, as corresponding to the Greek πάθος ἡπατικόν; similarly (1992a: 93) he sees *solstitialis morbus* (*Trin.* 544) as Plautus' serious version of Gk σειρίασις 'sunstroke'. Questions of this kind are clearly important for our appreciation of Plautine humour and realism, and of his treatment of his Greek models. I hope I may be forgiven for not pursuing them here on the grounds that their resolution will not affect the main point of this section, namely what Mazzini (1992a: 103) calls 'la retrodatazione della prima attestazione ... di una serie di conoscenze, convinzioni, tecniche e istituzioni mediche'.

[58] See, for example, Ilberg (1907); De Meo (1983: 224ff.); Weis (1992).

since the official installation of the cult of Asclepius in Rome in 293 BC, the third year of a destructive plague (Livy 10.47.6–7) — or still earlier (Nutton (1993: 57f.))?

In general, the transferred or metaphorical use of any item of special vocabulary is good evidence of its familiarity in its primary sense and gives to the lexicographer and the historian a reliable *terminus ante quem* for the coming to currency of objects and ideas, and their names.

(8) Disagreements in the choice of medical words between poetry and medical prose

As we have seen, there is in one way and another a good deal of medical vocabulary in Latin poetry, generally, one notes, with consistent use of particular words. There are numerous agreements between the medical vocabulary of Latin poetry — especially in metaphorical usage — and that of the nearest thing we have to contemporary technical prose (Celsus, *De medicina*[59] and Scribonius Largus, *Compositiones*[60]). There are also some disagreements, which raise an interesting question. Here are a few examples.

aegrotus 'ill; (as noun) one who is ill' occurs alongside *aeger* '*id.*' in comedy,[61] epigram (Catul. 97.12), satire (Pers. 3.83) and in prose, including Cicero (who, however, prefers *aeger* by 41:15). *aegrotus* would appear to be an ordinary everyday medical word[62] but it is avoided by Celsus and Scribonius, and by high poetry (with the sole exception of Accius *trag.* 71), in favour of *aeger*.

lippus 'having watery or inflamed eyes; (as noun) one so afflicted' is common in comedy, satire and epigram (e.g. Mart. 6.39.11, 6.78.2), although rare in prose (once in Vitruvius, 8.4.1) until Petronius (28.4, *al.*) and the

---

[59] Text: Marx (1915); Mudry (1982) of the preface; Contino (1988) of book 8. Introduction: Jocelyn (1986); Contino (1988: 13–50).

[60] Text: Sconocchia (1983). Introduction: Sconocchia (1993).

[61] In Plautus *aegrotus* is confined to *senarii*, *aeger* to long lines, a distribution that conforms well with Löfstedt's (1933–42: II 305ff.) stylistic characterization of the language proper to the different verse forms. I owe this observation to Professor Bain. It may also be significant that of the eight occurrences of *aeger* in Plautus and Terence, six of the seven that mean straightforwardly 'physically unwell' are fem. (Pl. *Truc.* 464, 475, 500, Ter. *Hec.* 188, 256, 341); at Pl. *Epid.* 129 it is used of the mind; the sole exception is Ter. *Eun.* 236, where the surrounding words also appear to be unusual.

[62] It is used in ordinary down-to-earth medical contexts e.g. at Pl. *Cap.* 190, *Men.* 884, *Cur.* 61 and Cic. *Div.* 2.13, 133, 145, *Att.* 6.1.2; and metaphorically e.g. at Pl. *Trin.* 76, Ter. *An.* 193, 559, *Hau.* 100.

Elder Pliny (28.130, *al.*). It is avoided by Celsus and Scribonius, who use only *lippio, -īre*[63] and *lippiens* (as adjective or noun).[64]

The loan-word *podager*[65] and the Latin derivative *podagrosus*[66] '(one) suffering from gout' are found in Plautus, Ennius, Lucilius and Horace, used either literally or metaphorically.[67] Neither of these words is to be found in medical prose, where the only word for '(one) suffering from gout' is *podagricus* (ποδαγρικός).[68]

Now, as I noted above, the converse of my hypothesis that *uoces propriae* are usual in metaphor implies that the lexicographer has an unnoticed tool at hand for determining the register and currency of a large number of words. To spell this out in more concrete terms, any dictionary of a special or technical language should take very seriously the vocabulary used in literary texts in metaphors drawn from the special field in question. On the face of it the words just listed constitute serious counter-examples to this principle: surely one will prefer to follow medical prose rather than a figurative use in poetry in determining the vocabulary of medical Latin, as a technical idiom? It is curious that the very existence of such a technical variety of Latin is either denied (e.g. by André (1987: 29–31)) or baldly asserted without argument (e.g. by Mazzini (1991*b*)) by those specialists working in this field; I return to this question in **(9)** below. Those who deny its existence have no reason for confining themselves to medical prose and excluding the numerous medical expressions to be found in non-technical literary texts; those who would believe — against, I think, the majority view — that there was a characterizable medical variety of Latin spoken or written by those with specialist knowledge of the field are missing an important opportunity to illustrate this idiom with reference to these disagreements in the choice of medical words between figurative use in literature and medical prose.

---

[63] *lippīre* is found first used metaphorically at Pl. *Cur.* 318 'lippiunt fauces fame'; cf. Cic. *Att.* 7.14.1 (*sensu proprio*). On the 'medical' and 'psychiatric' denominatives in -*īre*, see Mignot (1969: esp. 71–2) and Leumann (1977: 556).

[64] *lippientes* and *aegri* may be proper also to official army language under the Empire. The former appears on a strength report at Vindolanda (II 154, 22. Bowman, Thomas and Adams 1994: 90–8). I owe this reference to Professor Adams. Lists of men unfit for service through illness are headed by the word *aegri*, not *aegroti*, both at Vindolanda (*ibid.*) and frequently at Bu Njem (Marichal 1992: 84–8).

[65] From ποδαγρός with the regular Latin treatment of word-final -*ros* or -*ris* after a consonant.

[66] The formation of a derivative with a native suffix on the stem of a foreign word is indicative of the complete integration of that stem into the borrowing language. Cf. Biville (1989: 37).

[67] *podager* at Enn. *sat.* 64V (fig.?), Hor. *Ep.* 1.2.52 (lit.); *podagrosus* at Pl. *Poen.* 532 (fig.), *Mer.* 595, Lucil. 331M (lit.). On the interpretation of the Ennius line (*numquam poetor nisi [si] podager*), see Schäublin (1988: n.12) and Naiditch (1988); I owe these references to Professor M. D. Reeve. See also Grilli (1978).

[68] *podagricus* is read also at Laber. *com.* 6 but entirely without context.

Let a fourth example, of a partial disagreement between poetry and medical prose, suggest an alternative account of *aegrotus, lippus, podager/ podagrosus*. The verb *coïre* is used in elegy and elsewhere of the closing of metaphorical wounds (e.g. Prop. 3.24.18; Ov. *Tr.* 4.4.41, 5.2.9; *Pont.* 1.3.87, 1.6.24; cf. Hor. *Ep.* 1.3.32; Petr. 113.8). I am bound by my general hypothesis about the nature of vocabulary used in metaphor to regard this as an 'authentic', natural, medical expression for this context, and indeed this use of the verb is found (once) in Scribonius (121, p. 64,4 Sconocchia). Celsus, on the other hand, does not attest it, using instead for the first time in our record the simplex *glutinō, -āre* (and derivatives) which takes the medicament as subject and the wound as object. The disagreement between Celsus and Scribonius reminds us of the (probably universal) existence of variation within technical terminologies (cf. Langslow (1989: 39–40)); that between the medical writers and the elegists of a particular type of this variation, namely that between ordinary educated but lay medical usage and specialist idiom (cf. Adams (1995*b*: 663); Langslow (1989: 38–9)), or what I am about to argue is the elevated style of literary medical prose. Such variation may be recorded by Celsus in cases such as:

> Cels. 8.1.15   a ceruice duo lata ossa utrimque ad scapulas tendunt: nostri *scutula operta*, omoplatas Graeci nominant.

This is the only occurrence in the Latin record of *scutula operta* 'the shoulder-blades'. It belongs, I suggest, to the educated, colloquial language, much like English *shoulder-blade* (vs. technical English *scapula*). Celsus' own term is the phrasal lexeme *latum scapularum os*, which he uses nine times (5.26.10, 8.1.16, *al.*). Analogously, *aegrotus ~ aeger, coire ~ glutinari, lippus ~ lippiens, podager/podagrosus ~ podagricus* could be regarded as four more isoglosses that will have contributed to characterizing different types of Latin medical discourse, which we could tentatively label 'lay–colloquial–informal' and 'specialist–elevated–formal', respectively.

In general, then, in reconstructing non-specialist educated usage on special and technical subjects, we should not assume as a matter of course that 'technical' prose is our best witness; we should consider equally — and sometimes even prefer — the vocabulary of literary texts, especially when it is used metaphorically.

(9) Lucretius 4.1068 ff. and the beginnings of Latin medical discourse

The hypothesis developed above that *uocabula propria* are poets' first choice in metaphors is fully in keeping with commentators' ascriptions of the vocabulary of poetic imagery to, for example, 'il linguaggio medico' (Fedeli 1980: 83) or 'the drily accurate style of medical discourse' (Brown

1987: 210). I should like to dwell a moment longer on these two comments in order to explore the assumptions underlying them and to consider the meaning of the phrase 'medical language' applied to Latin. 'Medical Latin', it seems to me, can mean either (i) Latin words and expressions used (no matter by whom) to denote or discuss medical matters, including parts of the body, disease and its treatment, both theoretical and practical, and so on; or (ii) Latin words and expressions, used to denote or discuss these same medical matters, *that are characteristic of a group, or groups, of Latin-speakers/writers with specialist medical knowledge.*[69] We could say that (i) is the weak sense and (ii) the strong sense of the phrase 'medical Latin'. (i) could amount to no more than isolated laymen's words for generally-known parts of the body, diseases and types of therapy in the absence of Latin-speaking doctors, in a world, say, in which all medical specialists spoke and wrote only in Greek among themselves and in contact with Latin-speaking patients improvised each a different sort of Latin. (ii) does not require the assumption that there was a group of doctors who had Latin as their first language or that Latin was used extensively, or at all, *within* the medical profession, but it does require that doctors spoke to, or wrote for, educated laymen in a characteristic style of Latin, with its own linguistic stamp.

How, then, do Brown and Fedeli mean us to understand 'medical discourse', 'linguaggio medico'? Fedeli's 'linguaggio medico' could perfectly well have the weak sense, (i) above. I doubt, however, that this is the intended sense — if, that is, this question was considered at all — since 'linguaggio medico' enjoys apparently equal status, in the indices and discussion elsewhere in his commentaries on Propertius, with clear cases of special language in the strong sense (sense (ii) above), such as 'linguaggio forense, giuridico, militare, politico, sacrale'. On the other hand, in Brown's comments on the medical language in Lucretius' metaphor, I think that there can be no doubt that sense (ii), 'medical Latin' in the strong sense, is intended.

Now, I do not wish ultimately to disagree with Brown's — or Fedeli's — ascription of the poet's figurative vocabulary to medical Latin in the strong sense. What I miss, particularly in Brown's discussion, is any attempt to substantiate the implications of this strong claim, or rather any acknowledgement of the fact that it *is* a strong and controversial claim; this is so at any period of Roman history — at least until the later Empire[70] — and

---

[69] For this strong characterization of technical languages as autonomous varieties, see, in general, Sager *et al.* (1980: 63–5) and, with reference to medical Latin, Mazzini (1991*b*: 175 and n. 1).

[70] Some would say even then, and even in a single area, Africa, where several medical texts were produced in the fourth and fifth centuries; see Adams (1995*b*: 648).

all the more so before the composition of the *De rerum natura*, in, we suppose, the 50s BC.

There is, to be sure, good reason to suppose that the Latin poets, like most of their educated contemporaries, were both interested in and well informed about Greek medical theory and practice.[71] Lucretius' inclusion of Hippocratic, alongside Thucydidean, material in his account of the plague at the end of the poem, is the clearest and longest textual instance of such contacts and interests in the republican period; it gives us, incidentally, our oldest Latin version of a piece of Hippocrates.[72] Elsewhere, in Books 3 and 1, Lucretius appears to have been inspired by the Hippocratic *De flatibus*.[73] There are probable echoes of, or allusions to, doctrines of Asclepiades and Themison in Lucretius and Virgil respectively; these have to be argued for rather more carefully and cautiously.[74] Then there are the numerous references to medical concepts and language above all in Horace (Mazzini (1988: 69; 1991*a*)), and also in Ovid (Pinotti (1988: 15–24)). Horace, for one, will have been personally acquainted with the leading medical men of his day, including Augustus' physician Antonius Musa, who is named at *Ep.* 1.15.3 and probably alluded to at *Ep.* 1.3.26 (*frigida fomenta*: see Mayer (1994: ad locc.).

To all this we may add circumstantial indications that medicine generally is rising in status as a profession in the last generation of the Republic: witness Cicero's statement (*De off.* 1.151) that medicine and architecture were suitable careers for free men, and Caesar's inclusion of doctors in his offer of citizenship to those teachers of the liberal arts living in Rome (Suet. *Iul.* 42). Even if, therefore, the passages purporting to show the intellectual interests of the Augustan poets are purely literary imitations without bearing on the real world,[75] there is sufficient evidence of interest in Greek medicine for us to regard Varro's inclusion of medicine in his *Disciplinae* in the 30s BC as *following* the mood of the times, with its broad intellectual interests, rather than as trend setting.

But it remains doubtful whether the substance of the last two paragraphs amounts to evidence for the existence of medical Latin in the

---

[71] For more generous illustration and bibliography, see Mazzini (1988: 46–9).

[72] Compare: Lucr. 6.1193–5 'compressae nares, nasi (ῥίς) primoris acumen | tenue, cauati oculi, caua tempora, frigida pellis (δέρμα) duraque' with: Hp. *Prog.* 2 [= 2.114L] ῥὶς ὀξεῖα, ὀφθαλμοὶ κοῖλοι, κρόταφοι ξυμπεπτωκότες, ... καὶ τὸ δέρμα τὸ περὶ τὸ μέτωπον σκληρόν τε καὶ· περιτεταμένον καὶ καρφαλέον ἐόν (cf. *Coac.* 2.209 [= 5.630L]); and also with: Cels. 2.6.1 'nares acutae, conlapsa tempora, oculi concaui, ... cutis circa frontem dura et intenta'.

[73] See Phillips (1984), with references to earlier literature.

[74] See Pigeaud (1980) and (1982), and the excellent summary in Pigeaud (1988). I owe the last reference to Dr S. J. Harrison.

[75] I mean above all: Virg. *G.* 2.477–81 (praise of Lucretius), *A.* 1.742–6 (the song of Iopas; cf. A.R. 1.496ff.), Prop. 3.5.23–46, Hor. *Ep.* 1.12.14–18 and Ov. *Met.* 15.66–71.

strong sense in the first half of the first century BC. Notwithstanding the extant medical sections of Varro, *De re rustica*,[76] and reliable testimonies to a *De medicina* by Varro and pharmacological works in Latin by Pompeius Lenaeus, C. Valgius Rufus and Aemilius Macer (Plin. *Nat.* 25.4–5; Ov. *Tr.* 4.10.43–4) — even with allowance made for exaggeration in the Elder Pliny's famous remark on the language of medicine in his day,[77] the easier assumption has been, and remains, that any distinctive medical idiom in first-century Rome was a form of Greek.[78]

As things stand, then, the existence of Brown's Latin medical discourse in the age of Lucretius looks on general grounds decidedly doubtful. Perhaps its strongest available support so far is the aesthetic point (related to the general hypothesis developed above about the use of *uocabula propria* in metaphor) that Lucretius' image is so much more effective if its peculiar language puts his hearers in mind of the way that medical men of their acquaintance speak and/or write. Failing this, we must read Lucretius' metaphor as no more than medical Latin in the weak sense, and the striking accumulation of *-sco* verbs[79] (four in two lines) as having some other (less pointed?) effect, such as reminiscence (or parody?) of epic or tragedy.

(10) Medical vocabulary in Lucretius

Brown's belief in Latin medical discourse rests by implication on the lexical agreements between Lucretius, in the metaphor of love and elsewhere, and medical prose, above all Celsus. His commentary brings out very well the status as ordinary medical expressions of many of the words of 4.1068–71: *ulcus, inueterascit, in dies, furor, grauescit* (but add Cels. 6.6.29!), *uulnera, recentia curare*, as well as the *-sco* verbs of 1068–9. In these lines more might be made certainly of *plagae* 'surgical incisions' (41× in Celsus, e.g. 3.21.12, 4.7.3, 7.2.6); probably of *conturbare* (in medical contexts at e.g. Cic. *Tusc.* 3.15, 4.30; Larg. 19, 20; Sen. *Dial.* 12.5.3); possibly of *gliscit*, which occurs in a medical expression in Plautus (*Cap.* 558 *gliscit rabies*) and

---

[76] Varro distinguishes (*R.* 2.1.21) two sorts of veterinary and human medicine: 'scientiae genera duo, ut in homine, unum ad quae adhibendi medici, alterum quae ipse etiam pastor diligens mederi possit'. This view is in contrast with that of Cato, whose medical recipes were to be administered by the *pater familias*. For this reason I exclude Cato at this point; but see the end of **(10)** below on the phraseology of medical recipes, which appears to have remained constant from the time of Plautus until late antiquity.

[77] Plin. *Nat.* 29.17; note especially: 'immo uero auctoritas aliter quam Graece eam tractantibus etiam apud inperitos expertesque linguae non est, ac minus credunt quae ad salutem suam pertinent, si intellegunt'.

[78] See e.g. Rawson (1985: 178, 182); André (1987: 29–30).

[79] On which see **(11)** *(i)* below.

which Lucretius uses in another medical metaphor (3.480 *clamor, singultus, iurgia gliscunt*, the 'symptoms' of drunkenness; cf. 1.474). In general, however, Lucretius' medical vocabulary, *sensu proprio* or metaphorical, coincides with that of medical prose (particularly but not only Celsus) in many passages in the poem, notably in the description of the Athenian plague with which the poem ends (6.1138–286) — but there are many other places, too.[80] Here are some examples of Lucretius' medical words and phrases.

ardor 'high temperature of the human body' (3.477, 4.1098): cf. Cic. *FPL* 34.33, Cels., Larg., Plin. *Nat.* and later medical writers *saepe*, Sen.(?) *Her. O.* 1278. The phrase *nimius ardor* occurs at Lucr. 6.1163 and Cels. 1.8.3, 3.7.2D, 4.12.4, 5.28.11D (*TLL* II. 490.60 ff.).

decedere 'to remit', of a fever (2.34): cf. Cic. *Att.* 7.2.2, Nep. *Att.* 22.3, Hor. *Ep.* 2.2.152 (metaph.), Cels. 3.3.4, 3.4.17, 3.5.10, *al.* (*TLL* V. 1.122.43 ff.).

capitis dolor 'headache' (6.784, 1202): cf. Lucil. 1277M, Hor. *S.* 2.3.29, Ov. *Am.* 1.8.73, *al.*, Cels. *saepe*, and later medical writers (*TLL* V. 1.1839.56 ff.).

feruor 'a feverish heat within the body' (6.656, 1145): cf. Var. *Men.* 33, Hor. *S.* 2.1.25 (metaph.), Cels. 2.7.28, 3.3.4, 3.6.7, 4.13.6, Larg. 158, Col. 6.12.1, Sen. *Dial.* 2.9.1, Plin. *Nat.* 15.19, *al.* and later medical writers (*TLL* VI. 1.601.1 ff.).

male habere 'to cause physical distress to' (3.826 metaph.): cf. Pac. *trag.* 277 (of old age), Ter. *An.* 436, Cels. 1.5.1. 2.1.14, 18, *al.* (21x of a disease distressing the patient or a body part), Apul. *Fl.* 23 (used by a doctor), etc. (*TLL* VI. 3.2440.31 ff.).

laborare 'to be ill' (1.849, 2.970, 3.176, 507, 733): cf. Var. *R.* 2.1.21, Vitr. 1.4.12, Cic. *Att.* 5.8.1, 7.2.2, Cels. *pr.* 56, 67, 1.8.1, 2.8.16, *al.* (*TLL* VII. 2.806.53 ff.).

lethargus (ληθαργός) 'lethargy' (3.465, 829): cf. Hor. *S.* 2.3.145 (in a medical context); Cels. 2.1.21, 3.18.14, 15, 3.20.1, Plin. *Nat.* 32.116, *al.* (*TLL* VII. 2.1187.17 ff.). Lucretius and Celsus agree in avoiding the old Latin term *ueternus*, although the doctor uses it at Pl. *Men.* 891 and Horace of himself at *Ep.* 1.8.10 (cf. Cato, *orat.* 81 Sblendorio Cugusi (simile), Ter. *Eun.* 688, Catul. 17.24, Virg. *G.* 1.124 and Probus ad loc.: *ueternum grauem somnum uolunt intellegi . . . quem medici lethargum uocant*). *ueternus ciuitatem occupans* is a well-attested medical image of the body politic (Cael. *Fam.* 8.6.4, Cic. *Fam.* 2.13.3, Sen. *Ep.* 82.19, 88.19, *al.*); perhaps *ueternus*

---

[80] Mazzini (1988: 54–5) lists, with references to the poem, the numerous items of medical theory and practice of which Lucretius shows knowledge, though it is not Mazzini's purpose to comment on the vocabulary used.

~ *lethargus* is another isogloss dividing lay from specialist usage (cf. **(8)** above): this would give a good account of Horace's use of *lethargus* in the medical context at *S.* 2.3.145, but *ueternus* at *Ep.* 1.8.10, where the point of view is very much that of the patient or of his friends.

partes extremae (corporis) 'the extremities' (6.947): cf. Cels. 2.4.4, 2.7.12, 4.21.1, *al.* (*TLL* V. 2.2000.25 ff.).

partes genitales 'the genitals' (4.1044, 6.1206): cf. Val. Max. 7.7.6, *al.* Col. 6.26.2. (cf. 6.36.2 *genitalia loca*), Cels. 4.1.11 (*genitale* neut. sg. noun), Garg. Mart. *med.* 5, etc. (Cf. *TLL* VI. 2.1814.1 ff. and Adams (1982*a*: 57–8).)

profluuium sanguinis 'a flux of blood, haemorrhage' (6.1205): cf. Cels. 2.7.2, 28, 4.11.4, 5.22.6, *al.*, Col. 6.26.3.

sacer ignis one or more forms of erysipelas (6.660, 1167): cf. Virg. *G.* 3.566; Cels. 5.22.7, 5.24.4, 5.28.4ACD; Plin. *Nat.* 26.121, *al.*

signa mortis 'indications of impending death' (6.1182): cf. Cels. 2.6.6, 9, 14.

singultus 'hiccough' (3.480): cf. Cels. 2.7.17, *al.*, Larg. 191, Plin. *Nat.* 20.87, etc. The phrase *singultus frequens* is found at Cels. 2.7.17, 3.24.2 and Lucr. 6.1160. In the latter it denotes the convulsive catching of the breath of the dying, a use closer to the other meaning of the word, 'sobbing' (Cic. *Planc.* 76, Catul. 64.131, Hor. *C.* 3.27.74, etc.). When was this word first used for the humble hiccough? In Greek, λύζω shows a similar pattern of use: 'sob' in verse, 'hiccough' in (medical) prose.

temptare 'to attack', of disease or similar (3.147, 5.346, 6.1104): cf. Hor. *Carm.* 1.16.23 (in a medical image), Cels. (6×, 2.8.10, 3.21.4, *al.*), Larg. (7×, 89, 101, 161, *al.*).

uenus 'sexual intercourse', in humans or animals (4.1235, 1276, *al.*): cf. Virg. *G.* 4.199, Livy (4×: 4× *concubitus*), Cels. (14×: 2× *concubitus*: 2× *coitus*), Sen. (2× in prose: 9× *concubitus/concumbo*; 17× in verse:[81] 2× *concubitus*), Col. (11×, 6.24.2, etc.), Plin. *Nat.* (c. 60×, 20.146, etc.), Tac. *Ger.* 20.4*, Cael. Aur. (see Ernout (1956)). Cicero does not use *uenus* for 'sex' but rather, on the rare occasions when he has to, *concubitus* (*Rep.* 4.4, *N.D.* 1.42) and *concumbo* (*Fat.* 30, *Inv.* 1.44, 73, 74, 75). Adams (1982*a*: 189) characterizes *uenus* as 'one of the standard neutral nouns of the educated language for sexual intercourse' and gives the following summary of its distribution: '*uenus* is common from Lucr. onwards, in writers who deal with sexual activity in a technical and neutral tone'. One might add that it is common also in the poets[82] and raise the question whether both

---

[81] Although here the word generally means sexual love, sexual desire.

[82] The other examples in the *OLD s.v.* 4. are poetic, save Apul. *Met.* 1.9, 5.10, which are doubtful, and Ulp. *Dig.* 48.5.24 (mid-second century), which is different in that it uses the phrase *res ueneris.*

poetic and technical uses derive from a Lucretian innovation; whether they reflect a different innovator and, if so, whether technical or poetic; or whether they reflect independent innovations.

ueratrum 'hellebore' (4.640–1): cf. Cato, *Agr.* 114,1, 115,1, 2, Cels. 2.6.7, *et saepe*, Larg. 10, 99; Col. 6.32.2, 6.38.3 (where the word is ascribed to *rustici*), 7.13.2. Lucretius, Celsus and Scribonius agree in avoiding *elleborus*, although this Greek loan-word is common, especially in medical contexts, real and metaphorical, from Plautus on (e.g. Pl. *Men.* 913, Cato *Agr.* 157.12, Catul. 99.14, Virg. *G.* 3.451 (plur.), Hor. *S.* 2.3.82, Col. 10.17 (plur., imitating Virgil), Mart. 9.94.6).

This set of sixteen words and phrases gives some illustration of what we may regard as standard Latin medical expressions which occur already in Lucretius. They may be used to support a case for the existence of Latin medical discourse contemporary with Lucretius which the poet's audience would have 'heard' in the intense language of his medical metaphor. This is based on the assumption, no more (but see below), that these agreements between Lucretius and medical prose depend on a common source, that is at least one well-known Latin medical work (or course of lectures?[83]) that was composed before Lucretius wrote his poem and that influenced the vocabulary of medical discourse to the first century AD and beyond. A second possible interpretation of these lexical agreements is that there is a relation of dependence of Latin medical prose on the language of Lucretius, that a post-Lucretian composer of the first literary Latin medical text, as distinct from recipes — Varro, say, or Pompeius Lenaeus or C. Valgius Rufus — was influenced by Lucretius' choice and creation of high-sounding (Ennian) vocabulary for treating a new scientific subject in Latin (cf. Gigon (1978: 171)), and so borrowed from Lucretius in order to give a particular colour and status to his new medical prose. An obvious consequence of this is that these agreements are no evidence for pre-Lucretian medical Latin in the strong sense; any medical variety to which they were proper was post-Lucretian and could not have been imitated in the metaphor at 4.1068ff. The third available view of this first set of lexical agreements is the easiest of all: they are quite insignificant; they are all ordinary words from the language of everyday; agreements between Lucretius and Celsus which look like departures from normal usage (e.g. *lethargus, uenus, ueratrum*) are accidental results of our fragmentary record of republican Latin.

---

[83] Professor Adams raises the interesting question whether Latin medical expressions and terminology could have been disseminated in a consistent form in lectures forming part of an *encyclios disciplina*. Vitruvius (1.1.12–18, 6.pr.4) had an education of this sort, certainly including some medical theory, which surfaces frequently in his treatise.

As circumstantial evidence in favour of Brown's (implied) view of a common source of the above agreements between Lucretius and (especially) Celsus may be cited some typically telling observations in J. N. Adams's latest book (1995*b*) on Latin veterinary terminology. Adams writes (1995*b*: 642): 'The language of doctors could be parodied as early as the time of Plautus.' The parodies which he discusses (pp. 608, 637, 638) are three: (a) several features of the following line[s]:

> Pl. *Mer.* 139[–40]   CH. resinam ex melle Aegyptiam uorato, saluom feceris.
> AC. at edepol tu calidam picem bibito, aegritudo apscesserit.

I add line 140 because this is really a double parody, Charinus mimicking contemporary medical phraseology, Acanthio parodying Charinus. Adams draws attention to the medical use of *ex* 'dipped in', the (medical) *-to* imperative, the prediction, in a future tense, of successful cure after the prescription; (b) the use by the doctor of *aliquis* in conjunction with a numeral at:

> Pl. *Men.* 950   elleborum potabis faxo *aliquos uiginti* dies;[84]

(c) the emphatic *figura etymologica* in the same medical context:

> Pl. *Men.* [895–] 897   SENEX magna cum *cura* ego illum *curari* uolo.
> MEDICUS quin suspirabo plus sescenta in dies:
> ita ego eum cum *cura* magna *curabo* tibi.[85]

It may be objected that neither (b) nor (c) is strictly medical, as (b) appears to be a general colloquial use of *aliquis* (Hofmann and Szantyr (1965: 211)), and since (c) is found in a variety of special and technical contexts, from *Lex XII* 12.2 *noxiamue noxit* and Enn. *Ann.* 77V *curantes magna cum cura* on (see Hofmann and Szantyr (1965: 124–5, 791); Jocelyn (1969*a*: 173) and cf. Haffter (1934: 10–43) and below, n. 103). But, even setting these for the sake of argument aside, we still have in (a) an undeniable instance of the phraseology of medical recipes which will recur constantly in medical and veterinary treatises and which requires the assumption of a tradition of (at least) medical recipe literature[86] dating

---

[84] For parallels see Adams (1995*b*: 637 and n. 602); he compares in particular Cato, *Agr.* 156.1 and Pelag. 146.1.

[85] For parallels see Adams (1995*b*: 504 and n. 170).

[86] Adams (1995*b*: 639) prefers this 'medical' phraseology to be characteristic of *written* treatises rather than of the speech of practising *medici* (or *ueterinarii*). This implies that these Plautine parodies of doctors (like other humour in Plautus) suppose a literate audience. It is relevant to the last point that Varro and his interlocutors in the *Res rusticae* expect both

from the age of Plautus or earlier. This tradition is, of course, well attested already in parts of Cato, *De agricultura* (above, n. 76); Adams adduces several other parallels of construction and phraseology between Cato and Pelagonius (summarized at 1995*b*: 636–8), which 'underline the conservatism of the didactic (particularly recipe-) style over many centuries' (1995*b*: 637). Is this, then, another side of the medical discourse which Lucretius mimics? It is tempting to answer, 'Yes'. Admittedly, Celsus happens to exhibit rather few of the features of the recipe style characterized by Adams,[87] nor are any of them, to my knowledge, to be found in Lucretius. But, given so little material on which to base a reconstruction of any medical Latin in the strong sense, should we not be content with hard evidence for one type of Latin medical discourse older than Lucretius? In reality, both general considerations and surviving material in both Greek and Latin make it not merely plausible but overwhelmingly likely that there would have been from the beginning several quite different types of medical texts and utterances, the style varying with the content, the background of the author and the intended audience or readership.[88] Given this, as well as the theme of our Symposium, and the title of my chapter, I venture an exploratory coda.

(11) Further lexical colour in medical prose?

Studies of Latin technical prose have repeatedly drawn attention to two contrasting stylistic tendencies: conservatism and colloquialism (see De Meo (1983: *passim*), on individual technical languages). Both emerge in Adams's account of the language of Pelagonius and of medical recipe phraseology; both are characteristic of Celsus.[89] A third lexical colour — poeticism — has been observed by some in technical prose, both ancient

---

magistri pecoris and humble *pastores* to be literate and to carry with them written records (*commentarii*) of the symptoms and treatment of animals' diseases. See Adams (1995*b*: 72–8). How formal and how consistent was the Latin of these *commentarii*?

[87] I know of no examples in Celsus of the use of *aliquis* + numeral, of the *figura etymologica* or of the future-tense prediction of successful cure mentioned above; in particular, Celsus avoids religiously the *-to* imperative.

[88] On this stylistic variety, see Adams (1995*b*: 642–6, 653–5, 662–8). In veterinary terminology, in particular, Adams, summarizing (1995*b*: 668), distinguishes (i) terms of *pastores* or *rustici*, (ii) terms of specialist *ueterinarii*, (iii) 'terms with a "learned" flavour introduced to veterinary discourse by educated laymen with stylistic pretensions, (iv) inactive (non-current) terms crudely transferred or calqued from Greek'. Much the same variety will have existed in the sphere of human medicine.

[89] Conservatism: in vocabulary, see n. 97 below on *atra bilis* and *aqua inter cutem*; in syntax, note Celsus' use of gerund + accusative object at 1.3.8 and 7.26.5C: see Löfstedt (1990: 60), Hofmann and Szantyr (1965: 372–3) and J. H. W. Penney in this volume, pp. 259–60. On the question of colloquialism in Celsus, see most recently Önnerfors (1993: 243ff.).

and modern: L. Guilbert (1965: 70) and J. Dubois (1966: 104) have seen it in the modern French language of aviation; L. Callebat (1982: 704–7) has noted splashes of it in Vitruvius. I am not aware of any modern attribution of poetic colouring to Latin medical prose but I have been struck by a number of lexical agreements between Celsus and high poetry, including but in some instances possibly going beyond Lucretius. The very idea of such agreements brings with it a sense of *déjà vu*, and some foreboding: F. Marx thought to see lexical agreements between Celsus and Ovid sufficient to postulate influence of the poet upon the encyclopaedist (1915: xvi, xcvii, cviii, Index *s.v. Ouidii imitatio*), an idea which was to be thrown out rudely — if rightly — by Önnerfors (1993: 238–9) in a recent volume of *ANRW*. The agreements that I am about to illustrate are different in kind and will, I hope, merit further attention.

(i) Word formation

I have tried to show elsewhere (Langslow (1991: 118–20[90])) that already in Celsus' medical terminology certain suffixes stand out by their frequency in the text and by clustering in well-defined lexical or semantic fields; I say 'already' because this is a feature of modern scientific language; (see, for example, Sager *et al.* (1980: 257–64) and Fluck (1980: 84–5).) Several of these formations seem to have been favoured also by Lucretius and more generally by old high Latin poetry, in particular, nouns in *-(it)iēs, -iei* (fem.), *-or, -ōris* (masc.), *-us, -ūs* (masc.) and 'inchoative' verbs in *-scō, -scere*.

I begin with the last, the *-scō* verbs supposedly characteristic of pre-Lucretian Latin medical discourse. This productive formation (see Mignot (1969: 145–228)) is common in Celsus; he uses more than forty different verbs with this suffix, a good number of which are found earlier in high poetry, such as *albescere, grauescere, inueterascere, mollescere, nigrescere, ommutescere, spissescere*. This type is especially favoured by Lucretius (106 verbs, according to Swanson (1962: 38–9, 130–3)) and is frequent also in early epic and tragedy; with reference to the last Jocelyn (1969*a*: 198) remarks that these verbs 'probably had a poetic tone. Such forms are comparatively rare in the fragments of Ennius' tragedies but pullulate in those of his *Annales* and the rest of republican tragedy.'

Jocelyn (1969*a*: 199) has a similar comment on masculine abstract nouns in *-us, -ūs*: these 'were much affected by more elevated genres of archaic poetry; Ploen [1882] counted 63 in 1,940 verses of tragedy, and

---

[90] See now on this aspect of veterinary and medical Latin Adams (1995*b*: 519–68, esp. 519–20, 566–8; cf. 653), who states some doubts and reservations.

only 125 in 30,000 lines of comedy'. This is one of the formations singled out by Bailey (1947: 135) in his *Prolegomena* on the style of Lucretius; Swanson (1962: 8) lists 121 such forms used by Lucretius, including a dozen hapax (e.g. 4.1242 *adhaesus*). The preference of high poetry for *-us, -ūs* over *-io, -iōnis* (fem.) is due largely to metrical considerations; and yet *-us* is generally held to have been of higher style than *-io* (Hofmann and Szantyr (1965: 743)). Celsus attests more medical words in *-io* than in *-us* (58: 37) and yet the proportion of the latter is, I suggest, strikingly high for a prose work on a technical subject, higher, I think, than that to be found in Vitruvius or in Cicero's philosophical terminology (though this is, I confess, an impression only, based on the examples and discussion in Lebreton (1901), Poncelet (1957), Callebat (1974)). They are used especially to name natural bodily functions (e.g. *spiritus* 'breathing', *pulsus* 'the pulse', *conceptus* 'conception', *usus* 'a bodily function') including the five senses (*sensus: uisus, auditus, tactus, gustus, odoratus*). Celsus has a small group of concrete nouns in *-cessus* (*abscessus* 'abscess', *excessus* 'protuberance', *processus* 'process', *recessus* 'recess'), of which only the last is attested in the given concrete sense before Celsus, *recessus* having been used, perhaps significantly, chiefly by poets (e.g. Virg. *A.* 8.193 of a cave, cf. Ov. *Met.* 11.592 *et saepe*).

Several studies of masculine nouns in *-or, -ōris* have served in complementary fashion to indicate their semantic homogeneity. Instances of the type down to the time of Cicero have been most recently characterized by Untermann (1977: 334–5) as 'Empfindungen, die als temporäre Eigenschaften eines Menschen (übertragen auch jedes anderen belebten oder unbelebten Individuums) auftreten und durch Sinnesorgane wahrgenommen werden'. Such a formation lent itself ideally to the service of medical writers in describing the look, the feel, the temperature, and other symptoms of a patient's condition. In the medical vocabulary of Celsus I have counted 28 examples of this formation which name signs and symptoms of disease; these include very common words, such as *dolor, rubor, tremor*, etc. and some much rarer, e.g. *liuor, marcor, pallor, sopor* 'le synonyme poétique de *somnus*' (Ernout 1957*a*: 45), *stridor* (see **(11)** *(iii)* below), etc.[91] After Cicero it is principally in medical writers that new forms are found. As to the stylistic register of the formation, in a note on Ennius' tragedies, Jocelyn (1969*a*: 195) comments 'abstract formations in *-or* tended generally to have a lofty tone; Ploen [1882] counted 26 in 1,940 verses of tragedy and only 35 in 30,000 of comedy'. The formation is favoured by high poetry, tragedy and epic (Ernout 1957*a*: 53), especially

---

[91] The forms *fluor* 'a flux' and *marcor* 'apathy, languor' appear first in Celsus; he is the first to use *rubor, sopor* and *tepor* of the human body and disease.

by Lucretius, who attests 48 such nouns (Swanson (1962: 53–4)), nearly half of those known, including rare forms such as *amaror, leuor, stringor,* and *aegror, angor, luror, pallores* (plur.), the last four in medical contexts.

The use of formations in *-itiēs*, finally, is striking even before the end of the Republic, above all in prose, because by then the productive suffix was very definitely *-itia* and even in old Latin new first-declension forms were competing with and replacing old *-(it)iē*-stems (Hofmann and Szantyr (1965: 744 (g)); Leumann (1977: 285, 296)). Celsus attests the following pathological terms in his medical vocabulary: *caries, macies, materies, pernicies, sanies, scabies;* and *durities, mollities, nigrities;* the type may remain marginally productive in medical terminology, *cantabries* and *uermicies,* for example, appearing late. Forms in *-ies* are absent from Plautus, Terence and Cato (Swanson (1962: 53)); those in *-ities* are hardly to be found in classical prose but are commoner in poetry, especially in Virgil, metrical considerations again playing a part in hexameter poets. Lucretius attests some striking examples, including *amicities, durities, notities* (for Epicurean προληψις), and *spurcities* 'dirt, impurity' (6.977).

(ii) Accumulation of rhyming derivatives

As I noted, the suffixes mentioned in the last paragraph are characteristic not only of Celsus and Lucretius but also of high Latin poetry more generally. A nice indication of this is the accumulation in *parodies* of epic and tragedy of rhyming derivatives in just these suffixes.[92] The repeated suffix was clearly seen as typical of the target of the parody, as for example in:

Lucil. 599–601M	hic cruciatur fame frigore, inluuie, inbalnitie, inperfunditie, incuria,[93]
or Pl. *Rud.* 215	algor, error, pauor me omnia tenent,
or Pl. *Capt.* 133–4	ego qui tuo maerore maceror macesco, consenesco et tabesco miser.[94]

---

[92] An analogous phenomenon in Greek literature is Aristophanes' use of the suffix -κός to parody the 'new learning': see Peppler (1910).

[93] Parodying Pac. *trag.* 9 (*Antiopa*), according to Char. *GLK* 1.101.20f.

[94] Note in this connection Jocelyn's words (1969a: 198): 'Ploen [1882] counted 85 inchoative formations in comedy but it would be wrong to think that many came from ordinary Roman speech. 64 of them occur only in Plautus' plays and many of these nowhere else in Latin. Very often a paratragic tone is plainly detectable in the context of utterance.' Lucretius' 'uiuescit ... inueterascit ... gliscit ... grauescit' (4.1068–9) is surely itself a parody of some sort: is it of tragic / epic diction, or of medical discourse?

Accumulation, though less concentrated, of rhyming derivatives is found also in serious poetry. Note, for example:

> Enn. *scen.* 151–3V   caelum nite*scere*, arbores fronde*scere*,
> uites laetificae pampinis pube*scere*,
> rami bacarum ubertate incurue*scere*,
>
> Pac. *trag.* 294   sed nescioquidnam est, animus mi horre*scit*, et gli*scit* gaudium.
>
> Fur. Ant. *FPL* 3   incre*scunt* animi, uīre*scit* uolnere uirtus
>
> Pac. *trag.* 274–5   corpusque meum tali
> maer*ore*, err*ore*, mac*ore* senet,
>
> Acc. *trag.* 349   persuasit maer*or*, anxitudo, err*or*, dol*or*,
>
> Virg. *A.* 5.5   duri magno sed am*ore* dol*ore*s

and, with another formation:

> Enn. *scen.* 97–9V   haec omnia uidi inflamm*ari*,
> Priamo ui uitam euit*ari*,
> Iouis aram sanguine turp*ari*;

Ernout (1957*a*: 53) pointed to Virgil's frequent use of *-or* derivatives in a strongly archaizing passage in the *Aeneid* (7.458–66).[95]

In Celsus, too, it is not only in the number of such derivatives in a list of his vocabulary that he shows his predilection for these formations; he shows also a fondness for accumulating rhyming formations in twos or threes. Notice, for example:

> Cels. pr. 24   [vivisection shows of the internal body parts] dur*itie*m, moll*itie*m, leu*ore*m, conta*ctu*m, proce*ssus* deinde singulorum et rece*ssus*.

and the famous summary of the symptoms of inflammation:

> Cels. 3.10.3   notae uero inflammationis sunt quattuor: rub*or* et tum*or* cum cal*ore* et dol*ore*.

Sometimes a sentence will be marked not by a rhyming pair but by the close association of two or more of these suffixes, as for instance:

> Cels. 3.24.2   totum corpus cum pall*ore* quodam inalbe*scit*
> Cels. 4.7.1   lingua faucesque cum rub*ore* intume*scunt*

---

[95] The similar, though quite separate, phenomenon of homeoteleuton, in Shackleton Bailey's (1994) sense of the term, is also significantly more common in pre-neoteric Latin verse. Its high incidence in the *Aeneid* (four times as high as in *Ecl.* and *G.*) may reflect, according to Shackleton Bailey (1994: 100), Virgil's desire, even if unconscious, to imitate Ennius and eschew neoteric practice in his epic.

Cels. 6.6.29 [oculi] cum dol*o*re quodam graue*s*cunt et noctu praegraui
pituita inhaere*s*cunt.[96]

(iii) Vocabulary

Finally, I mention briefly below a few examples of other items of Celsus'
vocabulary, medical and non-medical — apart from the suffixal formations
touched on above — which may possibly have had a poetic ring to them.

It was noted in **(8)** above that *aegrotus*, although common in prose and
the less exalted forms of poetry, and though apparently the ordinary
doctor's word for '(one who is) ill' in Plautus and Cicero, is avoided by
epic poetry, including Lucretius, and by Celsus and Scribonius Largus.

The colour term *ater* 'black' — 'terme spécifiquement épique', according
to André (1949: 387) (cf. p. 196 above) — is preserved in medical prose not
only in the old phrasal term *atra bilis*,[97] but also in descriptive phrases such
as *sanguini atro similis* (Cels. 2.8.43; cf. 3.25.1, 5.26.20E). *ater* used of blood
occurs most famously at Enn. *scen.* 363V *tabo, sanie et sanguine atro*, a line
that appears to have been imitated in later epic poetry.[98] I acknowledge,
however, that *ater* may not in itself have been poetic, but rather 'affective',
denoting black in a sinister or unpleasant sense, evoking 'ce que la couleur
noire peut avoir d'impressionnant, de triste, de lugubre' (Marouzeau 1962:
166; cf. 1949*b*: 67 f.), so that it could have been used naturally and quite
independently in epic poetry and medical prose.[99]

effundere is common in Celsus in the sense 'to let out (a liquid)' (25
times). Once, rather strikingly, it is used to mean 'to let (a body part) fall
back' (7.7.4A *ut in gremium eius [medici] caput resupinus effundat [aeger]*).
This use appears to be unparalleled in prose, although it is quite common
in poetry, beginning with Lucretius (3.113; cf. *TLL* V.2.221.51 ff.).

Likewise, the intransitive use of *repetere* (= *redire*), which is found
several times in Celsus (2.1.6, 2.8.23, 3.22.3, *al.*) and Scribonius (56, 122)
(cf. Önnerfors (1963: 164 n. 33)), can be paralleled only in poetry (*Culex*
105, Virg. *A.* 7.241).

---

[96] With this pattern compare the humorous (pseudo-medical?) line in Cael. *Fam.* 8.6.4 'si
Parthi uos nihil calfaciunt, nos hic frig*o*re frige*s*cimus'; cf. Haffter (1934: 33).

[97] Celsus' term for μελαγχολία, *atra bilis* is already in Pl. *Am.* 727, Cato, *Agr.* 157,7. It and
aqua inter cutem 'dropsy' are nice instances of Celsus' lexical archaism. In the latter note
the 'undoing' by Celsus of the compound adjective *intercus*, made to acc. *intercutem*, gen.
intercutis, etc. arising by hypostasis. The age of this formation may be reflected in its use of
the preposition *inter* 'under' (?), parallels with which are not easy to find; Leumann (1977:
403) explains it as from *inter cutem et carnem*, but quotes no supporting examples.

[98] Note e.g. Virg. *A.* 8.487. For *ater sanguis* of the dead, cf. Virg. *A.* 3.28, 33, 622, *G.* 3.221,
507.

[99] I owe this observation to Professor Adams.

mortifer(us) 'deadly, fatal' is common in poetry, including elegy, from Ennius on; in poetry it is used to qualify a wide range of nouns. In prose it is less common[100] and its distribution and uses are striking. Nearly all prose occurrences are of wounds, diseases and their symptoms, injuries and poison, including snakebite: they are, in a word, medical. These contexts account for all occurrences in Cicero (10×), Hirtius (1×), Nepos (1×), Livy (4×), Valerius Maximus (2×), Ammianus Marcellinus (2×), as well as those in technical prose, where the word is most common (more than ten times in Celsus and the elder Pliny; three times in Columella, twice in Vitruvius and once in Scribonius Largus). It may be that its restricted use in prose reflects an archaic, even poetic, medical usage (*TLL* VIII. 1517.72 ff.).

praesens[101] 'effective' (of a remedy; with comparative and superlative), later 'immediate, swift in effect' (of trauma or remedy), is found first in Virgil's *Georgics* (2.127, 3.452) and is then common in technical prose (including Celsus, Columella and Pliny and later medical and veterinary writers). Semantically, it seems to be a step away from the use of the word with *deus*, *numina* and the like to mean 'present so as to bring aid' (cf. Ter. *Ph.* 345, Virg. *G.* 1.10 *uos, agrestum praesentia numina, Fauni, A.* 9.404 *tu dea tu praesens nostro succurre labori*, even Larg. *epist. dedic.* 1 [quosdam] *medicamento . . . dato, protinus uelut praesenti numine omni dolore . . . liberasse aegrum*, etc. and *TLL* X. 2.843.64 ff.). Pascucci (1961: 47) implies that Virgil invented the medical use and bequeathed it to later technical writers. But Virgil seems to allude to the medical use in Juno's speech to Iuturna:

> Virg. *A.* 12.152   tu pro germano si quid *praesentius* audes[102]

and, if this is right, it is more likely that the medical use of this 'religious word' (Nisbet–Hubbard 1970: *ad* Hor. *C.* 1.35.2) was already established. Of course, religious is not at all the same as poetic and, notwithstanding the allusion in Virgil, *praesens* may be an instance of an entirely different lexical source of medical Latin.[103]

stridor, which Celsus uses of the grinding of teeth (2.7.25 *insolitus dentium stridor*; cf. 2.6.5), is said to be a poetic word (Fedeli 1985: *ad* Prop. 3.7.47–8), and certainly the vast majority of its occurrences are in poetry

---

[100] As are compounds in *-fer* generally: see Arens (1950: esp. 243) and Bader (1962: 107–11).

[101] See Pascucci (1961) and *TLL* X.2.843.64ff., 844.51ff. and 849.42ff.

[102] Notice another medical image in this speech at line 158, in the words *conceptumque excute foedus* (*excutere* 'to cause a miscarriage' Ov. *Ep.* 11.42, *Fast.* 1.624, Cels. 2.7.16, Larg. *epist. dedic.* 5).

[103] Emphatic *figurae etymologicae* like *cura curare* (above, p. 214) may also according to Häffter (1934: 33n.) originate in 'feierliche Sakral- oder Gesetzessprache'; Häffter sees them, however, as proper mainly to 'hohe Dichterdiktion' (1934: 33 n. 43).

(Accius, Virgil, Tibullus, Ovid), though it is not unknown in prose (Cic. *Agr.* 2.70 of the tribune Rullus, *Tusc.* 5.116 of a saw, Vitr. 2.4.1 of a type of earth).[104]

(12) Possible accounts and conclusion

In principle, any linguistic feature shared by poetry and prose can arise in one of three ways: (a) by common inheritance from a single source, such as the ordinary language of everyday, or (b) through borrowing by one linguistic variety of features proper to the other, that is either (i) by poetry from prose or (ii) by prose from poetry. This set of possible accounts faces the Hellenist pondering agreements in vocabulary between Homer and Hippocrates or Hippocrates and tragedy; it faces us now if we are minded to consider the features shared by Celsus and high poetry set out in **(11)**. Let us take the options one by one.

On the first view — (a) common inheritance from a single source — we shall regard the above agreements as coincidental and insignificant; we shall deny any relation of dependence between Celsus*[105] and Latin epic. We shall say that -*sco* verbs, for example, are indeed common in epic and medical prose but as a result of independent exploitations of an inherited formation present in ordinary Latin in the pre-literary period.

Clearly this is the easiest position to take. It is of course akin in its motivating scepticism to the view taken on the Greek side that, say, Hippocrates and Euripides are simply using common (Ionic) words which happen to be otherwise unknown to us, so that certain lexical agreements are no indication of a relation of dependence, nor of any significance for Greek lexicography or literary history. On the Latin side, this account need not be quite so negative, since we know some Latin prose from the period separating Celsus from Lucretius (or Ennius) and it does not share the lexical features under discussion. In other words, even if we take up position (a) above, we are left with some non-trivial differences between Celsus and other literary Latin prose, and furthermore with the inference that one could use (in the first century AD) a number of Latin words and suffixes favoured by high poetry without sounding like a poet.[106]

---

[104] Like *singultus* or Gk λυγ- 'sob; hiccough', this medical use of what may have been felt to be a poetic word is reminiscent of the Greek use of the root βρυχ- (βρυγμός, βρύχειν) of grinding the teeth.

[105] Celsus* means 'Celsus or any Latin source of Celsus'.

[106] H. D. Jocelyn (1986: 330, n. 132) appears to take this view by suggesting in a note on *durities* that, given its distribution before Celsus (Lucr. 4.268, Catul. 66.50, Var. *R.* 1.55.1, Vitr. 2.9.7) the tone of the word was 'grandiosely archaic for poets, soberly archaic for writers on technical subjects'.

The second view — (b) (i) medical vocabulary in poetry — is ruled out by the fact that the shared items under consideration are not medical expressions, with the exception of *aegrotus/aeger*, which, though medical, conveys an ordinary everyday notion.

The third account, however — (b) (ii) poetic vocabulary in medical prose — is available. On this view, the words which occur only in Celsus and the poets would be flashes of poetic colour worked deliberately by Celsus* into medical discourse (just like those observed by L. Callebat (1982: 704–7) in Vitruvius).[107] And yet even this account does not easily yield an argument in favour of a pre-Lucretian Latin medical idiom, since very few of these poetic flashes have echoes that are demonstrably older than Lucretius; they may simply be further examples of Lucretian influence on Celsus* — one possible interpretation of Lucretius' medical vocabulary, aired in **(10)** above — and, as such, offer no support for R. D. Brown's explanation of the language of Lucretius' medical metaphor since any Latin medical discourse to which they are proper would be post-Lucretian.

Only a very strong version of this third account would allow these lexical agreements to yield support for Brown's reading of Lucretius; I mean a strong version something like this: the agreements between Celsus* and old high Latin poetry are dim reflections of the idiom of at least one famous example of a Latin medical discourse, spoken or written in Latin tinged with grandiose poetic language. The purpose of this lexical colour would have been to appeal to conservative taste, to confer high status on the subject and by echoing Ennius, the Roman Homer, to imitate the Homerizing tradition in Greek medical prose. This Latin medical discourse — composed perhaps by Varro[108] or Pompeius Lenaeus,[109] or by

---

[107] And we could add to the examples in **(11)** *(iii)* the snake *chelydrus* (above, n. 27).

[108] Varro (116–27 BC) is a likely suspect, above all because he devoted the eighth book of his *Disciplinae* to the subject of medicine. Although he is never mentioned by Celsus (anyway, Celsus, like modern encyclopaedias, gives very few references to his sources), he seems to allude to a contemporary scientific theory of contagion (*R.* 1.12.2; Lehmann (1982)) and he distinguishes (*R.* 2.1.21) the type of medicine requiring the help of a professional from that which the *pater familias* can take care of in the manner dealt with by Cato (see n. 76). He has at least one, later standard, translation of a Greek medical expression (*Men.* 447A *aluum subducere* for κοιλίαν ὑπάγειν, here in a *double entendre*). As for contacts with epic, it is to be noted that Varro quotes Ennius on points of terminology and usage (e.g. in *Disciplinae* Bk 5 [arithmetic], *apud* Gel. 10.1 on *quarto* vs. *quartum*, 3.14 on *dimidium* vs. *dimidiatum*. Note also *R.* 1.48.2 '[gluma "husk"] apud Ennium solum scriptum scio esse'; and 1.4.1 'eius principia sunt eadem, quae mundi esse Ennius scribit, aqua, terra, anima et sol').

[109] A second strong candidate, as a putative Ennianizing Latin source of Celsus*, is Pompeius Lenaeus, a freedman of Pompey, born about 100–90 BC. Lenaeus was the translator of Mithridates' medical library and, as far as Pliny knew (*Nat.* 25.5), he was the first man to write on pharmacology in Latin. Lenaeus was known also as a *grammaticus* and as an authority on early Latin literature. (See Suet. *Gram.* 15 and Kaster (1995: ad loc.).) He will

any of the πολὺ φῦλον of scholars who flooded into Rome from Greece from the middle of the second century BC (Plb. 31.24.6–7; Kaster (1995: 62)) — could have been older than Lucretius' poem and it could have been the language of this discourse that Lucretius' audience heard in the metaphor of love as a disease at 4.1068ff.

While the weaker version of (b) (ii) may deserve some consideration and further investigation, the weight of the reconstruction involved in the strong version in the last paragraph cannot reasonably be borne by the shared features so far identified (in **(11)** above) which may plausibly have echoes older than Lucretius: *ater sanguis, mortifer(us), praesens, stridor* and the suffixes and their accumulation, above all the *-sco* verbs which Lucretius uses in superabundance at 4.1068–9, our point of departure (in **(9)** above).

An idle thought: although the two sets of *comparanda* are very different, there is a certain similarity between the caution just expressed in provisionally preferring Lucretius over Ennius as the source of possible epicisms in literary medical Latin and (e.g.) Ruijgh's ascription, in **(1)** above, of epicisms in Hippocrates to the influence of the imagined idiom of the medical parts of Empedocles rather than directly to that of Homer.[110]

Much of the argument of the last part of this paper **(III)** stems from the seemingly innocuous claim that Lucretius mimics in a metaphor the style of contemporary doctors' Latin. This claim seems right in literary terms — i.e. it gives the metaphor more point, and is in keeping with the general hypothesis (in **(6)** above) that a poet (indeed, any user of a language) will use in a metaphor language proper to the metaphor's source-domain. It is also lexically well founded — i.e. the key words of the medical metaphor are found in later medical contexts, above all in Celsus — but it runs against the historian's view of medicine as an exclusively Greek-speaking profession in republican and imperial Rome. On the historical side — at first sight difficult — it may be observed that already Plautus can parody doctors' language and that there are testimonies in our sources to Latin medical texts that may have been around before Lucretius published his poem; one may conclude simply at this point, then, that it may have been their style that Lucretius' metaphor parodied. However, the simple-seeming lexical agreements between Lucretius and Celsus hold out the prospect, whatever account one gives of them, of

have been fully bilingual and equally learned in Greek and Latin literature. As an academic with philological and medical interests, he was certainly aware of the Greek tradition of medical prose and its Homerizing lexical strand. Is it unthinkable that the first literary Latin medical work should have been modelled on the post-Hippocratic tradition in the Greek world by incorporating lexical colouring from the Latin Homer?

[110] On Empedocles as Lucretius' literary model see Sedley (1989).

deriving more from Lucretius than evidence for medical Latin. To be sure, the establishment of a link between the medical vocabulary of Lucretius and Celsus* would be of significance for more than the history of medicine; but the lexical agreements between Celsus and Lucretius go beyond the medical metaphor and even beyond medical vocabulary *sensu proprio* to include non-medical items of high-poetic diction; a few other items of Celsus' vocabulary, not found in Lucretius, appear to be proper to Latin poetry and may be deliberate splashes of poetic colour in medical prose. The possibility that Celsus' vocabulary and Lucretius' metaphor give us the dim reflection of an archaizing, even Ennianizing, Latin medical text in circulation in Rome before the end of the 50s BC remains theoretical only, even if a persuasive reading of Lucretius implies something of the sort.

I am acutely aware that this paper yields more questions than answers, and, perhaps worse, that there are yet more questions that it fails to raise. I hope, however, that some of these questions regarding contacts between the language of poetry and the language of science may help to reawaken interest in the Greek themes with which I opened **(I)**; that these Greek paradigm-cases together with the working hypotheses developed in **(II)** may provoke some reaction among Latinists; and that the illustrative case-studies in **(III)** are not perceived simply as an overlong and ultimately indecisive commentary on three lines of Lucretius — their intention has been to indicate some general possibilities and problems for sociolinguistics in a corpus-language, and to suggest some of the results that may stand to be gained from systematic comparative study of literary and technical texts.

Bibliography

Adamietz, J. (ed.) (1986), *Die römische Satire* (Grundriß der Literaturgeschichten nach Gattungen) (Darmstadt).

Adams, J. N. (1971), 'A type of hyperbaton in Latin prose', *PCPhS* 17: 1–16.

—— (1976), 'A typological approach to Latin word-order', *Indogermanische Forschungen* 81: 70–99.

—— (1980*a*), 'Latin words for woman and wife', *Glotta* 50: 234–55.

—— (1980*b*), 'Anatomical terminology in Latin epic', *BICS* 27: 50–62.

—— (1982*a*), *The Latin Sexual Vocabulary* (London).

—— (1982*b*), 'Anatomical terms transferred from animals to humans in Latin', *Indogermanische Forschungen* 87: 90–109.

—— (1983), 'Words for "prostitute" in Latin', *RhM* 126: 321–58.

—— (1992), 'Iteration of compound verb with simplex in Latin prose', *Eikasmos* 3: 295–8.

—— (1994*a*), 'Wackernagel's law and the position of unstressed personal pronouns in Classical Latin', *TPhS* 92: 103–78

—— (1994*b*), *Wackernagel's Law and the Placement of the Copula* esse *in Classical Latin* (Cambridge Philological Society, Suppl. vol. 18) (Cambridge).

—— (1995*a*), 'The language of the Vindolanda writing tablets: an interim report', *JRS* 85: 86–134.

—— (1995*b*), *Pelagonius and Latin Veterinary Terminology in the Roman Empire* (Studies in Ancient Medicine, 11) (Leiden).

Allen, W. S. (1973), *Accent and Rhythm. Prosodic Features of Latin and Greek: a Study in Theory and Reconstruction* (Cambridge).

—— (1978, 2nd ed.), *Vox Latina. A Guide to the Pronunciation of Classical Latin* (Cambridge).

Alfonso, S., Cipriani, G., Fedeli, P., Mazzini, I., Tedeschi, A. (1990), *Il poeta elegiaco e il viaggio d'amore* (Scrinia, 3) (Bari).

Anderson, R. D., Parsons, P. J. and Nisbet, R. G. M. (1979), 'Elegiacs by Gallus from Qaṣr Ibrîm', *JRS* 69: 125–55.

Anderson, W. S. (1956; 1964; 1970; 1981), 'Recent Work in Roman Satire', *ClW* 50: 33–40; *ClW* 57: 293–301; 343–8; *ClW* 63: 181–94; 199; 217–22; *ClW* 75: 273–99.

—— (1961), '*Venusina lucerna*: the Horatian model for Juvenal', *TAPA* 52: 1–12. (Reprinted in Anderson (1982) 103–14.)

—— (1962), 'The Programs of Juvenal's Later Books', *CPh* 57: 145–60. (Reprinted in Anderson (1982), 277–92.)

—— (1982), *Essays on Roman Satire* (Princeton).

André, J. (1949), *Étude sur les termes de couleur dans la langue latine* (Paris).

—— (1967), *Les noms d'oiseaux en latin* (Paris).

_____ (1980), 'Deux remarques sur le volume du mot latin', *RPh* 54: 7–18.

_____ (1987), *Être médecin à Rome* (Realia) (Paris).

_____ (1991), *Le vocabulaire latin de l'anatomie* (Paris).

Arens, J. C. (1950), '-fer and -ger: their extraordinary preponderance among compounds in Roman poetry', *Mnemosyne*[4] 3: 241–62.

Argenio, I. (1963), 'I grecismi in Lucilio', *CRSt* 11: 5–17.

Artymowicz, A. (1909), 'Der Wechsel von *et* und *que* zu Beginn lateinischer daktylischer Verse von Ennius bis Corippus', *Wiener Studien* 31: 38–81.

Atherton, C. (1996), 'What every grammarian knows?', *CQ* NS 46: 239–60.

Austin, R. G. (ed.) (1964), *P. Vergili Maronis Aeneidos Liber Secundus* (Oxford).

_____ (ed.) (1971), *P. Vergili Maronis Aeneidos Liber Primus* (Oxford).

_____ (ed.) (1977), *P. Vergili Maronis Aeneidos Liber Sextus* (Oxford).

Avotins, I. (1980), 'Alexander of Aphrodisias on vision in the atomists', *CQ* NS 30: 429–54.

Axelson, B. (1945), *Unpoetische Wörter. Ein Beitrag zur Kenntnis der lateinischen Dichtersprache* (Lund).

Bader, F. (1962), *La formation des composés nominaux du latin* (Paris).

Baehrens, E. (ed.) (1885), *Catulli Veronensis liber* (Leipzig).

Baehrens, W. A. (1912), *Beiträge zur lateinischen Syntax*. Philologus, Suppl. 12 (Leipzig).

Bagnall, R. S. (1993), *Egypt in Late Antiquity* (Princeton).

Bailey, C. (ed.) (1947, corr. ed. 1949, 3 vols), *Titi Lucreti Cari de rerum natura libri sex* (Oxford).

Baratin, M. (1989), *La naissance de la syntaxe à Rome* (Paris).

Barnes, J., Mignucci, M. (edd.) (1988), *Matter and Metaphysics* (Naples).

Bartalucci, A. (1968), 'La sperimentazione enniana dell'esametro e la tecnica del saturnio', *SCO* 17: 99–122.

Bauer, C. F. (1933), *The Latin Perfect Endings '-ere' and '-erunt'* (Ling. Soc. America, Language Diss. 13) (Philadelphia).

Beck, M. (1996), *Die Epistulae Heroidum XVIII und XIX des Corpus Ovidianum. Echtheitskritische Untersuchungen* (Paderborn).

Bell, A. J. (1923). *The Latin Dual and Poetic Diction* (London and Toronto).

Benediktson, D. T. (1977), 'Vocabulary analysis and the generic classification of literature', *Phoenix* 31: 341–8.

Bennett, C. E. (1910), *Syntax of Early Latin, Vol. I—The Verb* (Boston).

Bentley, R. (ed.) (1711), *Q. Horatius Flaccus* (Cambridge).

Benz, L., Stärk, E., Vogt-Spira, G. (edd.) (1995), *Plautus und die Tradition des Stegreifspiels*. Festgabe für E. Lefèvre zum 60. Geburtstag (Tübingen).

Berkowitz, L. and Brunner, Th. F. (1968), *Index Lucilianus* (Hildesheim).

Binder, G. (ed.) (1988), *Saeculum Augustum II* (Wege der Forschung 512) (Darmstadt).

Biville, F. (1987), *Graphie et prononciation des mots grecs en latin* (Paris).

_____ (1989), (ed.) 'Grec et latin: contacts linguistiques et création lexicale. Pour une typologie des hellénismes lexicaux du latin', in Lavency and Longrée (1989), 29–40.

_____ (1990), *Les emprunts du latin au grec: approche phonétique* vol. I (Bibliothèque de l'information grammaticale, 19) (Louvain—Paris).

Blase, H. (1903), 'Tempora und Modi', in G. Landgraf (ed.), *Historische Grammatik der lateinischen Sprache*. 3. Band *Syntax des einfachen Satzes* (Leipzig).

Bloch, H. (1940), 'L. Calpurnius Piso Caesoninus in Samothrace and Herculaneum', *AJA* 44: 485–93.

Blümel, W. (1979), 'Zur historischen Morphosyntax der Verbalabstrakta im Lateinischen', *Glotta* 57: 77–125.

Boetticher, G. (1830), *Lexicon Taciteum* (Berlin).

Boldt, H. (1884), *De liberiore linguae Graecae et Latinae collocatione verborum* (Diss. Göttingen).

Bollack, J. (1965–69), *Empédocle* (3 vols; Paris).

Bömer, F. (1951), Review of Axelson (1945), *Gnomon* 23: 166–8.

——— (1952), 'Excudent alii . . .', *Hermes* 80: 117–23.

——— (1957), 'Beiträge zum Verständnis der augusteischen Dichtersprache', *Gymnasium* 64: 1–21.

——— (1965), 'Eine Stileigentümlichkeit Vergils: Vertauschen der Prädikate', *Hermes* 93: 130–1.

——— (1967), 'Ovid met. I 39', *Gymnasium* 74: 223–6.

——— (1969), *P. Ovidius Naso. Metamorphosen. Buch I–III* (Heidelberg).

——— (1976), *P. Ovidius Naso Metamorphosen. Buch IV–V* (Heidelberg).

——— (1982), *P. Ovidius Naso Metamorphosen. Buch XII–XIII* (Heidelberg).

Bonjour, M. (1984), 'Cicero nauticus', in R. Chevallier (ed.), *Présence de Cicéron*, 9–19 (Collection Caesarodunum 19 bis) (Paris).

Bonner, S. F. (1949), *Roman Declamation in the Late Republic and Early Empire* (Liverpool).

Booth, J. (1981), 'Aspects of Ovid's language', in H. Temporini (ed.), *ANRW* II.31.4 2686–700 (Berlin–New York).

——— (ed.) (1991), *Ovid. The Second Book of* Amores (Warminster).

Bourgeois, P. (1940), 'L'hellénisme, procédé d'expression dans les Géorgiques', *RÉL* 18: 73–94.

Bowman, A. K., Thomas, J. D. and Adams, J. N. (1990), 'Two letters from Vindolanda', *Britannia* 21: 33–52.

Bowman, A. K. and Thomas, J. D., with contributions by Adams, J. N. (1994), *The Vindolanda Writing-Tablets (Tabulae Vindolandenses II)* (London).

Bowman, A. K. and Thomas, J. D. (1996), 'New writing tablets from Vindolanda', *Britannia* 27: 299–328.

Bowra, C. M. (1952), *Heroic Poetry* (London).

Bramble, J. C. (1974), *Persius and the Programmatic Satire* (Cambridge).

——— (1982a), 'Martial and Juvenal', in Kenney and Clausen (1982), 101–27.

——— (1982b), 'Lucan', in Kenney and Clausen (1982), 533–57.

Braund, S. H. (1989a), 'City and country in Roman satire', in Braund (1989b), 23–48.

——— (ed.) (1989b), *Satire and Society in Ancient Rome* (Exeter Studies in History, 23) (Exeter).

——— (1992a), *Roman Verse Satire* (Greece and Rome New Surveys in the Classics, 23) (Oxford).

——— (1992b), *Lucan, Civil War, translated with introduction and notes* (Oxford).

——— (ed.) (1996), *Juvenal, Satires, Book I* (Cambridge).

Brenous, J. (1895), *Étude sur les hellénismes dans la syntaxe latine* (Paris).

van Brock, N. (1961), *Recherches sur le vocabulaire médical du grec ancien* (Études et Commentaires, 41) (Paris).

Brown, R. D. (1987), *Lucretius on Love and Sex: a Commentary on De Rerum Natura IV, 1030–1287, with Prolegomena, Text and Translation* (Columbia studies in the classical tradition, 15) (Leiden).

Bürger, R. (1911), 'Beiträge zur Elegantia Tibulls' in *XAPITEΣ. Friedrich Leo* 371–94 (Berlin).

Brunér, E. A. (1863), 'De ordine et temporibus carminum Valerii Catulli', *Acta Soc. Scient. Fennicae* 7: 599–657.

Bülow-Jacobsen, A., Cuvigny, H. and Fournet, J.-L. (1994), 'The identification of Myos Hormos. New papyrological evidence', *BIFAO* 94: 27–42.

Burnyeat, M. F. (1978), 'The upside-down back-to-front sceptic of Lucretius IV 472', *Philologus* 122: 197–206.

Cairns, F. (1972), *Generic Composition in Greek and Roman Poetry* (Edinburgh).

—— (1979), *Tibullus: a Hellenistic Poet at Rome* (Cambridge).

—— (1983), 'Propertius 1.4 and 1.5 and the 'Gallus' of the Monobiblos', *PLLS* 4: 61–104.

—— (1984), 'The etymology of *militia* in Roman elegy' in *Apophoreta philologica Emmanueli Fernandez-Galiano a sodalibus oblata* 2.211–22 (Madrid).

—— (ed.) (1986), *Papers of the Liverpool Latin Seminar 5, 1985* (Liverpool).

—— (1986), 'Stile e contenuti di Tibullo e di Properzio' in *Atti del Convegno Internazionale di Studi su Albio Tibullo* 49–50. (Rome).

Callebat, L. (1974), 'Le vocabulaire de l'hydraulique dans le livre VIII du *De architectura* de Vitruve', *RPh* 48: 313–29.

—— (1982), 'La prose du *De Architectura* de Vitruve', in H. Temporini (ed.), *ANRW* II.30.1: 696–722 (Berlin).

—— (ed.) (1995), *Latin vulgaire, latin tardif. IV.* Actes du 4ᵉ colloque international sur le latin vulgaire et tardif. Caen, 2–5 septembre 1994 (Hildesheim, Zurich, New York).

Campanile, E. (1985), art. 'grecismi', in *Enciclopedia Virgiliana* ii.805–7 (Rome).

Casali, S. (ed.) (1995), *P. Ovidii Nasonis Heroidum Epistula IX. Deianira Herculi* (Florence).

Caspari, F. (1908), *De ratione quae inter Vergilium et Lucanum intercedat quaestiones selectae* (Diss. Leipzig).

Cavenaile, R. (1958), *Corpus Papyrorum Latinarum* (Wiesbaden).

Cèbe, J.-P. (1966), *La caricature et la parodie dans le monde romain*, (Bibl. des Écoles françaises d'Athènes et de Rome, 206) (Paris).

Charpin, F. (ed.) (1978, 1979, 1991), *Lucilius, Satires. Texte établi, traduit et annoté* (Paris).

Christ, W. (1879, 2nd ed.), *Metrik der Griechen und Römer* (Leipzig).

Christes, J. (1971), *Der frühe Lucilius. Rekonstruktion und Interpretation des XXVI. Buches sowie von Teilen des XXX. Buches* (Heidelberg).

—— (1972), 'Lucilius. Ein Bericht über die Forschung seit F. Marx (1904/5)', in H. Temporini (ed.), *ANRW* I.2. 1182–1239 (Berlin).

—— (1986), 'Lucilius', in Adamietz (1986), 57–122.

Cichorius, C. (1908), *Untersuchungen zu Lucilius* (Berlin).

Clark, S. B. (1908), 'The authorship and the date of the double letters in Ovid's Heroides', *HSCPh* 19: 121–55.

Coffey, M. (1989, 2nd ed.), *Roman Satire* (Bristol).

Coleman, R. G. G. (1977) 'Greek influence on Latin syntax', *TPhS* 1975: 101–56.

—— (1987), 'Vulgar Latin and the diversity of Christian Latin', in J. Herman (ed.), *Latin vulgaire—latin tardif* 37–52. (Tübingen).

—— (1989), 'The formation of specialized vocabularies in grammar and rhetoric: winners and losers', in Lavency and Longrée (1989: 77–89).

—— (1991), 'Latin prepositional syntax in Indo-European perspective', in Coleman (ed.), *New Studies in Latin Linguistics* 323–38 (Amsterdam).

—— (1995), 'Complex sentence structure in Livy', in D. Longrée (ed.), *De Vsu. Études de syntaxe latine offertes en hommage à Marius Lavency*, 71–84 (Louvain-la-Neuve).

Collinge, N. E. (1962), 'Medical terms and clinical attitudes in the tragedians', *BICS* 9: 43–7.

Conrad, C. (1965), 'Word order in Latin epic from Ennius to Virgil', *HSCPh* 69: 194–258.

Conte, G. B. (1970), 'Ennio e Lucano', *Maia* 22: 132–8.

Contino, S. (ed.) (1988), *A. Cornelii Celsi, De medicina liber VIII* (Bologna).

Coppel, B. (1976), review of Ross (1969), *Gnomon* 48: 559–66.

Cordier, A. (1943), 'La langue poétique à Rome', *Mémorial des études latines . . . offert à J. Marouzeau* 80–92 (Paris).

Courtney, E. (1965), 'Ovidian and non-Ovidian Heroides', *BICS* 12: 63–6.

—— (1980), *A Commentary on the Satires of Juvenal* (London).

—— (ed.) (1993), *The Fragmentary Latin Poets* (Oxford).

Cutt, T. (1936), *Meter and Diction in Catullus' Hendecasyllabics* (Diss. Chicago).

Dagron, G. (1969), 'Aux origines de la civilisation byzantine: langue de culture et langue d'état', *Rev. Hist.* 241: 23ff.

Daube, D. (1956), *Forms of Roman Legislation* (Oxford).

De Decker, J. (1913), *Juvenalis Declamans* (Ghent).

Deichgräber, K. (ed.) (1935), *Hippokrates über Entstehung und Aufbau des menschlichen Körpers, Περὶ σαρκῶν* mit einem sprachwissenschaftlichen Beitrag von Eduard Schwyzer (Leipzig–Berlin).

—— (1971), *Aretaeus von Kappadozien als medizinischer Schriftsteller* (Abh. d. Sächs. Akad. d. Wiss. zu Leipzig, Philol.-hist. Kl., 63, 3) (Berlin).

D'Elia, S. (1961), 'Echi del "de officiis" nell' "Ars amatoria" ovidiana', in *Atti del I congr. int. di studi ciceroniani*, ii. 127–40 (Rome).

Della Corte, M. (1958), 'Le iscrizioni di Ercolano', *Rendiconti della Accademia di Archeologia, Lettere e Belle Arti*, n.s. 33: 239–308 (Naples).

Delatte, K. (1967), 'Keywords and poetic themes in Propertius and Tibullus', *RELO* 3: 31–79.

Delz, J. (ed.) (1987), *Sili Italici Punica* (Stuttgart).

De Meo, C. (1983), *Lingue tecniche del latino* (Testi e manuali per l'insegnamento universitario del latino 16) (Bologna).

Denniston, J. D. (1952), *Greek Prose Style* (Oxford).

Deufert, M. (1996), *Pseudo-Lukrezisches im Lukrez. Die unechten Verse in Lukre-*

zens *'De rerum natura'*. Untersuchungen zur antiken Literatur und Geschichte 48 (Berlin and New York).

Diggle, J. (1972), 'Ouidiana', *PCPS* ns 18: 31–41.

Diggle, J. and Goodyear, F. R. D. (edd.) (1972), *The Classical Papers of A. E. Housman* (Cambridge).

Dingel, J. (1997), *Kommentar zum 9. Buch der Aeneis Vergils* (Heidelberg).

Dionisotti, A. C. (1995), 'Hellenismus' in O. Weijers (ed.), *Vocabulary of Teaching and Research Between Middle Ages and Renaissance* (Civicima. Études sur le vocabulaire intellectuel du Moyen Age 8) (Turnhout).

Domínguez Domínguez, J. F. and Martín Rodríguez, A. M. (1993), '*Dare* con infinitivo en latín clasico', *Cuadernos de filología clásica*, 4: 9–22.

Dover, K. J. (1963), 'The Poetry of Archilochus', in *Entretiens sur l'Antiquité classique* 10: 183–212 (Geneva).

———— (1968, corrected reprint of 1960 ed.), *Greek Word Order* (Cambridge).

Draeger, A. (1882, 3rd ed.), *Über Syntax und Stil des Tacitus* (Leipzig).

Drexler, H. (1967), *Einführung in die römische Metrik* (Darmstadt).

Dubois, J. (1966), 'Les problèmes du vocabulaire technique', *Cahiers de lexicologie* 9: 103–12.

Dumortier, J. (1935), *Le vocabulaire médical d'Eschyle et les écrits hippocratiques* (Paris).

Easterling, P. E. (ed.) (1982), *Sophocles, Trachiniae* (Cambridge).

Eich, M. (1925), *De praepositionum collocatione apud poetas Latinos inde ab Ovidio* (Diss. Bonn).

Eklund, S. (1970), *The periphrastic, completive and finite use of the present participle in Latin. With special regard to translation of Christian texts in Greek up to 600 A.D.* (Acta Universitatis Upsaliensis. Studia Latina Upsaliensia, 5) (Uppsala).

Elder, J. P. (1962), 'Tibullus: Tersus atque Elegans' in J. P. Sullivan (ed.) *Critical Essays on Roman Literature: Elegy and Lyric*, 65–106. (London).

Eliot, T. S. (1932 [1917]), 'Tradition and the individual talent', in *Selected Essays*, 13–22 (London).

Ellis, R. (1876; 2nd ed. 1889), *A Commentary on Catullus* (Oxford).

Erbse, H. (1953), 'Homerscholien und hellenistische Glossare bei Apollonios Rhodios', *Hermes* 81: 163–96.

Ernout, A. (1946), 'Infinitif grec et gérondif latin', *Philologica* (Paris).

———— (1947), 'Le vocabulaire poétique', rev. of Axelson (1945), *RPh* 21: 55–70 (= 1957b: 66–86).

———— (1956), 'VENVS, VENIA, CVPIDO', *RPh* 30: 7–27 (= 1957b: 87–111).

———— (1957a), 'METVS — TIMOR. Les formes en -*us* et en -*os* (-*or*) du latin', in 1957b: 7–56

———— (1957b), *Philologica II* (Paris).

Ernout, A. and Meillet, A. (1959; 4th ed.), *Dictionnaire étymologique de la langue latine. Histoire des mots*, augmenté d'additions et de corrections nouvelles par J. André (Paris).

Ernout, A. and Thomas, F. (1953), *Syntaxe latine* (Paris).

Evans, W. J. (1921), *Allitteratio Latina* (London).

Évrard-Gillis, J. (1976), *La récurrence lexicale dans l'oeuvre de Catulle: étude stylistique* (Paris).

Fantham, E. (1972), *Comparative Studies in Republican Latin Imagery* (Toronto).

Farrell, J. (1991), *Virgil's 'Georgics' and the Traditions of Ancient Epic* (New York and Oxford).

Fedeli, P. (ed.) (1965), *Properzio, Elegie libro IV: Testo critico e commento* (Bari).

—— (ed.) (1980), *Sesto Properzio, Il primo libro delle Elegie: Introduzione, testo critico e commento* (Florence).

—— (ed.) (1985), *Properzio, Il libro terzo delle Elegie: Introduzione, testo e commento* (Bari).

Ferguson, J. (1987), *A Prosopography to the Poems of Juvenal* (Brussels).

Fiske, G. C. (1919), 'The plain style in the Scipionic Circle', in *Studies in Honor of Ch. Forster Smith* (Madison).

—— (1920), *Lucilius and Horace. A Study in the Classical Theory of Imitation* (University of Wisconsin Studies in Language and Literature 7) (Madison).

Fitch, J. G. (1981), 'Sense-pauses and relative dating in Seneca, Sophocles and Shakespeare', *AJP* 102: 289–307.

Flashar, H. (ed.) (1971), *Antike Medizin* (Wege der Forschung 221) (Darmstadt).

Fluck, H.-R. (1980), *Fachsprachen: Einführung und Bibliographie* (Munich).

Flury, P. (1968), *Liebe und Liebessprache bei Menander, Plautus und Terenz* (Heidelberg).

—— (1990), 'Beiträge aus der Thesaurus-Arbeit, XXV: *occurrere*', *MH* 47: 225–6.

Fordyce, C. J. (ed.) (1961; repr. with corrections and additional notes 1973), *Catullus: a Commentary* (Oxford).

—— (ed.) (1977), *P. Vergili Maronis Aeneidos libri 7–8*, with a commentary ed. by John D. Christie (Oxford).

Fraenkel, E. (1922), *Plautinisches im Plautus* (Philologische Untersuchungen 28) (Berlin)

—— (1928), *Iktus und Akzent im lateinischen Sprechvers* (Berlin).

—— (1960 = transl. of [1922] with addenda), *Elementi plautini in Plauto* (Florence).

—— (1968), *Leseproben aus Reden Ciceros und Catos* (Rome).

Freudenburg, K. (1993), *The Walking Muse: Horace on the Theory of Satire* (Princeton).

Friedländer, P. (1941), 'Pattern of sound and atomistic theory in Lucretius', *AJP* 62: 16–34.

Gaisser, J. H. (1993), *Catullus and his Renaissance Readers* (Oxford).

Gardner-Chloros, P. (1991), *Language Selection and Switching in Strasbourg* (Oxford).

Garvie, A. F. (ed.) (1986), *Aeschylus, Choephori, with Introduction and Commentary* (Oxford).

Geymonat, M. (ed.) (1973), *P. Vergili Maronis Opera* (Turin).

Gianfrotta, P. A. (1987), art. 'Navis', in *Enciclopedia Virgiliana* iii. 670–4 (Rome).

Gigante, M. (1981), *Scetticismo e epicureismo* (Naples).

Gigon, O. (1978), 'Lukrez und Ennius', in *Entretiens sur l'Antiquité classique* 24: 167–91 (Geneva).

Godwin, J. (ed.) (1986), *Lucretius: 'De Rerum Natura' IV* (Warminster).

—— (ed.) (1991), *Lucretius: 'De Rerum Natura' VI* (Warminster).

Gow, A. S. F. (1931), 'Diminutives in Augustan Poetry', *CQ* 26: 150–7.

Goodyear, F. R. D. (ed.) (1972), *The Annals of Tacitus, I: Annals 1.1–54*, (Cambridge Classical Texts and Commentaries 15) (Cambridge).

_____ (ed.) (1981), *The Annals of Tacitus, II: Annals 1.55–81 and Annals 2*, (Cambridge Classical Texts and Commentaries 23) (Cambridge).

Goold, G. P. (1974), *Interpreting Catullus* (London).

_____ (1983), *Catullus, edited with introduction, translation and notes* (London)

_____ (1990), *Propertius* (Cambridge, Mass.).

Görler, W. (1982), 'Beobachtungen zu Vergils Syntax', *Würzburger Jahrbücher* 8: 69–81.

_____ (1984), 'Zum Virtus-Fragment des Lucilius (1326–1338 Marx) und zur Geschichte der stoischen Güterlehre', *Hermes* 12: 445–68.

_____ (1985), art. 'Eneide, 6. La lingua', in *Enciclopedia Virgiliana* ii. 262–78 (Rome).

Gransden, K. W. (ed.) (1991) *Virgil Aeneid Book XI* (Cambridge).

Gratwick, A. S. (1982), 'The Satires of Ennius and Lucilius', in Kenney and Clausen (1982), 156–71.

Griffin, J. (1985), *Latin Poets and Roman Life* (London) (pp. 1–31 = *JRS* 66 [1976], 87–105).

Grilli, A. (1978), 'Ennius podager', *RFIC* 106: 34–8.

Groeber, G. (1884), 'Vulgärlateinische Substrate romanischer Wörter', *ALL* 1: 204–54.

Guilbert, L. (1965), *La formation du vocabulaire de l'aviation* (Paris).

Haffter, H. (1934), *Untersuchungen zur altlateinischen Dichtersprache* (Problemata, 10) (Berlin).

_____ (1956), 'Zum Problem der überlangen Wortformen im Lateinischen', *WSt* 69: 363–71.

Hahn, E. A. (1958), 'Vergil's linguistic treatment of divine beings, part II', *TAPA* 89: 237–53.

Hakamies, R. (1951), *Étude sur l'origine et l'évolution du diminutive latin et sa survie dans les langues romanes* (Helsinki).

Halm, C. (ed.) (1863), *Rhetores Latini Minores* (Leipzig).

Handford, S. A. (1947), *The Latin Subjunctive. Its Usage and Development from Plautus to Terence* (London).

Hanslik, R. (1969), art. 'Lucilius', in *Der kleine Pauly*, vol. III (Stuttgart).

Hanssen, J. S. T. (1951), *Latin Diminutives: a Semantic Study* (Bergen).

Hardie, P. R. (ed.) (1994), *Virgil, Aeneid, Book IX* (Cambridge).

Harrison, E. L. (1960), 'Neglected hyperbole in Juvenal', *CR* ns 10: 99–101.

Harrison, S. J. (ed.) (1990), *Oxford Readings in Vergil's Aeneid* (Oxford).

_____ (ed.) (1991), *Vergil, Aeneid 10*, with introduction, translation, and commentary (Oxford).

Hartung, H. J. (1970), *Ciceros Methode bei der Übersetzung griechischer philosophischer Termini* (Diss. Hamburg).

Haupt, M. (1841), *Observationes Criticae* (Leipzig) (= 1875: 73–142).

_____ (1875), *Opuscula* I (Leipzig).

Heck, B. (1950), *Die Anordnung der Gedichte des C. Valerius Catullus* (Diss. Tübingen).

Henry, A. (1971), *Métonymie et métaphore* (Paris).

Herescu, N. I. (1960), *La poésie latine. Étude des structures phoniques* (Paris).

Heraeus, W. (1937), *Kleine Schriften* (Heidelberg).

Hermann, G. (1796), *De metris poetarum Graecorum et Romanorum libri III* (Leipzig).

———— (1816), *Elementa doctrinae metricae* (Leipzig).

Hettrich, H. (1988), *Untersuchungen zur Hypotaxe im Vedischen* (Berlin – New York).

———— (1990), *Der Agens in passivischen Sätzen altindogermanischer Sprachen* (NAWG, 1. Philologisch-historische Klasse, Nr.2) (Göttingen).

Heusch, H. (1954), *Das Archaische in der Sprache Catulls* (Diss. Bonn).

Heurgon, J. (1959), *Lucilius* (Paris).

Heyne, C. G. and Wagner, G. P. E. (edd.) (1830–33, 4th edn.), *P. Virgili Maronis opera.* (Leipzig).

Highet, G. (1951), 'Juvenal's Bookcase', *AJP* 72: 369–94.

———— (1954), *Juvenal the Satirist. A Study* (Oxford).

Hillen, M. (1989), *Studien zur Dichtersprache Senecas. Abundanz. Explikativer Ablativ. Hypallage* (Untersuchungen zur antiken Literatur und Geschichte 32) (Berlin – New York).

Hinds, S. E. (1987), 'Language at breaking point: Lucretius 1.452', *CQ* NS 37: 450–3.

Hofmann, J. B. (1951), *Lateinische Umgangssprache.* 3. Auflage (Heidelberg).

Hofmann, J. B. and Szantyr, A. (1965), *Lateinische Syntax und Stilistik.* (Handbuch der Altertumswissenschaft II 2.2) (Munich).

Holford-Strevens, L. (1988), *Aulus Gellius* (London).

Hollis, A. S. (ed.) (1977), *Ovid, Ars Amatoria Book I, edited with an introduction and commentary* (Oxford).

Horsfall, N. (1971), 'Numanus Regulus. Ethnography and propaganda in *Aen.* IX.598f.', *Latomus* 30: 1108–16 (= Harrison (1990: 127–44)).

———— (1981), 'Some problems of titulature in Roman literary history', *BICS* 28: 103–11.

Housman, A. E. (1907), 'Luciliana', *CQ* 1: 51–74, 148–59. (= Diggle and Goodyear (1972) ii.662–97.)

Hunter, R. L. (ed.) (1989), *Apollonius of Rhodes, Argonautica Book III* (Cambridge).

Hupe, C. (1871), *De genere dicendi C. Valerii Catulli Veronensis. Pars I* (Diss. Münster).

Hutchinson, G. O. (1988), *Hellenistic Poetry* (Oxford).

———— (1993), *Latin Literature from Seneca to Juvenal. A Critical Study* (Oxford).

Ilberg, J. (1907), 'A. Cornelius Celsus und die Medizin in Rom', *Neue Jahrbücher* 19: 377–412 (= Flashar (1971), 308–60).

Jacobson, H. (1974), *Ovid's Heroides* (Princeton, N.J.).

Jal, A. (1861), *Virgilius nauticus. Études sur la marine antique* (Paris).

Janni, P. (1967), 'Due note omeriche', *QUCC* 3: 7–30.

Janni, P. and Mazzini, I. (edd.) (1991), *La traduzione dei classici greci e latini in Italia oggi. Problemi, prospettive, iniziative editoriali* (Atti del Convegno Nazionale, Macerata, 20–22 aprile 1989) (Macerata).

Janson, T. (1979), *Mechanisms of Language Change in Latin* (Stockholm).

Janssen, H. H. (1941), *De kenmerken der romeinsche dichtertaal* (Nijmegen – Utrecht).

Jenkyns, R. (1982), *Three Classical Poets: Sappho, Catullus and Juvenal* (London).

Jocelyn, H. D. (ed.) (1969a), *The Tragedies of Ennius: the fragments edited with an introduction and commentary* (Cambridge).

———— (1969b), 'The fragments of Ennius' Scenic Scripts', *AC* 38: 181–217.

———— (1971), 'The Tragedies of Ennius', *Entretiens sur l'Antiquité classique* 17: 41–95 (Geneva).

———— (1972), 'The Poems of Quintus Ennius', in H. Temporini (ed.), *ANRW* I.2.987–1026 (Satires and minor works: 1022–6) (Berlin).

———— (1977), 'Ennius, Sat. 6–7 Vahlen', *RFIC* 105: 131–51.

———— (1979), 'Catullus 58 and Ausonius, *Ep.* 71', *LCM* 4: 87–91.

———— (1980), 'Marcello Zicàri and the poems of C. Valerius Catullus', *RPL* 3: 55–72.

———— (1986), 'The new chapters of the ninth book of Celsus' *Artes*', *PLLS* 5: 299–336 (Liverpool).

———— (1995), 'Two Features of the Style of Catullus' Phalaecian Epigrams', *Sileno* 21: 63–82.

Jouanna, J. (1970), review of Lanata (1968), *REG* 83: 254–7.

Jouanna, J. and Demont, P. (1981), 'Le sens d' ἰχώρ chez Homère (*Iliade* V, vv. 340 et 416) et Eschyle (*Agamemnon*, v. 1480) en relation avec les emplois du mot dans la *Collection hippocratique*', *REA* 83: 197–209.

Kaimio, J. (1979), *The Romans and the Greek Language* (Commentationes Human. Litterarum Soc. Scient. Fenn. 64) (Helsinki–Helsingfors).

Kaster, R. A. (ed.) (1995), *C. Suetonius Tranquillus, De Grammaticis et Rhetoribus, edited with a translation, introduction and commentary* (Oxford).

Kenney, E. J. (1958), 'Nequitiae poeta', in N. I. Herescu (ed.), *Ovidiana. Recherches sur Ovide*, 201–9 (Paris).

———— (1962), 'The First Satire of Juvenal', *PCPS* ns 8: 29–40.

———— (1963), 'Juvenal: Satirist or Rhetorician?', *Latomus* 22: 704–20.

———— (ed.) (1971), *Lucretius De Rerum Natura Book III* (Cambridge).

———— (1979), 'Two disputed passages in the Heroides', *CQ* NS 29: 394–431.

———— (ed.) (1996), *Ovid Heroides XVI–XXI* (Cambridge).

Kenney, E. J. and Clausen, W. V. (edd.) (1982), *The Cambridge History of Classical Literature*, ii, *Latin Literature* (Cambridge).

Kingsley, P. (1995), *Ancient Philosophy, Mystery, and Magic: Empedocles and Pythagorean Tradition* (Oxford).

Knoche, U. (1982; 4th ed.), *Die römische Satire* (Göttingen).

Knox, P. E. (1986), 'Ovid's *Metamorphoses* and the traditions of Augustan poetry', *PCPS* Suppl. 11 (Cambridge).

———— (ed.) (1995) *Ovid Heroides. Select Epistles* (Cambridge).

Koch, P. (1995), 'Latin vulgaire et traits universels de l'oral', in Callebat (1995: 125–44).

Korfmacher, W. Ch. (1935), 'Grecizing in Lucilian Satire', *CJ* 30: 453–62.

Korzeniewski, D. (ed.) (1970), *Die römische Satire* (Wege der Forschung 238) (Darmstadt).

Krenkel, W. (ed.) (1970; 2 vols), *Lucilius, Satiren. Lateinisch und Deutsch* (Leiden).

Krause, H. (1878), *De Vergilii usurpatione infinitivi* (Diss. Halle).

Kroll, W. (1912), 'Der lateinische Relativsatz', *Glotta* 3: 1–18.

_____ (1913) (repr. 1958), *M. Tullii Ciceronis Orator*. Als Ersatz der Ausgabe von Otto Jahn. Erklärt von W. K. (Berlin).

_____ (1924), *Studien zum Verständnis der römischen Literatur* (Stuttgart).

_____ (1925), 3rd ed., repr. 1969, *Die wissenschaftliche Syntax im lateinischen Unterricht* (Dublin).

_____ (1929), 2nd ed., 1st ed. 1922, reprinted with addenda, 1968), *C. Valerius Catullus* (Stuttgart).

Kudlien, F. (1963), *Untersuchungen zu Aretaios von Kappadokien* (Mainz).

Kühner, R. and Stegmann, C. (edd.) (1955; 3rd ed. by A. Thierfelder, 2 vols), *Ausführliche Grammatik der lateinischen Sprache* (Darmstadt).

Labate, M. (1984), *L'arte di farsi amare. Modelli culturali e progetto didascalico nell'elegia ovidiana.* (Biblioteca di 'Materiali e discussioni per l'analisi dei Testi classici', 2) (Pisa).

Lachmann, K. (1848), 'De Ovidii epistulis', *Prooemium indicis lectionum aestivarum a. 1848 = Kleinere Schriften zur classichen Philologie*, ed. J. Vahlen, 56–61 (Berlin).

Lakoff, G. and Johnson, M. (1980), *Metaphors We Live By* (Chicago).

Lakoff, G. and Turner, M. (1989), *More than Cool Reason: a Field Guide to Poetic Metaphor* (Chicago).

Lanata, G. (1966), 'Sul linguaggio amoroso di Saffo', *QUCC* 2: 63–79.

_____ (1968), 'Linguaggio scientifico e linguaggio poetico. Note al lessico del *De morbo sacro*', *QUCC* 5: 22–36.

Landgraf, G. (1898), 'Der Accusativ der Beziehung (determinationis)', *ALL* 10: 209–24.

_____ (1914, 2nd ed.), *Kommentar zu Ciceros Rede Pro Sex. Roscio Amerino* (Leipzig—Berlin)

Langslow, D. R. (1989), 'Latin technical language: synonyms and Greek words in Latin medical terminology', *TPhS* 87: 33–53.

_____ (1991), 'The development of Latin medical terminology: some working hypotheses', *PCPS* ns 37: 106–30.

La Penna, A. (1951), 'Note sul linguaggio erotico dell'elegia latino', *Maia* 4: 187–209.

_____ (1956*a*), review of Heusch (1954), *Gnomon* 28: 291–4.

_____ (1956*b*), 'Problemi di stile catulliano', *Maia* 8: 141–60.

Lateiner, D. (1977), 'Obscenity in Catullus', *Ramus* 6: 15–32.

Lausberg, M. (1990), 'Epos und Lehrgedicht. Ein Gattungsvergleich am Beispiel von Lucans Schlangenkatalog', *Würzburger Jahrbücher* 16: 173–203.

Lavency, M. and Longrée, D. (edd.) (1989), *Actes du Ve Colloque de Linguistique latine* (Louvain-la-Neuve / Borzée, 31 March–4 April 1989) (*Cahiers de l'Institut de linguistique de Louvain* 15.1–4) (Louvain-la-Neuve).

Leavis, F. R. (1948, 2nd ed.), *Education and the University, a sketch for an 'English School'* (London).

Lebreton, J. (1901), *Études sur le langage et la grammaire de Cicéron* (Paris).

Lee, A.G. (1975), *Tibullus: Elegies* (Cambridge).

—— (ed.) (1990), *The Poems of Catullus, Edited with an Introduction, Translation and Brief Notes* (Oxford).

Lehmann, C. (1979), 'Der Relativsatz vom Indogermanischen bis zum Italienischen. Eine Etüde in diachroner syntaktischer Typologie', *Die Sprache* 25: 1–25.

—— (1984), *Der Relativsatz* (Tübingen).

Lehmann, Y. (1982), 'Varron et la médecine', in Sabbah (1982), 67–72.

Leishman, J. B. (1956), *Translating Horace* (Oxford).

Lelièvre, F. J. (1958), 'Parody in Juvenal and T. S. Eliot', *CPh* 53: 22–6.

Leo, F. (1896), *Analecta Plautina de figuris sermonis I* (Progr. Göttingen) = Fraenkel, E. [ed.], [1960] *Friedrich Leo. Ausgewählte kleine Schriften*. Erster Band: *Zur römischen Literatur des Zeitalters der Republik*: 71–122 (Rome).

—— (1906), 'review of Lucilii carminum reliquiae ed. Marx, vol. I–II, *GGA*: 837–61 (= Fraenkel, E. [ed.] [1960], *Friedrich Leo. Ausgewählte kleine Schriften*. Erster Band: *Zur römischen Literatur des Zeitalters der Republik*: 221–247 (Rome)).

—— (1967), *Geschichte der römischen Literatur*. Erster Band: *Die archaische Literatur*. Im Anhang: 'Die römische Poesie in der Sullanischen Zeit' (Darmstadt) (= Unveränderter Nachdruck der Ausgabe Berlin 1913).

Leumann, M. (1947), 'Die lateinische Dichtersprache', *MH* 4: 116–39 = *Kleine Schriften* (Zürich-Stuttgart 1959) 131–56 = Lunelli (1980) 131–78.

—— (1950), *Homerische Wörter* (Basel).

—— (1977, 6th ed.), *Lateinische Laut- und Formenlehre* (Handbuch der Altertumswissenschaft II 2.1) (Munich).

Levinson, S. C. (1983), *Pragmatics* (Cambridge).

Lévy, C. (1992), 'Cicéron créateur du vocabulaire latin de la connaissance: essai de synthèse', in *La langue latine, langue de la philosophie* (École française de Rome, 161) (Rome).

Lewis, N. (1959), *Samothrace, the Ancient Literary Sources* (London).

Leyhausen, J. (1893), *Helenae et Herus epistulae Ovidii non sunt* (Diss. Halle).

Linde, P. (1923), 'Die Stellung des Verbs in der lateinischen Prosa', *Glotta* 12: 153–78.

Lindsay, W. M. (1893), 'The Saturnian metre', *AJP* 14: 139–70, 305–34.

—— (1907), *Syntax of Plautus* (Oxford).

—— (ed.) (1913; repr. Hildesheim 1978), *Sexti Pompeii Festi de verborum significatu quae supersunt cum Pauli epitome* (Leipzig).

—— (1922), *Early Latin Verse* (Oxford).

Linse, E. (1891), *De P. Ovidio Nasone vocabulorum inventore* (Progr. Dortmund).

Löfstedt, B. (1990), 'Notizen zu Sprache und Text von Celsus, De medicina', *MH* 47: 60–2.

Löfstedt, E. (1911), *Philologischer Kommentar zur 'Peregrinatio Aetheriae'. Untersuchungen zur Geschichte der lateinischen Sprache* (Uppsala).

—— (1928 [vol. 1]; 1933 [vol. 2]; 1942 [2nd ed. of vol. 1]), *Syntactica. Studien und Beiträge zur historischen Syntax des Lateins I & II* (Lund).

—— (1959), *Late Latin* (Oslo).

Lohmann, A. (1915), *De Graecismorum Vergiliano usu quaestiones selectae* (Diss. Münster).

Long, A. A., and Sedley, D. N. (1987, 2 vols.), *The Hellenistic Philosophers* (Cambridge).

Lot, F. (1946), 'La langue du commandement dans les armées romaines', in *Mélanges dédiés à la mémoire de F. Grat* (Paris).

Luck-Huyse, K. (1996), *Der Traum vom Fliegen in der Antike* (Palingenesia 62) (Stuttgart).

Lunelli, A. (ed.) (1980, 2nd ed.), *La lingua poetica latina* (contains Italian versions of Janssen (1941) and Leumann (1947) with updated bibliography and annotations) (Bologna).

Lyne, R. O. A. M. (1980), *The Latin Love Poets: from Catullus to Horace* (Oxford).

――― (1989), *Words and the Poet: Characteristic Techniques of Style in Vergil's Aeneid* (Oxford).

McGlynn, P. (1963, 2 vols), *Lexicon Terentianum* (Glasgow).

McKeown, J. C. (ed.) (1987), *Ovid: Amores. Text, Prolegomena and Commentary* (Liverpool).

McKie, D. (1984), 'The horrible and ultimate Britons: Catullus, 11.11', *PCPS* NS 30: 74–8.

Madvig, J. N. (ed.) (1869), *M. Tullii Ciceronis De finibus bonorum et malorum.* 2nd ed. (Copenhagen).

Maltby, R. (1991), *A Lexicon of Ancient Latin Etymologies* (Leeds).

――― (1993), 'The Limits of Etymologising', *Aevum Antiquum* 6: 257–75.

Marache, R. (1964), 'Rhétorique et humour chez Juvénal', in Renard and Schilling (1964), 474–8.

Marganne, M.-H. (1993), *L'ophtalmologie dans l'Égypte gréco-romaine d'après les papyrus littéraires grecs* (Studies in Ancient Medicine, 8) (Leiden).

Marichal, R. (1992), *Les ostraca de Bu Njem* (Suppléments de 'Libya Antiqua' 7) (Tripoli).

Mariner, S. (1963), '*Traiectus lora* (Virg. *En.* II 273)', *Estudios Clasicos* 7: 107–19.

Mariotti, I. (1954), 'I grecismi di Lucilio', *Stud. Urb.* 28: 357–86.

――― (1960), *Studi Luciliani* (Florence).

Mariotti, S. (1991, 2nd ed.), *Lezioni su Ennio* (Urbino).

Marouzeau, J. (1907), *Place du pronom personnel sujet en latin* (Paris).

――― (1922), *L'ordre des mots dans la phrase latine, I: Les groupes nominaux* (Paris).

――― (1949*a*), *L'ordre des mots dans la phrase latine, III: Les articulations de l'énoncé* (Paris).

――― (1949*b*), *Quelques aspects de la formation du latin littéraire* (Collection linguistique 53) (Paris).

――― (1962; 4th ed.), *Traité de stylistique latine* (Paris).

Marshall, P. K. (ed.) (1968, 2 vols), *A. Gellii Noctes Atticae* (Oxford).

Martyn, J. R. C. (1979), 'Juvenal's Wit', *Grazer Beiträge* 8: 219–38.

Marx, F. (1882), *Studia Luciliana.* Diss. Bonn.

――― (ed.) (1904, 1905), *C. Lucilii carminum reliquiae.* Vol. prius: Prolegomena, testimonia, Fasti Luciliani, carminum reliquiae, indices, Vol. posterius: Commentarius (Leipzig).

――― (1909), 'Die Beziehungen des Altlateins zum Spätlatein', *NJb. f. d. class. Altertum*: 434–48.

_____ (ed.) (1915), *A. Cornelii Celsi quae supersunt* (*CML*, i; Leipzig–Berlin).

Mason, H. A. (1963), 'Is Juvenal a Classic?', in Sullivan (1963), 93–176.

Maurach, G. (1975), 'Ovid, Met. I, 48 und die Figur der "Umkehrung" ', *Hermes* 103: 479–86.

Mayer, R. G. (1983), 'Catullus' divorce', *CQ* 33: 297–8.

_____ (ed.) (1994), *Horace, Epistles, Book I* (Cambridge).

Mazzini, I. (1988), 'La medicina nella letteratura latina. I. Osservazioni e proposte interpretative su passi di Lucilio, Lucrezio, Catullo e Orazio', *Aufidus* 4: 45–73.

_____ (1990), 'Il folle da amore', in Alfonso *et al.* (1990), 39–83.

_____ (1991*a*), 'La medicina nella letteratura latina. II. Esegesi e traduzione di Horat. *Epod.* 11, 15–16 e *Od.* I 13, 4–5', in Janni and Mazzini (1991), 99–114.

_____ (1991*b*), 'Il lessico medico latino antico: caratteri e strumenti della sua differenziazione', in Sabbah (1991), 175–85.

_____ (1992*a*), 'La medicina nella letteratura latina. III. Plauto: conoscenze mediche, situazione e istituzioni sanitarie, proposte esegetiche', in Mazzini (1992*b*), 67–113.

_____ (ed.) (1992*b*), *Civiltà materiale e letteratura nel mondo antico* (Atti del Seminario di Studio, Macerata, 28–29 giugno 1991) (Macerata).

Meillet, A. (1965; 7th ed.), *Aperçu d'une histoire de la langue grecque* (Paris).

Menière, P. (1858), *Études médicales sur les poètes latins* (Paris).

Mette, H. J. (1956), rev. of E. V. Marmorale, *L'ultimo Catullo, Gnomon* 28: 34–8 (part repr. in R. Heine (ed.) [1975] *Catull* [Wege der Forschung 308, Darmstadt]: 19–23).

Meyer, W. (1889), 'Caesur im Hendekasyllabus', *SB Bayr. Ak., philosoph.-philol. und hist. Cl.* 2: 208–27.

Migliorini, P. (1990), *La terminologia medica come strumento espressivo della satira di Persio* (Quaderni di Anazetesis 2) (Pistoia).

Mignot, X. (1969), *Les verbes dénominatifs latins* (Paris).

Miller, H.W. (1944), 'Medical terminology in tragedy', *TAPA* 75: 156–67.

_____ (1945), 'Aristophanes and medical language', *TAPA* 76: 74–84.

Mohler, S. L. (1948), 'Sails and Oars in the Aeneid', *TAPA* 79: 46–62.

Momigliano, A. (1957), 'Perizonius, Niebuhr and the character of the early Roman tradition', *JRS* 47: 104–14.

Morford, M. P. O. (1972), 'A Note on Juvenal 6.627–61', *CPh* 67: 198.

Mras, K. (1927/28), 'Randbemerkungen zu Lucilius' Satiren', *WS* 46: 78–84.

Mudry, Ph. (1982), *La préface du De medicina de Celse: Texte, traduction et commentaire* (Bibliotheca Helvetica Romana 19) (Rome).

Mühmelt, M. (1965), *Griechische Grammatik in der Vergilerklärung*, (Zetemata 37) (Munich).

Müller, C. F. W. (1869), *Plautinische Prosodie* (Berlin).

_____ (1908), *Syntax des Nominativs und Akkusativs im Lateinischen* (Leipzig and Berlin).

Müller, C.W., Sier, K. and Werner, J. (edd.) (1992), *Zum Umgang mit fremden Sprachen in der griechisch-römischen Antike* (Palingenesia 36: Kolloquium der Fachrichtungen Klassische Philologie der Universitäten Leipzig und Saarbrücken am 21. und 22. November 1989 in Saarbrücken) (Stuttgart).

Müller, H. M. (1980), *Erotische Motive in der griechischen Dichtung bis auf Euripides* (Hamburg).

Müller, K. (ed.) (1975), *T. Lucreti Cari: De rerum natura libri sex* (Zurich).

Münscher, K. (1921), 'Metrische Beiträge II. Erstarrte Formen im Versbau der Aiolier', *Hermes* 56: 66–103.

Munari, F. (1971), 'Textkritisches zu mittellateinischen Dichtern' in Coseriu, E. and Stempel, W.-D. (edd.) *Festschrift für Harri Meier zum 65. Geburtstag* (Munich).

Murgatroyd, P. (1980), *Tibullus I: A Commentary* (Pietermaritzburg).

——— (1994), *Tibullus: Elegies II* (Oxford).

Myers, R. and Ormsby, R. J. (1970), *Catullus. The Complete Poems for Modern Readers* (New York).

Myers-Scotton, C. (1993), *Duelling Languages. Grammatical Structure in Code-switching* (Oxford).

Mynors, R. A. B. (ed.) (1958), *C. Valerii Catulli Carmina* (Oxford).

——— (ed.) (1990), *Virgil, Georgics, edited with an introduction and commentary* (Oxford).

Nagle, B. R. (1980), *The Poetics of Exile: Program and Polemic in the Tristia and Epistulae ex Ponto of Ovid*. (Collection Latomus, 170) (Brussels).

Naiditch, P. G. (1988), 'Three notes on "Housman and Ennius"' *Housman Society Journal* 14: 46–9.

Naylor, H. D. (1922), *Horace, Odes and Epodes: A Study in Poetic Word-Order* (Cambridge).

Neue, F. and Wagener, C. (1892–1905; 3rd ed.), *Formenlehre der lateinischen Sprache* (Berlin).

Neumann, G. (1968), 'Sprachnormung im klassischen Latein', *Sprache der Gegenwart* 2: 88–97.

Newman, J. K. (1990), *Roman Catullus and the Modification of the Alexandrian Sensibility* (Hildesheim).

Nilsson, N.-O. (1952), *Metrische Stildifferenzen in den Satiren des Horaz* (Stockholm).

Nisbet, R. G. M. (1978), 'Notes on the text of Catullus', *PCPS* NS 24: 92–115 (=1995: 76–100).

——— (1995), S. J. Harrison (ed.), *Collected Papers on Latin Literature* (Oxford).

Nisbet, R. G. M. and Hubbard, M. (1970), *A Commentary on Horace: Odes Book 1* (Oxford).

——— (1978), *A Commentary on Horace: Odes Book II* (Oxford).

Norden, E. (ed.) (1903; 1957, repr. of 2nd ed., 1915), *P. Vergilius Maro, Aeneis Buch VI* (Leipzig and Stuttgart).

——— (ed.) (1910), *Einleitung in die Altertumswissenschaft* (Berlin).

Nowottny, W. (1962), *The Language Poets Use* (London).

Nutton, V. (1993), 'Roman medicine: tradition, confrontation, assimilation', in H. Temporini (ed.), *ANRW*, II.37: 1, 49–78 (Berlin).

Önnerfors, A. (1963), *In Medicinam Plinii studia philologica* (Lunds Univ. Årsskrift. N.F. Avd. 1. Bd 55, Nr 5) (Lund).

——— (1989), '*Dare* und *Auris/Auricula* im Spätlatein', *Symb. Osl.* 64: 130–57.

—— (1993), 'Das medizinische Latein von Celsus bis Cassius Felix', in H. Temporini (ed.), *ANRW* II.37: 1, 227–392 (Berlin).

Ortony, A. (1979), *Metaphor and Thought* (Cambridge).

Paganelli, D. (1961), *Properce: Élégies* (Paris).

Page, D. L. (1936), review of Dumortier (1935), *CR* 50: 17–18.

Palmer, A. (ed.), (1898) *P. Ovidi Nasonis Heroides with the Greek translation of Planudes* [Completed by L. C. Purser.] (Oxford).

Palmer, L. R. (1954), *The Latin Language* (London).

Paludan, E. (1941), 'The development of the Latin elegy', *ClMed* 4: 204–29.

Pascucci, G. (1961), *'consens, praesens, absens', SIFC* 33: 1–61.

Pasquali, G. (1981), *Preistoria della poesia romana: con un saggio introduttivo di Sebastiano Timpanaro* (Florence).

Patzer, H. (1955), 'Zum Sprachstil des neoterischen Hexameters', *MH* 12: 77–95.

Pearce, T. E. V. (1966), 'The enclosing word order in the Latin hexameter' *CQ* NS 16: 140–71; 298–320.

Peppler, C. W. (1910), 'The termination –κος, as used by Aristophanes for comic effect', *AJP* 31: 428–44.

Peter, H. (1901), *Der Brief in der römischen Literatur* (Leipzig).

Petersmann, H. (1986), 'Der Begriff *satura* und die Entstehung der Gattung', in Adamietz (1986), 7–24.

—— (1989), 'Die Urbanisierung des römischen Reiches im Lichte der lateinischen Sprache', *Glotta* 96: 406–28.

—— (1992), 'Vulgärlateinisches aus Byzanz' in Müller, C. W. *et al.* (1992), 219–31.

—— (1995a), 'Soziale und lokale Aspekte in der Vulgärsprache Petrons', in Callebat (1995), 533–47.

—— (1995b), 'Zur mündlichen Charakterisierung des Fremden in der Komödie des Plautus', in Benz *et al.* (1995), 123–36.

—— (forthcoming), 'Language and style as means of characterization in the comedies of Plautus', *Papers of the Leeds International Latin Seminar.*

Phillips, J. H. (1984), 'Lucretius and the (Hippocratic) *On Breaths:* Addenda', in Sabbah (1984), 83–5.

Pigeaud, J. (1980), 'La physiologie de Lucrèce', *REL* 58: 176–200.

—— (1982), 'Virgile et la médecine. Quelques réflexions sur l'utilisation de la pensée physiologique dans les Géorgiques', *Helmantica* 33: 539–60.

—— (1988), 'Die Medizin in der Lehrdichtung des Lukrez und des Vergil', in Binder (1988), 216–39.

Pinkster, H. (1987), 'The pragmatic motivation for the use of subject pronouns in Latin: the case of Petronius', in *Études de linguistique générale et de linguistique latine offertes en hommage à Guy Serbat*, 369–79 (Paris).

Pinotti, P. (ed.) (1988), *Publio Ovidio Nasone, Remedia Amoris* (Edizioni e saggi universitari di filologia classica, 39) (Bologna).

Platnauer, M. (1951), *Latin Elegiac Verse* (Cambridge).

Ploen, H. (1882), *De copiae verborum differentiis inter varia poesis Romanae antiquioris genera intercedentibus* (Diss. Strasbourg).

Poncelet, R. (1957), *Cicéron traducteur de Platon. L'expression de la pensée complexe en latin classique* (Paris).

Powell, J. G. F. (1987), 'The *farrago* of Juvenal 1.86 reconsidered', in Whitby, Hardie and Whitby (1987).

―――― (ed.) (1988), *Cicero: Cato Maior De Senectute* (Cambridge).

―――― (1995*a*) 'Cicero's translations from Greek', in Powell (1995*b*), 273–300.

―――― (ed.) (1995*b*), *Cicero the Philosopher* (Oxford).

Puelma Piwonka, M. (1949), *Lucilius und Kallimachos. Zur Geschichte einer Gattung der hellenistisch-römischen Poesie* (Frankfurt am Main).

Pye, D. W. (1963), 'Latin 3rd plural perfect indicative active — Its endings in verse usage', *TPhS*: 1–27

Radermacher, L. (1951), *Artium Scriptores (Reste der voraristotelischen Rhetorik)*. (Österr. Akademie der Wissenschaften, phil.-hist. Kl., Sitzungsberichte, 227. Bd., 3. Abh.) (Vienna).

Ramage, E. S. (1957), *Urbanitas, rusticitas, peregrinitas: the Roman view of proper Latin* (Cincinnati).

Rand, E. K. (1925), *Ovid and his Influence* (London, Calcutta, Sydney).

Rawson, E. D. (1969), *The Spartan Tradition in European Thought* (Oxford).

―――― (1985), *Intellectual Life in the Late Roman Republic* (London).

Reichenkron, G. (1961), 'Zur römischen Kommandosprache bei byzantinischen Schriftstellern', *Byz. Zeitschr.* 54: 18–27

Reitzenstein, R. (1893), *Epigramm und Skolion. Ein Beitrag zur Geschichte der alexandrinischen Dichtung* (Giessen).

―――― (1907), art. 'Epigramm', *RE* 6.1: 71–111.

―――― (1912), *Zur Sprache der lateinischen Erotik* (Sitzungsb. d. Heidelberger Ak. d. Wiss., Phil.-hist. Kl., 12. Abh.) (Heidelberg).

Renard, M., and Schilling, R. (edd.) (1964), *Hommages à Jean Bayet*, (Collection Latomus 70) (Brussels).

Riemann, O. (1885; 2nd ed.), *Études sur la langue et la grammaire de Tite-Live* (Paris).

Risch, E. (1984), *Gerundivum und Gerundium. Gebrauch im klassischen und älteren Latein. Entstehung und Vorgeschichte* (Berlin–New York).

Risselada, R (1993), *Imperatives and Other Directive Expressions in Latin* (Amsterdam).

Roby, H. J. (1896), *A grammar of the Latin language from Plautus to Suetonius*. Part II *Syntax* (London).

Romaine, S. (1995; ed. 1, 1989), *Bilingualism* (Oxford).

Romano, A. C. (1979), *Irony in Juvenal* (Hildesheim and New York).

Ronconi, A. (1938), 'Stile e lingua di Catullo', *A & R* III 6: 139–56 (= 1950: 23–47).

―――― (1939), 'Allitterazione e stile in Catullo', *Stud. Urb.* 13B: 1–77 (= 1953: 9–82 = 1971: 11–86).

―――― (1940*a*), 'Per la storia del diminutivo latino. Studi esegetici e stilistici', *Stud. Urb.* 14B: 1–45 (= 1953: 107–50 = 1971: 87–130).

―――― (1940*b*), 'Atteggiamenti e forme della parodia catulliana', *A & R* III 8: 141–58 (= 1953: 193–212 = 1971: 173–92).

―――― (1950), *Da Lucrezio a Tacito* (Messina—Florence).

―――― (1971; ed. 1, 1953), *Studi catulliani* (Bari—Brescia).

van Rooy, C. A. (1965), *Studies in Classical Satire and Related Literary Theory* (Leiden).

Rösler, W. (1989), 'Typenhäuser bei Aischylos?', in Schuller *et al.* (1989), 109–14.

Ross, D. O. (1969), *Style and Tradition in Catullus* (Cambridge, Mass.)

Rothstein, M. (1966; 3rd ed.), *Sextus Propertius: Elegien* (Dublin — Zurich).

Rudd, N. (1960), 'Horace on the origins of satura', *Phoenix* 14: 36–44.

—— (1986), *Themes in Roman Satire* (London).

Ruijgh, C. J. (1957), *L'élément achéen dans la langue épique* (Assen).

Sabbah, G. (ed.) (1982), *Médecins et médecine dans l'antiquité* (Centre Jean Palerne: Mémoires, iii) (Saint-Étienne).

—— (ed.) (1984), *Textes médicaux latins antiques* (Centre Jean Palerne: Mémoires, v) (Saint-Étienne).

—— (ed.) (1991), *Le latin médical. La constitution d'un langage scientifique* (Centre Jean Palerne: Mémoires, x) (Saint-Étienne).

Safarewicz, J. (1965), 'Uwagi o jezyku Lucyliusza', *Eos* 55: 96–105.

Sager, J. C., Dungworth, D. and McDonald, P. F. (1980), *English Special Languages: Principles and Practice in Science and Technology* (Wiesbaden).

de Saint-Denis, E. (1935), *Le rôle de la mer dans la poésie latine* (Paris).

—— (1965), *Essais sur le rire et le sourire des Latins* (Paris).

Schäublin, C. (1988), 'Housman and Ennius', *Housman Society Journal* 14: 42–5.

Schawaller, D. (1987), 'Semantische Wortspiele in Ovids Metamorphosen und Heroides', *Gräzer Beiträge* 14: 199–214.

Scherer, A. (1963), 'Die Sprache des Archilochos', in *Entretiens sur l'Antiquité classique* 10: 89–107 (Geneva).

Schmid, P. (1964), 'Juvénal. Essai d'une définition stylistique'. Résumé, in *REL* 42: 57–9.

Schmid, W. and Stählin, O. (1929), *Geschichte der griechischen Literatur*, I: i (Munich).

Schmidt, B. (ed.) (1887), *C. Valeri Catulli Veronensis carmina* (Leipzig).

—— (1914), 'Die Lebenszeit Catulls und die Herausgabe seiner Gedichte', *RhM* 69: 267–83.

Schmidt, E.A. (1977), 'Lucilius kritisiert Ennius und andere Dichter. Zu Lucilius fr. 148 Marx', *MH* 34: 122–9.

—— (1985), *Catull* (Heidelberg).

Schmitt, R. (1967), *Dichtung und Dichtersprache im indogermanischer Zeit* (Wiesbaden).

Scholte, A. (ed.) (1933), *Publii Ovidii Nasonis Ex Ponto Liber Primus commentario exegetico instructus* (Amersfoort).

Scholz, U.W. (1986*a*), 'Der frühe Lucilius und Horaz', *Hermes* 114: 335–65.

—— (1986*b*), 'Die *satura* des Q. Ennius', in Adamietz (1986), 25–53.

Schreiber, G. (1917), *De Lucili syntaxi* (Diss. Greifswald).

Schünke, E. (1906), *De traiectione coniunctionum et pronominis relativi apud poetas Latinos* (Diss. Kiel).

Schuller, W., Hoepfner, W. and Schwandner, E. L. (edd.) (1989), *Demokratie und Architektur: Der hippodamische Städtebau und die Entstehung der Demokratie* (Konstanzer Symposion vom 17. bis 19. Juli 1987) (Munich).

Schulze, K. P. (1920), 'Bericht über die Literatur zu Catullus für die Jahre 1905–1920', *Bursians Jahresb.* 183: 1–72.

Schuster, M. (1948), art. '(123) C. Valerius Catullus', *RE* II.7.2: 2353–410.

_____ (ed.) (1949), *Catulli Veronensis liber* (Leipzig).

Schweizer, H. J. (1967), *Vergil und Italien* (Aarau).

Sconocchia, S. (ed.) (1983), *Scribonii Largi Compositiones* (Leipzig).

_____ (1993), 'L'opera di Scribonio Largo e la letteratura medica latina del 1. sec. d. C.', in H. Temporini (ed.), *ANRW* II.37: 1, 843–922. (Berlin).

Scott (Ryberg), I. G. (1927), *The Grand Style in the Satires of Juvenal* (Smith College Classical Studies 8) (Northampton, Mass.).

Sebeok, T. A. (ed.) (1960), *Style in Language* (Cambridge, Mass.).

Sedley, D. N. (1988), 'Epicurean anti-reductionism', in Barnes and Mignucci (1988), 295–327.

_____ (1989), 'The proems of Empedocles and Lucretius', *GRBS* 30: 269–96.

_____ (1992) 'Sextus Empiricus and the atomist criteria of truth', *Elenchos* 13: 21–56.

Segal, C. (1990), *Lucretius on Death and Anxiety* (Princeton).

Segebade, J. (1895), *Vergil als Seemann. Ein Beitrag zur Erklärung und Würdigung des Dichters.* Progr.d.Gymn. (Oldenburg).

Shackleton Bailey, D. R. (ed.) (1965), *Cicero's Letters to Atticus.* II *58–54 B.C. 46–93 (Books III and IV)* (Cambridge).

_____ (ed.) (1977), *Cicero: Epistulae ad Familiares.* I *62–47 B.C.* (Cambridge).

_____ (1992), 'Homoeoteleuton in non-dactylic Latin verse', *RFIC* 120: 67–71.

_____ (1994), *Homoeoteleuton in Latin Dactylic Verse* (Stuttgart—Leipzig).

Sharrock, A. R. (1994), *Seduction and Repetition in Ovid's Ars Amatoria 2* (Oxford).

Shipley, F. W. (1911), 'The heroic clausula in Cicero and Quintilian', *CPh* 6: 410–18.

Silk, M. S. (1974), *Interaction in Poetic Imagery with Special Reference to Early Greek Poetry* (Cambridge).

Simpson, F. P. (1879), *Select Poems of Catullus* (London).

Skutsch, F. (1892), *Plautinisches und Romanisches. Studien zur plautinischen Prosodie* (Leipzig).

Skutsch, O. (1934), *Prosodische und metrische Gesetze der Iambenkürzung* (Forschungen z. griech. u. latein. Grammatik 10) (Göttingen).

_____ (1964), 'Rhyme in Horace', *BICS* 11: 73–8.

_____ (1969), 'Metrical variations and some textual problems in Catullus, *BICS* 16: 38–43.

_____ (1976), 'Notes on Catullus', *BICS* 23: 18–22.

_____ (1980), 'Catullus 58.4–5', *LCM* 5: 21.

_____ (1985), *The 'Annals' of Quintus Ennius edited with Introduction and Commentary* (Oxford).

Smith, K. F. (1913), *The Elegies of Albius Tibullus* (New York).

Smith, W. S. (ed.) (1989), 'Heroic models for the sordid present: Juvenal's view of tragedy', in H. Temporini (ed.), *ANRW* II.33.1: 811–23 (Berlin).

Soubiran, J. (1966), *L'élision dans la poésie latine* (Paris).

Spies, A. (1930), *Militat omnis amans* (Diss. Tübingen).

von Staden, H. (1989), *Herophilus: the Art of Medicine in Early Alexandria* (Cambridge).

Stevens, E. B. (1953), 'Uses of hyperbaton in Latin poetry', *ClW* 46: 200–5.

Sullivan, J. P. (ed.) (1963), *Critical Essays on Roman Literature: Satire* (London).

Summers, W. C. (1910), *Select Letters of Seneca edited with introductions and explanatory notes* (London).

Svennung, J. (1935), *Untersuchungen zu Palladius und zur lateinischen Fach- und Volkssprache* (Uppsala).

———— (1945), *Catulls Bildersprache. Vergleichende Stilstudien* I (Uppsala Universitets Årsskrift 3) (Uppsala—Leipzig).

Swanson, D. C. (1962), *A Formal Analysis of Lucretius' Vocabulary* (Minneapolis).

Syndikus, H. P. (1984), *Catull. Eine Interpretation. Erster Teil. Die kleinen Gedichte (1-60)* (Darmstadt).

Terzaghi, N. (ed.) (1934, 2nd ed.), *Lucilio*, (Turin) (Repr. Hildesheim, New York 1979).

———— (ed.) (1966), *Saturarum Reliquiae* (Florence).

Thierfelder, A. (1955), 'De morbo hepatiario', *RhM* 98: 190–2.

Thill, A. (1979), *Alter ab illo. Recherches sur l'imitation dans la poésie personnelle à l'époque Augustéenne* (Paris).

Thomas, R. F. (ed.) (1988, 2 vols), *Virgil, Georgics* (Cambridge).

Thomson, D. F. S. (ed.) (1978), *Catullus. A Critical Edition. Edited and Introduced* (Chapel Hill).

Tovar, A. (1969), 'Lucilio y el latín de España', in *Studi linguistici in onore de V. Pisani*, ii.1019–32 (Brescia).

Townend, G. B. (1973), 'The literary substrata to Juvenal's satires', *JRS* 63: 148–60.

Tracy, V. A. (1971), 'The authenticity of *Heroides* 16–21', *CJ* 66: 328–30.

Tränkle, H. (1960), *Die Sprachkunst des Properz und die Tradition der lateinischen Dichtersprache* (Hermes Einzelschriften 15) (Wiesbaden).

———— (1967a), 'Ausdrucksfülle bei Catull', *Philologus* 111: 198–211.

———— (1967b), 'Neoterische Kleinigkeiten', *MH* 24: 87–103.

———— (1981), 'Catullprobleme', *MH* 38: 245–58.

Traina, A. (1975), 'Orazio e Catullo' in *Poeti latini (e neolatini). Note e saggi filologici*: 253–75 (Bologna).

Untermann, J. (1971), 'Entwürfe zu einer Enniusgrammatik', *Entretiens de la Fondation Hardt* 17: 209–51 (Geneva).

———— (1977), 'Zur semantischen Organisation des lateinischen Wortschatzes', *Gymnasium* 84: 313–39.

Väänänen, V. (1966, 3rd ed.), *Le Latin vulgaire des inscriptions pompéiennes* (Berlin).

Vairel-Carron, H. (1975), *Exclamation. Ordre et défense* (Paris).

Van Sickle, J. B. (1968), 'About form and feeling in Catullus 65', *TAPA* 99: 487–508.

Vechner, D. (1610, ed. 1, Frankfurt; ed. 2 Strasburg 1630; ed. 3 Leipzig 1680; ed. 4 Gotha 1733 (Heusinger)), *Hellenolexia.*

Vessey, D. W. T. C. (1969), 'Notes on Ovid, *Heroides* 9', *CQ* ns 19: 349–61.

Vetter, E. (1953), *Handbuch der italischen Dialekte*, I. Band: Texte mit Erklärung, Glossen, Wörterverzeichnis (Heidelberg).

Vollmer, F. (1923), *Römische Metrik*, in A. Gercke and E. Norden (edd.), *Einleitung in die Altertumswissenschaft*. I. Band: 8. Heft (Leipizig & Berlin).

Wackernagel, J. (1892), 'Über ein Gesetz der indogermanischen Wortstellung', *Indogermanische Forschungen* 1:333–436 (= *Kleine Schriften* (1955) i. 1–104 (Göttingen)).

_____ (1926 [vol. 1], 1928 [vol. 2]), *Vorlesungen über Syntax* (Basel).

Walde, A. and Hofmann, J. B. (1930–1956, 2 vols), *Lateinisches etymologisches Wörterbuch* (Heidelberg).

Waszink, J. H. (1971), 'Problems concerning the Satura of Ennius', *Entretiens sur l'Antiquité classique* 17: 97–147. (Geneva).

Watkins, C. W. (1982), 'Aspects of Indo-European poetics', in E. C. Polomé (ed.), *The Indo-Europeans in the fourth and third millenia*, 104–20 (Ann Arbor).

_____ (1989), 'New parameters in historical linguistics, philology and cultural history', *Language* 65: 783–99.

_____ (1995), *How to Kill a Dragon. Aspects of Indo-European Poetics* (New York – Oxford).

Watson, P. (1983), '*Puella* and *Virago*', *Glotta* 61: 119–43.

_____ (1985), 'Axelson revisited: the selection of vocabulary in Latin poetry', *CQ* NS 35: 430–48.

Weinreich, O. (1959), 'Catull c. 60', *Hermes* 87: 75–90.

_____ (1960), *Catull. Liebesgedichte und sonstige Dichtungen* (Hamburg).

_____ (1962; 2nd ed.), *Römische Satiren* (Zürich und Stuttgart).

Weis, R. (1992), 'Zur Kenntnis des Griechischen im Rom der republikanischen Zeit', in Müller, C. W. *et al.* (1992), 137–42.

Weise, F. O. (1882), *Die griechishen Wörter in Latein* (repr. 1964 Leipzig).

Wellmann, M. (1931), *Hippokratesglossare* (Quellen und Studien zur Geschichte der Naturwissenschaften und der Medizin, 2) (Berlin).

West, D. A. (1969), *Imagery and Poetry of Lucretius* (Edinburgh).

West, M. L. (1982), *Greek Metre* (Oxford).

Westphal, R. (1867), *Catulls Gedichte in ihrem geschichtlichen Zusammenhange* (Breslau).

Whitby, M., Hardie, P., and Whitby, M. (edd.) (1987), *Homo Viator. Classical Essays for John Bramble* (Bristol).

Wiesen, D. S. (1989), 'The verbal basis for Juvenal's satiric vision', in H. Temporini (ed.), *ANRW* II.33.1: 708–33 (Berlin).

Wifstrand, A. (1933), *Von Kallimachos zu Nonnos* (Lund).

Wilamowitz-Moellendorff, U. von (1898), 'De uersu Phalaeceo' in *Mélanges Henri Weil* (Paris), 449–61 (revised in 1921: 137–53).

_____ (1921), *Griechische Verskunst* (Berlin).

Wilhelm, F. (1925), 'Zu Ovid Ex Ponto I,3', *Philologus* 81: 155–67.

Wilkinson, L. P. (1959), 'The language of Virgil and Homer', *CQ* NS 9: 181–92.

_____ (1963), *Golden Latin Artistry* (Cambridge).

Williams, G. W. (1968), *Tradition and Originality in Roman Poetry* (Oxford).

Williams, R. D. (ed.) (1960), *P. Vergili Maronis Aeneidos Liber Quintus* (Oxford).

Wills, J. (1996), *Repetition in Latin Poetry. Figures of Allusion* (Oxford).

Winterbottom, M. (1977*a*), 'A Celtic hyperbaton?', *The Bulletin of the Board of Celtic Studies* 27: 207–12.

_____ (1977*b*), 'Aldhelm's prose style and its origins', *Anglo-Saxon England* 6: 50–1.

Wiseman, T. P. (1969), *Catullan Questions* (Leicester).

_____ (1974), *Cinna the Poet, and Other Roman Essays* (Leicester).

_____ (1979), 'On what Catullus doesn't say', *Latin Teaching* 35 n. 6: 11–15.

Wölfflin, E. (1882), 'Über die Aufgaben der lateinischen Lexikographie', *RhM* 37: 83–121.

_____ (1885), 'Das adverbielle *cetera, alia, omnia*', *ALL* 2: 90–9.

_____ (1886), 'Der substantivierte Infinitiv', *ALL* 3: 70–91.

Wyke, M. (1989), 'Mistress and metaphor in Augustan elegy', *Helios* 16: 25–47.

Zanker, G. (1987), *Realism in Alexandrian Poetry: a Literature and its Audience* (London–Sydney–Wolfeboro, NH).

Zicàri, M. (1964), 'Some metrical and prosodical features of Catullus' poetry', *Phoenix* 18: 193–205 (= 1978: 203–19).

_____ (1978), *Scritti catulliani* (Urbino).

Zwierlein, O. (1986), *Kritischer Kommentar zu den Tragödien Senecas* (Akad. d. Wiss. u. d. Literatur Mainz, Abhandlungen der geistes- und sozialwissenschaftlichen Klasse, Einzelveröffentlichung 6) (Wiesbaden).