I.1

Metrics as a combinatory system: Aldhelm’s *De metris ac de pedum regulis*

Aldhelm and Metrical Studies at Canterbury

The first treatises on linguistic subjects to survive from Anglo-Saxon England are not elementary grammars, but a pair of rather sophisticated works on Latin quantitative versification, Aldhelm’s *De metris* and *De pedum regulis*. As I noted in my Introduction, the principles of Latin versification formed an essential part of late-antique grammatical instruction: the basic grammars contained enough phonetic doctrine to lay the foundation for metrical study, and the traditional conception of grammar as the elucidation of the poets meant that metrical study was privileged in the grammatical instruction of Latin-speaking schoolboys. Versification lay closer to the heart of the grammatical curriculum than the evidence of early medieval grammar might suggest. It should not seem odd, then, that when we look for systematic linguistic description from the earliest stage of the Anglo-Saxon encounter with Latin culture, we should find metrical treatises. What is odd is that these first metrical treatises present their subject as

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2 On the status of metrics in the grammatical treatises of antiquity, see Mario De Nonno, “Ruolo e Funzione della Metrica nei Grammatici Latini,” *Metrica Classica e Linguistica: atti del colloquio Urbino 3-6 ottobre*
recondite, essentially separate from the elementary grammatical system from which it springs. This attitude towards the subject might best be explained by the personality of the author, Aldhelm, who famously rejoices in making things gratuitously difficult. It can also be explained, however, by the circumstances of Aldhelm’s – and Anglo-Saxon England’s – introduction to the subject.3

Our first evidence for the teaching of metrics in England comes with the foundation of the school of Canterbury by Theodore and Hadrian, sometime shortly after 669.4 Aldhelm, the first known Anglo-Latin author and the first to write Latin quantitative verse, was also the most distinguished product of this new school, and the only one to digest the fruits of his learning into treatises for future generations of students. As Aldhelm himself claims:


3 It would be tempting to attribute Aldhelm’s distinctive approach to metrics to his sources. However, in the next generation Bede drew on a very similar set of sources for his De arte metrica but managed to present the subject as clear, comprehensible, and neatly-integrated with elementary grammar. See my discussion of Bede in Part I.2, below. Aldhelm’s sources in the De metris, in particular, are in no way out of the ordinary: his chief sources are Audax (or, in one passage, the nearly-identical Victorinus) and Donatus’s Ars maior. On Aldhelm’s sources, see Vivien Law, “The Study of Grammar in Eighth-Century Southumbria,” Anglo-Saxon England 12 (1983): 43-71. Law offers several corrections to the sources proposed by Ehwald in his edition.

4 Many aspects of the extraordinarily broad curriculum of this school - but little information on grammatical studies - have come to light with the publication by Bernhard Bischoff and Michael Lapidge of Biblical Commentaries from the Canterbury School of Theodore and Hadrian. (Cambridge: Cambridge University Press, 1994).
...constat neminem nostrae stirpis prosapia genitum et Germaniae gentis cunabulis
confortum in huiuscemodi negotio ante nostram mediocritatem tantopere
desudasse priorumque argumenta ingeniorum iuxta metricae artis disciplinam
litterarum textui tradidisse...(MGH AA 15:202)⁵

...it is the case that no one born of the lineage of our stock and nourished in the
cradles of a Germanic people has exerted himself to such a degree in a matter of
this sort before our modest self and has entrusted the proofs of earlier talents to
the fabric of letters according to the discipline of the metrical art...

One winter while he was still studying at Canterbury, Aldhelm wrote to his bishop,
Leuthere,⁶ regretting that he would be unable to rejoin his community at Malmesbury for
Christmas, since he had too much Metrics homework to do (not to mention Law and
Computus):

Neque enim parva temporum intervalla in hoc lectionis studio protelanda
sunt, ei dumtaxat qui solerti sagacitate legendi succensus legum Romanarum iura
medullitus rimabitur et cuncta iurisconsultorum secreta imis praecordiiis
scrutabitur et, quod his multo artius et perplexius est, centena scilicet metrorum
genera pedestri regula discernere et ad musica cantilenae modulamina recto

⁵ Citations are to Ehwald’s edition. Translations are my own unless otherwise noted.
⁶ Leuthere is probably Leutherius, Bishop of the West Saxons, 670-76, who granted Aldhelm the abbacy of
Malmesbury ca. 673; for discussion of the dating of Aldhelm’s abbacy, see Michael Herren’s introduction
to his translation of the letters in Lapidge and Herren, Aldhelm: The Prose Works.
syllabarum tramite lustrare, cuius rei studiosis lectoribus tanto inextricabilior obscuritas praetenditur, quanto rarior doctorum numerositas reperitur.

Sed de his prolixu ambitu verborum ratiocinari stricta epistularis angustia minime sinit, quomodo videlicet ipsius metricae artis clandestina instrumenta litteris, logis, pedibus, poeticis figuris, versibus, tonis, temporibus conglomerentur, pathetica quoque septenae divisionis disciplina hoc est acefalos, lagaros, procilios cum ceteris qualiter varietur, qui versus monoscemi, qui pentascemi, qui decascemi certa pedum mensura trutinentur et qualiter catalectici vel brachicatalectici seu ypercatalectici versus sagaci argumentatione colligantur. Haec, ut reor, et his similia brevi temporis intercapidine monumentaneo ictu apprehendi nequaquam valebunt. (MGH AA 15:476-77)

Nor must small intervals of time be prolonged in this study of reading, at least by one who, afire with the skillful sagacity of reading, will probe inwardly the codes of Roman law and scrutinize with his inmost heart all the secrets of the jurisconsults, and what is much stricter and more intricate than these, namely to distinguish the hundredfold kinds of meters by the foot-rule and to traverse the musical modulations of song along a straight path of syllables. For eager readers, the obscurity of this subject becomes the more difficult to disentangle as the number of teachers grows sparser.

7Pedester in classical Latin means “pedestrian” and, of writing, “prosaic” in both literal and pejorative senses.
But the narrow confines of a letter scarcely allow me to consider these matters in a lengthy circuit of words, that is to say, in what manner the hidden instruments of the metrical art itself are gathered into letters, syllables (logis\textsuperscript{8}), feet, poetic figures, verses, accents, and times, and also how the discipline of the pathe (pathetica) of sevenfold division varies, that is acefalos, lagaros, procilios, and the rest; which verses are counted as monoscemi, which pentascemi, and which decascemi by a strict measuring of feet, and how catalectic and brachicatalectic and hypercatalectic verses are reckoned according to skillful argumentation. These things, I think, and things like them will in no way be able to be apprehended in a short interval of time and in a momentary beat (ictu\textsuperscript{9}).

Aldhelm is either finding this material challenging, or, more likely, taking pride in having difficult material to show off to others. Characteristically, he is enjoying having a whole new store of recondite Greek vocabulary with which to amaze his friends and confound his enemies. When did Aldhelm ever prefer an easy subject to one that he could make sound difficult with a parade of long words? Another impression that emerges from this letter, among the earliest we have from Aldhelm, is that his command of Latin prose style was fully in place by the time he encountered the formal study of Latin metrics. We do not have the evidence to assess Aldhelm’s early education.\textsuperscript{10} However he acquired it,

\textsuperscript{8}According to Ehwald, logis = syllabis. MGH AA 15: 477, n. 10.

\textsuperscript{9}A metricist’s pun.

\textsuperscript{10}On the evidence for Aldhelm’s life and early education, see Lapidge and Herren, 1979, 5-9, and Andy Orchard, The Poetic Art of Aldhelm. (Cambridge: Cambridge University Press, 1994), 4-5. Orchard
he clearly arrived at Canterbury with a high level of Latinity. It is interesting to speculate – little more than speculation is possible – about the level of preparation of Aldhelm’s fellow students at Canterbury.\footnote{There is a scholarly near-consensus that quantitative Latin verse was neither studied nor practiced - or at least not widely - in seventh-century Ireland. The canonical position is articulated in Michael Winterbottom, “Aldhelm's Prose Style and its Origins,” \textit{Anglo-Saxon England} 6 (1977): 39-76. Further, the metrical tag to Aldhelm’s letter to Heahfrith has been interpreted as a suggestion that the English are superior metricists to the Irish (Michael Herren in \textit{Lapidge and Herren}, 1979, 146). David Howlett’s recent investigation of prose rhythm in Hiberno-Latin authors supports the consensus position. (“Insular Latin Writers’ Rhythms.” \textit{Peritia} 11 (1997): 53-116.) On the other hand, Rijklof Hofman has presented evidence that the Irish Priscian glossators commented on quantitative metrics: Rijklof Hofman, “Moines irlandais et métrique latine,” \textit{Études Celtiques} 27 (1990): 235-66. Since the Irish Priscian commentaries are found in ninth-century or later manuscripts, we cannot be sure whether or not they reflect seventh-century Irish teaching.} As Neil Wright has observed, “the difficulties which Theodore and Hadrian faced in teaching metrics to English students must have been enormous.”\footnote{Lapidge and Rosier, \textit{Aldhelm: The Poetic Works}, 183} The difficulties for even the most talented English student in mastering an alien system of versification in a language with an utterly foreign phonology are apparent from Aldhelm’s occasional lapses in clarity and in understanding of his sources in his own metrical treatises. The even greater difficulties in composing verse in this alien system are clear from the shortcuts Aldhelm took in his own original verse.\footnote{For a complete analysis (and sympathetic appreciation) of Aldhelm’s verse composition technique, see Michael Lapidge, “Aldhelm's Latin Poetry and Old English Verse,” \textit{Anglo-Latin Literature} 600-900, (London: The Hambledon Press, 1996) 247-269, and Andy Orchard, \textit{The Poetic Art of Aldhelm}, (Cambridge: Cambridge University Press, 1994).} The foreignness of the system can only have been compounded by its Greek metalanguage. Not only was Latin meter, then as now, described in the handbooks in a vocabulary

concludes there is no reason not to accept William of Malmesbury’s report that Aldhelm’s first teacher was an Irishman.
adopted (and sometimes poorly adapted) from Greek metrics, but Theodore and Hadrian were Greek speakers.\textsuperscript{14} The circumstances of instruction at Canterbury would thus have been further complicated by the fact that both the target language, Latin, and the instructors’ (implicit) language of reference, Greek, were foreign to the English students.

The fact that Aldhelm encountered metrics late in his Latin education and that his early education would probably not have made clear the metrical applications of grammatical doctrine leads him to present metrics as a self-contained system, largely separate from the material presented in the school grammars. The impulse to conceive of metrics in this way was probably strengthened by the fact that Aldhelm encountered the subject as one of a number of advanced disciplines. His letter to Leuthere reflects this sense of the place of metrics as a special subject replete with exotic terms of art. The practical repercussions of this approach to metrics are best expressed in the \textit{De metris}, the first of Aldhelm’s paired treatises on versification. In the \textit{De metris}, Aldhelm describes the structure of the Latin hexameter as an abstract mathematical system for combining smaller metrical units (feet) into larger units (lines), in a way that almost completely ignores the communicative content or rhetorical structure of verse as a linguistic form. Meter is seen as a combinatory system that is strictly constrained by its own “rules of the game” but totally unrestrained by the notions of sense unit, completeness of thought,

\textsuperscript{14}Theodore came from Tarsus in the Greek-speaking eastern Mediterranean, studied in Antioch, and probably lived in a Greek-speaking community at Rome before coming to England late in life; Hadrian was most likely from Greek-speaking Libya and spent most of his career in Naples. For a hypothetical reconstruction of Theodore’s travels, see Michael Lapidge, “The Career of Archbishop Theodore,” \textit{Archbishop Theodore}, ed. Michael Lapidge. (Cambridge: Cambridge University Press, 1995) 1-29; on Hadrian, see Lapidge’s supplementary note 505, to his “Aldhelm's Latin Poetry and Old English Verse.”
grammatical concord, or any of the other syntactic-semantic concepts that we have seen were developed in the basic grammar library. Although Aldhelm’s approach to metrics would seem to exclude the kind of syntactical thought we are looking for in the hidden curriculum, his treatment is worth considering as an extreme but influential example of a persistent strain in the early medieval understanding of larger units of language: the tendency to see the combination of smaller linguistic units into larger ones as a matter of abstract patterning overlying (or underlying) other levels of linguistic meaning.

**Aldhelm’s De metris**

Aldhelm’s two technical treatises on meter, *De metris* (“On meters”; MGH AA 15.74-96) and *De pedum regulis* (“On the rules of feet”; MGH AA 15.150-204) form parts two and four of the *Epistula ad Acircium*,15 a large composite work. The *Epistula* opens with an address to Acircius16 and an extended essay on the wonderful number seven (MGH AA 15.59-74).17 This is followed by the *De metris*, a treatise on the structure of the hexameter. After the *De metris* come one hundred *Aenigmata*, or riddles, of whose meter the metrical treatises are ostensibly explanatory:

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15The *Epistula ad Acircium* is edited, with the rest of Aldhelm’s works, in Ehwald, *Aldhelmi Opera*. The address to Acircius and the treatise on the number seven are translated by Michael Herren in Lapidge and Herren, *Aldhelm: The Prose Works*. The *Aenigmata*, which are nested between the two treatises on metrics, are translated in Lapidge and Rosier, *Aldhelm: The Poetic Works*. The *De metris* and a selection from the *De pedum regulis* are translated by Neil Wright in Lapidge and Rosier, *Aldhelm: The Poetic Works*, 183-219, where they are accompanied by a very helpful introduction and notes.

16Aldfrith, King of Northumbria, 685-705; on this identification see Lapidge and Herren, 1979, 32.

17On the sources of this work, see Herren’s notes 4 and 7 in Lapidge and Herren, 1979, 187.
I strove to compose a hundred offerings of riddles, wishing to exercise the first rudiments of a little talent, as it were in some gymnasium, so that it might arrive in turn at the more important matter of the work (providing that these modest...
efforts have not in any way lacked the rules of metrical definition and that they
have correctly preserved the tripartite distinction of syllables according to the
plumbline of scansion); the aforementioned chapters of riddles, in short, are laid
out in the first place in four-fold lines of verses, and afterwards, according to what
the occasion of composing matters presented, are sung in five- or six- or even
seven-fold verses of meters and even more. To these according to the discipline of
poetic tradition I have taken care to join unceasingly cola and commata\(^\text{19}\) or
pentimemrical and heptimemrical caesurae with progressions of double and
triple feet; otherwise, lacking the correct scale of balance, the rules of dactylic
hexameter would have wobbled on slippery footsteps of syllables.

[...]

And so that the principle of these things (the riddles) should shine more clearly,
we have added the seven-times-fourfold feet of meters, with which not only all
the eight principal types progress, but also truly those varieties which, sprouting
from the same stem, are woven into a hundred leaves of meters.

(These seven-times-fourfold feet are covered in the *De pedum regulis*, which deals with
the metrical shapes of words that can be used in quantitative verse, with numerous
examples, and closes with brief chapters on prosody and on syzygies, or large, compound

\(^{19}\)Since Aldhelm mentions these in the context of caesurae, these are presumably cola and commata in the
strictly metrical sense (subdivisions of the verse), rather than rhetorical/syntactical cola and commata. See
Isidore’s discussion of these terms, quoted above at p. 66, and Bede’s treatment, p. 111, below.
feet. Something like a rationale for the Epistula emerges. The opening treatise on the number seven signals that number is immanent in everything, especially (perhaps) in meter. The Aenigmata are elementary exercises in verse composition for the author, but (implicitly) elementary exercises in analysis for students. And while Aldhelm claims the De pedum regulis will explain the riddles’ metrical form, it is in the De metris that he treats the problems more relevant to understanding his riddles’ meter.

Aimed at an audience with basic grammar (and all that implied) but with no experience of Latin quantitative metrics and at most an imperfect understanding of the phonology underlying them, the De metris is arranged to pick up where Donatus leaves off. That is, although Aldhelm presents his material as a self-contained subject of study, he makes some effort to arrange his presentation so as to take advantage of what students would be likely to know already. The De metris falls into three major sections: first, reminder of the importance of syllables and a short lesson on elision; second, an exhaustive account of the possible arrangements of metrical feet within the line; and

20The Aenigmata have a life in manuscript quite apart from their inclusion in this composite work on metrics, and the metrical works are likewise found with and without the riddles at various stages of the Epistula’s transmission. On the manuscript tradition as a whole see Ehwald, 35-58; on manuscripts of the Aenigmata, see Nancy Porter Stork, Through a Gloss Darkly: Aldhelm’s Riddles in the British Library MS Royal 12.C.xxiii. (Toronto: Pontifical Institute of Mediaeval Studies, 1990); and compare the alternative to Ehwald’s grouping of manuscripts proposed by Katherine O’Brien O’Keeffe and Alan R.P. Journet, “Numerical Taxonomy and the Analysis of Manuscript Relationships,” Manuscripta 27 (1983): 131-145. In addition the diverse subject matter of the four sections of the Epistula, the fact that there is almost no overlap in the sources of the two metrical treatises lends support to Michael Herren’s suggestion that Aldhelm had composed these works at different periods and gathered them later for presentation to Aldfrith. (Lapidge and Herren, 31.) For a synopsis of the sources of the metrical treatises, see Vivien Law, “The Study of Grammar in Eighth-Century Southumbria,” Anglo-Saxon England 12 (1983): 43-71.
third, a two-part treatment of the caesura, that is, the relationship of foot-boundaries and word-boundaries within the line.

The segue from the treatise on the number seven to the De metris ends with a reminder that syllables are the very essence of the matter:

Neque enim in tam densa totius latinitatis silva et nemorosis sillabarum saltibus, ubi de singulis verborum radicibus multiplices regularum ramusculos pululasse antiqua veterum traditio declarat, rudibus facile negotium deprehenditur et praesertim metricae artis disciplina carentibus et nescientibus qualiter vel quo pacto longae et breves sillabae vel etiam communes utrubi competentes, quas Graeci dichronas dicunt, sagaciter discriminentur. (MGH AA 15:78)

For, in so dense a wood of the whole of Latinity and amid bushy groves of syllables, where from each root of words the venerable tradition of the ancients declares that many branchlets of rules have sprouted, this matter is not easily grasped by the untrained and especially by those lacking the discipline of the metrical art who do not know how or by what method long and short syllables, or even common ones fitting together in whichever way, which the Greeks call twotimers, are wisely to be distinguished.

The whole theory of meter, he says, springs from this three-fold division of syllable quantity: long syllables, short syllables, and those which may be long or short. The
“whole theory of meter” – *omnis metrorum ratio* – to which he refers consists of four interrelated sets of quantitative criteria:

- **tempora**
- syllable count
- foot count
- schemata

The doctrine of *tempora* applies what the student would know about how to determine syllable length to mathematical proportions internal to metrical units. *Tempus* can be used to describe the duration of the whole line, or, as we will see in the *De pedum regulis*, the internal time-structure of a single foot. In ancient metrical theory, one short syllable had a notional duration of one *tempus* and two short syllables were equal in duration to one long syllable, or two *tempora*. Thus the feet that make up a particular verse type can be quantified in terms of *tempora*, and a verse made from the permissible types of feet will have a fixed number of tempora. In the case of dactylic hexameter, for example, a dactyl has a duration of $2 + 1 + 1 = 4$ *tempora*, and a spondee measures $2 + 2 = 4$ *tempora*. A line consisting of six feet chosen from these two types, will have $6 \times 4 = 24$ *tempora*. The number of *tempora* in a hexameter line is thus constant, even though the number of syllables may vary.

To arrive at an accurate count of *tempora*, though, one must understand elision, which eliminates certain syllables from the reckoning because they are not pronounced.
The types of elision are *synaloepha*, elision of a final vowel, and *ecthipsis*, elision of a final vowel + m. As Neil Wright notes, an explanation of elision and its function in scansion is hard to find in the grammars, so this is a gap that needs filling before Aldhelm can proceed. Its treatment here is a specific and useful adaptation to second-language learners for whom the whole phonology of Latin was a foreign construct. Its insertion at this point is original with Aldhelm. Grammarians classed the types of elision under “metaplasm”, and filed them at the end of the grammar with figures of speech, not at the beginning with syllables. Aldhelm refers to them as metaplasms, but has nevertheless managed to place them at precisely the point where they are of most relevance in his theory of meter. Aldhelm closes this section by congratulating himself on having removed an obstacle for students:

> Propterea namque has duas metaplasmorum species...indagare et explanare nisus sum, quia... nisi sagaci subtilitate prae cognitae fuerint, diversa impedimentorum obstacula et errorum offendicula scandentibus velut iter carpentibus generare solent. Idcirco diversos versus metrorum ad sinaliphae metaplasmum congruentes catervatim congressimus, quatenus his perspectis nullum deinceps explosae collisionis chaos et latebrosum contractae sinaliphae baratrum lucem scandentis confundat aciemque legentis obtundat. (MGH AA 15:81)

For these reasons I have striven to explain these two varieties of metaplasm, since unless they are recognized in advance with sagacious subtlety, they tend to

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21 Lapidge and Rosier, 185.
generate various obstacles of impediments and small stumbling-blocks of errors for those scanners as it were picking their way. Therefore we have gathered together in throngs various verses of meters pertaining to the metaplasm of synaloepha, so that when these have been looked over, no confusion of ejected elision or hidden pit of irregular synaloepha might henceforth confound the eye of the scanner or blunt the gaze of the reader.

It is striking that, in the midst of an exposition of the mathematical elements of meter that will emphasize the mutual ordering of discrete units, Aldhelm here gestures towards the reader’s experience of processing a verse-line left to right. Significantly, he seems to be stressing the visual experience of scansion, or at least the tension between what the reader sees and what he must pronounce. The references to the eye of the scanner and the gaze of the reader strengthen the suspicion that quantitative versification was primarily a graphic, not a phonological, reality for Anglo-Saxon students. Aldhelm’s use of the traditional method of showing the scansion of a line of verse by leaving spaces between feet instead of between words reinforces this sense of scansion as a visual operation.

22 Or “climbers”: the ordinary meaning of scandere is “to climb”. The metaphors of climbing, walking, et sim. in grammatical writing would make an interesting study in their own right.

23 For example, the scansion of Aen. 7.123 is explained as follows (MGH AA 15: 80):

Idem libro VII Aeneidos in uno versus geminas, sinalipham et ecthlipsin, comprehendit ita:
In Book 7 of the Aeneid, he (sc. Vergil) includes both types, synaloepha and ecthlipsis, in one verse, thus:

Nunc repeto Anchises fatorum arcana reliquit;
Scanditur enim hoc modo:
For it is scanned this way:

Nunc crepe. toanchi. sesfa. torumar. canare. liquit.
also quietly introduces the reader to the relation of word division and foot division, which will be treated explicitly in the later sections of the treatise.

Having dealt with elision, Aldhelm returns to the tempora. At this point, Aldhelm takes up the dialogue form of his main source, Audax, and his student interlocutor asks troublesome questions to which the master responds with greater or lesser clarity. Instead of having the master quiz the student, as in Donatus’s A.m. or the parsing grammars, Aldhelm allows the student to guide the dialogue and to interrogate the master about inconsistencies in his doctrine. The master acknowledges, for example, that although the dactylic hexameter is said to consist of dactyls and spondees, the sixth foot is in fact often a trochee. This would disturb the tempora-count, however, since such a line would yield \((5 \times 4) + (2 + 1) = 23\) tempora. The 23-tempora line disrupts the 24-tempora theory, so Aldhelm summarily excludes it from further consideration:

\[\text{The trouble this system of scansion-notation must have caused for scribes is apparent from Ehwald’s apparatus to this section.}\]

\[24\]In a chapter headed “On the Exchange of Alternate Question and Answer Signified by Two Different Letters,” Aldhelm explains that he will signify the teacher (magister) by M and the student (discipulus) by D. As Wright notes (Lapidge and Rosier, 266), Aldhelm claims Augustine (Soliliques, De libero arbitrio, De magistro, and De musica), Isidore, and Junilius as exemplars of the dialogue form, even though Audax, Aldhelm’s main source, is also in dialogue form. Audax relays information in a very compact, short question/short answer format, though, whereas Aldhelm expands the form to allow the “student” to ask for clarification and examples where an explanation has been unclear. The result is somewhat more like a literary/philosophical dialogue than the source would suggest. It would be interesting to know whether Aldhelm actually read (and profited from) Augustine’s De musica, but I have found no evidence so far in the text of the metrical treatises that he did.
...nonnulli metricae artis peritia praediti hunc pedem de versu excludendum censuerunt... (MGH AA 15: 82)

...several of those endowed with experience of the metrical art judged that this foot was to be excluded from the line...

(While the desire always to make practice conform to theory is an irritant in Aldhelm, the advice to ignore the syllaba anceps is sound from the beginning student’s point of view.)

After several complications to do with nomenclature (such as: How can a line be called dactylic if it has six spondees? Because such a line only occurs in dactylic hexameter. Q.E.D.), Aldhelm moves on to the second mathematical parameter of the verse, syllable count. The magister in the dialogue states that every hexameter line has between twelve and seventeen syllables. The student protests that one often finds lines of 18 or 19 or 20 syllables, but the master reminds the forgetful student about how elision eliminates some syllables from the count.

The line’s syllable count is directly related to the third criterion, the number of feet of each permissible type in the line. (Aldhelm is leading up to a classification of all possible lines based on the number of dactyls in the line.) To arrive at a line of only twelve syllables, you need a line consisting entirely of spondees. Substitute a dactyl for one of the spondees, and you get a line of thirteen syllables. Two dactyls increase the count to fourteen syllables; three dactyls make a line of fifteen syllables, four dactyls
make sixteen syllables, and five dactyls make seventeen syllables. Since a dactyl is not allowed in the sixth foot, seventeen is the maximum possible number of syllables in the line. As Aldhelm summarizes,

Versus dactilicus exameter, si a solis spondeis constiterit, erit XII syllabarum; si unum dactilum habuerit, XIII; si duos, XIV; si tres, XV; si quattuor, XVI; si quinque, XVII: ita, quoties dactilicus accesserit, toties sillaba crescit. (MGH AA 15: 84)

The dactylic hexameter line, if it consists of only spondees, will have twelve syllables, if it has one dactyl, thirteen, if two, fourteen, if three, fifteen, if four, sixteen, if five, seventeen. Every time a dactyl is added, it grows by a syllable.

After an unhelpful digression on the possibility of having a dactyl in sixth place in the line, Aldhelm returns to the internal arrangement of the line, six dactyls and spondees “circum se positis aut alterna interpositione variatis,” “arranged around one another or varied by alternate insertion.”(p. 82) The free variation in mutual ordering implied by this characterization is subject to the limitation, Aldhelm says, that a dactyl must appear in the fifth foot (p. 83). The fact that this is a) not always true and b) in direct contradiction to the immediately-preceding discussion of the spondaic line and to the theory of schemata that follows does not seem to have bothered Aldhelm. That the dactyl is characteristic of the fifth foot explains (in Aldhelm’s view) why the spondee is characteristic of the sixth foot.
Once the student has understood the relationship between the number of syllables and the number of dactyls in the line and the constraints on the placement of dactyls, he is ready to confront the schemata. A schema is any one of the possible arrangements of themetrical elements of the line, an abstract formulation of the arrangement of dactyls and spondees “circum se positis aut alterna interpositione variatis.”

Aldhelm’s presentation involves classifying all hypothetical verses according to the number of schemata they admit. The number of syllables (and hence the number of feet) in a line determines the number of possible schemata, the possible arrangements of dactyls and spondees in that line. Since there are six feet in a line of dactylic hexameter and the last foot cannot contain a dactyl, there are 32 possible arrangements – schemata – of dactyls and spondees in the five free positions. These schemata can, in turn, be classed in five groups, depending on how many dactyls they contain: lines with no dactyls, with one, with two, with three, with four, and with five. These five classes are then grouped into three categories according to how many schemata they admit: an all-dactyl line and an all-spondee line have only one possible arrangement each, and so are called monoscemi. A one-dactyl line and a four-dactyl line admit five schemata each and are called pentascemi. The two-dactyl and four-dactyl lines admit ten combinations each, and so are called decascemi.
These classifications are summarized in the following chart: 25 (D=dactyl, S=spondee)

**Monoscemi:**
- all dactyls: DDDDD
- no dactyls: SSSSS

**Pentascemi:**
- 1 dactyl: DSSSS SDDSS SSDSS SSSDS SSSSD
- 4 dactyls: SDDDD DSDDD DDSDD DDDSD DDDDS

**Decascemi:**
- 2 dactyls: DDSSS DSDSS DSSDS DSSSD SDDSS SDSDS SDSSD SSDDS SSDSD SSSDD
- 3 dactyls: DDDSS DDSSD DDSDS DSSDD DSDSD DSDDS SSDDD SSDDD SDDDS SSDDS SDDDS

Or, in the order Aldhelm actually presents them:

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25 My chart is inspired by Neil Wright’s elegant but somewhat different illustration of these possibilities (Lapidge and Rosier, 186). Aldhelm, unfortunately, does not include any charts. On the lack of diagrams in early medieval grammars see Vivien Law, “Linguistics in the Earlier Middle Ages: The Insular and Carolingian Grammarians,” Grammar and Grammarians in the Early Middle Ages, (London and New York: Longman, 1997) 70-90, at 86, n. 3.
no dactyls:  SSSSS  
monoscemi

1 dactyl:  DSSSS  SDSSS  SSDSS  SSSDS  SSSSD  
pentascemi

2 dactyls:  DDSSS  DSDSS  DSSDS  DSSSD  
SDDSS  SDSDS  SDSSD  
SSDDS  SSDSD  
SSSDD

decascemi

3 dactyls:  DDDSS  
decascemi

DDSSD  DDSDS  
DSSDD  DSDSD  DSDDS  
SSDDD  SDSDD  SDDSD  SDDDS

pentascemi

4 dactyls:  SDDDD  DSDDD  DDSDD  DDDSD  DDDDS  
monoscemi

5 dactyls:  DDDDD

The monoscemi-pentascemi-decasemi distinction is important to Aldhelm because it affects the possibilities for variatio. Versus monoscemi (all dactyls or all spondees) he characterizes as lacking the possibility for variation; the admission of a single foot of the other type immediately introduces an element of free play into the line:

M In versu XII sillabarum una species est: hic est, quem superius diximus monoscemum nuncupari; is quippe sine ulla varietate omnes in se spondeos habet...

D In versu XIII sillabarum quot scemata sunt?
M Quinque sine dubitationis scrupulo.

D Quomodo quave ratione?

M Ibi quippe unus dactilus inter spondeos admissus omnibus quinque locis libere decurrit. (MGH AA 15: 84)

M In a verse of twelve syllables, there is only one form: that which we said above is called monoscemus; indeed, it has in itself all spondees without any variation...

D How many schemata are there in a verse of thirteen syllables?

M Five, without any scruple of doubt.

D In what way or for what reason?

M Why, one dactyl admitted there among the spondees runs freely through all five places.

The modern reader will be reassured to hear that the “student” in Aldhelm’s dialogue was as confused by the idea of schemata as one might expect. It is here that Aldhelm’s manipulation of the dialogue form comes into its own. The “student” constantly questions the unhelpful explanations of the “master”, allowing Aldhelm to play his usual game of being pedantic and obscurantist while at the same time glossing his own text and expanding and improving on his source’s terseness. One example will show his method. Here is the explanation of the line of fourteen syllables (pp. 85-86):

D Versus .XIV. sillabarum quot scemata habet?

D How many scemata does the verse of 14 syllables have?
Certissima definitione X. scematibus constat.

By the most specific description it consists of ten scemata.

Da per ordinem earundem specierum rationem!

Give an account of these same types in order!

Aut enim primo et secundo loco dactilus ponitur aut primo et tertio aut primo et quarto [etc.]

A dactyl is put in the first and second position, or the first and third, or the first and fourth [etc.]

[...]

Da exemplis horum probationem!

Give proof of these with examples!

(The master gives six verses from Juvencus, Sedulius, Juvenal, and Lucan as examples of three of the schemata.)

Versibus istis, quos exempli gratia protulisse visus es, nequaquam omnes X. scematum regulae liquido patuerunt, sed tantum tres formulae id est dactilus loco primo et quinto, item loco secundo et quinto, item loco tertio et quinto; residua vero VII. scemata necdum prolata delitescunt. Quamobrem operae pretium reor, ut id quod passiva definitionis generalitate non ad integrum promulgaveras, nunc
The master obliges with a full set of made-up examples. The student’s hectoring obliges him to make the theory of the schemata complete, but it also disguises the actual distribution of the schemata in poetic practice. Of the total number of mathematically-possible schemata, Aldhelm can find a certain number exemplified in the poets; he uses even fewer in his own hexameter compositions. The remainder are attested only in his teaching examples. Indeed, although Aldhelm nowhere states this explicitly, monoscemi, pentascemi, and decascemi refer not to individual, actual, attested hexameter lines, but to a sets of possibilities for creating lines given the presence of a certain number of dactylys, which is to say a certain number of syllables.

26 On the limitations on metrical variation in Aldhelm’s own hexameter verse, see Andy Orchard, The Poetic Art of Aldhelm. (Cambridge: Cambridge University Press, 1994).
Aldhelm’s relish in describing the schemata highlights the suitability of quantitative metrics for description in the early medieval grammatical system, and, by contrast, the difficulty of making syntax fit that system. Quantitative verse can be described in purely formal terms, using concepts that are well-developed even in the early medieval grammars. The building-block of quantitative metrics is the syllable as graphical-phonological unit, the description of which holds an important place in the ars grammatica (as, for example Donatus’s A.M. I). Syllables are combined into a limited number of types of feet, whose attributes can be described completely in terms of the number, order, and quantities of the syllables that make them up. One type of foot does not differ from another as to its accidents: no foot is incapable of description in terms of its constituent syllables. The notion of analyzing linguistic units in terms of the number and type of their constituents is one of the most frequently-recurring features of early grammar: every element of discourse has as one of its accidents figura, which is its status as being made up of one or more elements. Schema is the Greek equivalent of figura, and captures a similar notion: that a line can be described in terms of the number and type of its constituents.\(^2\) Feet are combined into verse lines of fixed length. The rules governing the number and order of the feet within the line are clearly stated in the inherited late-antique treatises. In short, the “syntax” of meter is, in itself, uncomplicated by sense – either constraints of sense on the mutual ordering of constituents or the need to track completeness of sense in order to determine where the formal unit ends. The metrical

system is susceptible of clear description, too, because it is finite: the number of possible combinations of feet is manifold, but it is also, as Aldhelm demonstrates, calculable and easily predictable with a knowledge of the rules that govern the system.

Of course, the parts of speech and all their attendant complications do, in reality, enter into metrical composition. In the Anglo-Saxon metrical treatises, there are two distinct ways of handling this complication. Bede’s method is to plunge right into the problem of sense, and to discuss the metrical line as a formal unit that overlaps with syntactical-rhetorical sense units. This approach treats meter as one of a number of forms of rhetorical patterning that can be used to help the reader demarcate the text, and is very much in continuity with Bede’s approach in the De schematibus et tropis, the companion-piece to the De arte metrica. We will return to Bede shortly. Aldhelm’s approach, by contrast, treats the parts of speech as formal units that must be manipulated in parallel with the formal units of the metrical system. This approach draws on the morphological description of the partes in which the grammars are so rich. The latter parts of the De metris and the whole of the De pedum regulis concern the incorporation of words into the metrical system — although the mechanics of that incorporation are poorly explained. The former deals with the intersection of word-boundaries and foot-boundaries in the hexameter line, and the latter with the metrical forms of words.

After Aldhelm has moved through all thirty-two possible metrical schemata (in order and with complete specificity), he passes on to the caesurae, the pauses in the line coincident with word-ending. The caesura is where the concepts of word-boundary and
foot-boundary intersect. As Neil Wright notes, the *De metris* offers two accounts of the caesura. The second is the one with which modern students will be familiar: that is, caesurae as significant pauses in the line marked by a word-ending in the middle of the third or fourth foot of the hexameter. Aldhelm treats these briefly at pp. 95-96. Aldhelm begins, however (p. 92), with a rather different explanation of the caesura, one which classifies the whole hexameter verse on the basis of the relationship between words and feet within the line. His categories, districtus, divisus, and mixtus, like the hexameter schemata, are misleading as to actual poetic practice. A *versus districtus* is a line in which word- and foot-boundaries never coincide. A *versus divisus* is one in which word-boundary and foot-boundary always coincide – although Aldhelm admits that this type is not used much. His example is a made-up one from Audax:

*Dic mihi, Clio, quisnam primus fingere versus*” (p. 93)

A *versus mixtus* is mixture of these forms - the usual sort. This method of classification, while likely to be of no help to the student, is in keeping with the schematic approach to the hexameter, in which the verse is characterized by the potential internal relationships among its constituent elements. The schemata describe the relationships among varieties of one type of constituent, metrical feet, and the caesurae describe the interaction of these with the second type of constituent, the part of speech.

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28 Lapidge and Rosier, 187.
The De pedum regulis

The De pedum regulis (DPR) is devoted to cataloguing the second type of constituent, the part of speech, in terms that should allow it to be integrated into the schematic structure of the verse. In DPR, Aldhelm (following the ancient grammatical practice) uses the categories of the metrical feet to explain the quantitative structure of words. The chapter headings of the DPR – “De pirrhichio”; “De spondeo”; “De iambo”; “De trocheo”; “De tribracho”; “De moloso”; “De anapesto”; “De dactilo”; “De amphibracho”; “De amphimacro”; “De bachio”; “De palimbachio”; “De proceleumatico”; etc., etc. - give the misleading impression that the treatise will be devoted to the lyric meters in which all these feet are used. Instead, each of these feet provides a metrical category into which words can be grouped: for example, deus is a pyrrhic, felix is a spondee; senex is an iamb, sanctus is a trochee, anima is a tribrach, and so on. There is no suggestion that Aldhelm contemplates users of the DPR composing any verse form other than hexameters (although one could use the word-lists compiled here for such a purpose, or for constructing metrical clausulae). The relationship between words described as if they were feet, and feet as members of the metrical line, is touched on only once, in a brief exchange between Master and Student at the end of the chapter on the pyrrhic:

D Potestne pirrichius aut iambus exametro heroico inseri, dum exempla exametris versibus protulisti?
M Si praedicta coniugationum verba\textsuperscript{29} sine contextu partium orationis et absque metrorum versificatione proferuntur, pirrichii aut iambi regulis mancipantur; quodsi in dactylico carmine scandendi ratio et caesurarum divisio per cola et commata sequestrare compulerit spondei dumtaxat aut dactili legibus subiugantur, quod millenis exemplorum formulis sine imposturae et falsitatis frivolo prolatis facillime conprobari poterit. (p. 154)

D Can the pyrrhic or the iamb be inserted in the heroic hexameter, whereas you have produced examples in dactylic verse?

M If the aforementioned verbs of the conjugations are produced out of the context of the parts of speech and without metrical versification, they are subjected to the rules of the pyrrhic or the iamb. But if in dactylic verse the system of scansion and the division of the caesurae compels one to separate them into cola and commata, they are subjected in only to the rules of the spondee and the dactyl, which may be proved most easily by thousand-fold patterns of examples produced without any silliness of pretense or falsity.\textsuperscript{30}

Ignored in this discussion are the complications a student would encounter in attempting to use the DPR catalogue of feet to compose verse: namely, that some of the

\textsuperscript{29} At pp. 153-54, Aldhelm has run through a long list of first- and third-conjugation verbs that may be pyrrhics. I take praedicta to be transferred from coniugationum, as it were “verbs of the aforementioned conjugations.”

\textsuperscript{30} The “silliness” perhaps harks back to the Student’s pestering the Master in the De metris to provide a full set of examples for each schema, which the Master was forced to do with made-up verses. See pp. 90-91 above.
feet here treated cannot be accommodated to dactylic verse, and that the metrical form of a word may change when it is placed in context with other words in the line. While the DPR’s word-lists do, as Wright notes, form a mnemonically-helpful elementary gradus, one would need a great deal of metrical sophistication to use these words successfully in a verse.

The DM and the DPR, considered as parts of a composite treatise, are carefully constructed to lead the student to understand the patterning of the multiple, overlapping units that make up quantitative verse: syllables, tempora, feet, and parts of speech. Aldhelm effects the introduction of parts of speech to this quantitative system by treating words as if they were metrical units: the communicative aspects of the partes are ignored. Even with this limitation – the assimilation of the partes to the metrical system – Aldhelm is not entirely successful in explaining what words have to do with meter. This is, admittedly, a difficult matter to explain. Aldhelm’s approach is less than satisfactory because he treats words as a complication of the otherwise watertight metrorum ratio.

Bede, in his De arte metrica, takes the opposite approach, treating the verse line as one of a number of kinds of patterning that can overlie the semantic units to which he gives priority.

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31 E.g., sanctus will no longer be a trochee if it is followed by a word beginning with a consonant.
32 Lapidge and Rosier, 188.
I.2

Verse units and sense units: Bede’s De arte metrica

Bede’s De arte metrica (DAM) is the first part of a two-part work, the second part being the short tract De schematibus et tropis. This pairing is significant for the methodology of Bede’s metrical treatise, in which he uses concepts from the third part of the ars grammatica that will also appear in the companion work on the schemes and tropes. Bede’s DAM emphasizes the rhetorical as opposed to the mathematical aspects of versification, but still offers a clear, usable account of the technical aspects of metrics.

Aldhelm assumed knowledge of the minimal units of language and began the DM by reminding readers of their importance, before starting almost immediately on even more technical matters. Bede begins his treatise by considering litterae and syllabae afresh, as they pertain to meter and prosody. This difference of approach may reflect Bede’s usual, systematic approach to textbook-writing. It may also reflect the way he acquired his metrical knowledge. Aldhelm apparently learned about quantitative metrics late in his education, as one of a number of advanced subjects in Theodore and Hadrian’s

33 The two treatises are edited by Calvin B. Kendall in CCSL 123A: 81-171 (Turnhout: Brepols, 1975). Kendall has also published a translation of the two works: Bede, Libri II De arte metrica et De schematibus et tropis: The Art of Poetry and Rhetoric (Saarbrucken: AQ-Verlag, 1991). Translations in this chapter are my own unless otherwise noted.

school at Canterbury. We know less about Bede’s introduction to metrical studies than we do about Aldhelm’s, because Bede does not mention his own metrical studies. In the absence of other evidence, it would be reasonable to guess that Bede learned about quantitative metrics earlier in his education, in a natural sequence with his other grammatical studies, and in the context of exposure to other metrical forms of Latin, such as hymns. Thus, although Bede and Aldhelm used a similar array of sources in their metrical works, Aldhelm is inclined to present metrics as a freestanding system, marvellous in its own right, whereas Bede presents a more-or-less integrated combination of elementary grammar, quantitative metrics as a system, the relationship of verse forms to semantic units, and accentual verse.

Bede’s very first sentence situates his work pedagogically:

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35 Palmer (“Bede as Textbook Writer”) identified Bede’s sources in the DAM as Donatus’s Ars maior; Pompeius’s commentary on Donatus (GL 5.95-312); Sergius’s De littera (GL 4.475-485); Audax’s De Scauri et Paladii libris excerpta per interrogationem et responisonem (GL 7.320-362) and/or Maximus Victorinus’s Ars (GL 6.187-205) – the textual evidence slightly favors Victorinus, although Bede mentions Audax by name; the De finalibus metrorum (GL 6.229-42) and the De ratione metrorum (GL 6.216-28) attributed to (Maximus?) Victorinus; Mallius Theodorus, De metris (GL 6. 585-601); Diomedes, Ars grammatica (GL 1.300-529); Charisius, Ars grammatica (GL 1.1-296); Servius, De centum metris (GL 4.456-67); Julian of Toledo; and the Ars Palaemonis de metrica institutione (GL 6.206-15). This list should probably be shortened in light of more recent research: see the discussions in George Hardin Brown, Bede the Educator, The Jarrow Lecture 1996); and Vivien Law, “Notes on the Dating and Attribution of Anonymous Latin Grammars of the Early Middle Ages,” Grammar and Grammarians in the Early Middle Ages. (London and New York: Longman, 1997) 28-49.
Qui notitiam metricae artis habere desiderat, primo necesse est distantiam litterarum syllabarumque sedulus discat. (I.1, p. 82)\(^{36}\)

He who desires to have knowledge of the metrical art must first be careful to learn the difference between letters and syllables.

In the chapter “De littera” (DST I), Bede reviews the alphabet with an eye to properties of letters most relevant to scansion. He explains the vowels, semivowels, and mutes, the Greek letters (Y and Z) and the Christian letters, Eta Xhi Rho Omega, and Alpha. Of the latter, he notes that Eta and Omega are special signs for long vowels in Greek, whereas all Latin vowels are *dichronae* – that is, they can be either long or short (DST I.1-25, pp. 82-83). This treatment is typical of Bede’s keen eye for what among the mix of Greek information that pervades Latin grammar is actually useful for monastic readers.

In the chapter “De syllaba” (DAM II), Bede explains the rules of syllabic quantity. Syllables are either short, in which case they have one *tempus*, or long, in which case they have two *tempora*. There are also common syllables: these are apparent exceptions to the rules of quantity, to which Bede will devote a separate chapter. Long syllables are long by nature or position, and Bede explains the rules for “making position” (*positione syllabae fieri*). Syllables that are not long by nature or position are

\(^{36}\) Citations of Bede’s text are by chapter and line number, as well as page number in Kendall’s CCSL edition. (DAM is, technically, Book I and DST Book II of the composite work, but I have not used this
short. (DAM II.1-47, pp. 86-88.) With the exception of the doctrine of the *tempora* there is nothing here that would look unfamiliar to the modern student of Latin versification. Whereas Aldhelm went out of his way to make the rules of the hexameter look hard, Bede makes them as clear as possible by building systematically on what his students would already have known and paring away any superfluous information.

Chapter III is devoted to “common” syllables, which Bede classifies as a poetic license by which naturally long syllables are changed into short ones or naturally short ones are made long (DAM III.2-4, p. 88). Common syllables come about in nine ways, which Bede lists and exemplifies (DAM III.4-137, pp. 88-94). These include the mute + liquid rule, the situation in which a short vowel ends a word and s+consonant begins the next word; the option of having z make position within a word (*gaza* is Bede’s example); and the *syllaba anceps*. Bede is careful to point out that common syllables do not include hidden quantity, or categories of words in which a dubious consonant appears sometimes to be making position and sometimes not: e.g. *x* always either makes position (*fax* *nex* *nix* *nox* *nux* *exitus* etc.) or follows a long vowel anyway (*pax* *lex* *lux* *rex* *vox*) when in the same word, and never does so when starting a word (“litora Xerxes”). Choice does not come into the matter. (DAM III.119-126, p. 93.)

As soon as Bede starts discussing syllabic quantity, he invokes the concept of the word, *pars orationis* or *verbum*. This is necessary because the rules for position are

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37 Discussed above in the section on Aldhelm.
different within the same word and across words – information omitted by Aldhelm – and unless a student recognizes this he will be tempted to see exceptions proliferating where there are none.  

The rules of quantity apply equally to all Latin words, so in the early chapters of DAM Bede works with the idea of *pars orationis* or *verbum* without differentiating which part of speech or what morphological features he’s talking about. In the remaining chapters on syllables (DAM III-VI), Bede deals with the effect of compounding on syllabic quantity and gives rules of thumb for quantity in morphological and derivational endings and in the indeclinable parts of speech. From this early stage, he relates the quantitative shapes of words to their employment in quantitative verse, and he explains clearly to the beginner what the practical implications are of knowing syllabic quantity. For instance, he suggests that the student who is just learning scansion should carefully observe the quantities of each part of speech as it occurs in hexameter and pentameter line:

> Haec de differentia syllabarum paucis dicta sint, quas etiam exemplis ipse plurimum discernere potest, qui scansionem versus heroici discere curaverit. Sed et qui necdum ad hoc pervenit, hunc interim hortamur syllabas omnium partium orationis ex principio versusum heroicorum diligentius scrutetur. Omnis enim

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38 In *De schematibus et tropis* and *De orthographia*, Bede will show a similar concern for categorizing apparent exceptions to ordinary usage, perhaps in part to avoid seeing them emended away. Here, though, in discussing versification, he has the advantage of a tradition that states the rules for ordinary usage quite unambiguously.
versus exameter, qui sex pedibus, et pentameter, qui quinque pedibus constat, 
primam habet syllabam longam, quia vel a spondeo vel a dactylo incipit, quorum 
prior pes duabus longis syllabis consistit, ut ‘dicens’, secundus longa et duabus 
brevibus, ut ‘dicimus’. Et ideo cum codicem exametri vel elegiaci carminis 
adsumis in manus, quamcumque paginam aperiens inspexeris, quemcumque 
versum arripiens legeris, absque ulla dubietate primam syllabam aut natura aut 
positione longam invenies, quod nimimum sive spondei seu dactyli constat esse 
principium. (DAM IIII, p. 94)

We need speak only briefly about distinguishing syllables, which he who 
cares to learn the scansion of heroic verse can for the most part discern for 
himself from examples. But in the meantime we urge even one who has not yet 
progressed to this point to scrutinize diligently the syllables of every part of 
speech at the beginning of heroic verses. Every hexameter verse, which consists 
of six feet, and every pentameter, which consists of five feet, has a long syllable 
first, since it starts with either a spondee or a dactyl, of which the former consists 
of two longs, as in dicens, and the latter of a long and two shorts, as in dicimus. 
And so when you take in your hands a book of hexameter or elegiac poetry, 
whatever page you open and look at, whatever verse you seize on and read, 
without the slightest doubt you will find the first syllable to be long either by 
nature or by position, since of course it is the beginning of a spondee or of a 
dactyl.
He adds later that the hexameter always ends with a dactyl followed by either a spondee or a trochee (DAM X, p. 109). Thus the student is given the parameters of metrical certainty and uncertainty up front, and is shown how to apply what he knows of syllabic quantity to the practical problem of scanning a line. This is a far cry from Aldhelm’s approach in which the structure of the hexameter was presented as a freestanding theoretical system (in the De metris) and the metrical shapes of words in a separate treatise (the De pedum regulis).

Bede carries this emphasis on understanding how metrical and non-metrical units function together throughout his treatise. His chapter on the metrical structure of the hexameter and pentameter ends with a note on the convention of end-stopping elegiac couplets:

Observandum est autem in carmine elegaico nequid umquam de sensu versus pentametri remaneat inexplicatum, quod in sequente versu exametro reddatur, sed uterque sensibus suis terminetur versus. (DAM X, pp. 110-111)

It should be observed that in elegaic verse nothing of the sense of the pentameter line should ever remain unexpressed which is to be completed by the hexameter in the following line. At any rate, let each line end with its own senses.

Bede here uses “sense” in much the same way that Isidore used it when he talked about punctuating the periodic sentence. The semantic unit sensus can be tracked
simultaneously with another, formal unit, to which it is not identical. In the case of
Isidore’s *sententia*, the other, formal unit is implied but not defined; here the other unit,
the verse, is strictly defined by metrical criteria. Bede’s examples suggest what kind of
unit he identifies as a complete *sensus*. In his first example, from Sedulius (Hymn I.1-
2), each line of the couplet must coincide with a sense unit:

Cantemus, socii, Domino, cantemus honorem,
    dulcis amor Christi personet ore pio.

Let us sing to the Lord, comrades, let us sing honor;
    let the sweet love of Christ sound from a pious mouth.

In the second example, from Prosper (LIII.5-6 and 7-8), the hexameter and pentameter
together contain the sense; in Bede’s words, “sibi mutuo conserantur”: they are fastened
one to the other, or are continuous with each other:

Solus peccator seruit male, qui licet ampio
    utatur regno, sat miser est famulus.

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39 Isidore defines the *colon* as the point at which the sense is complete but there is still some sentence left:
“Ubi autem in sequentibus iam sententia sensum praestat, sed adhuc aliquid superest de sententiae


The lone sinner serves ill, who, although he may possess an ample kingdom, is a wretched enough servant.

In the example above, Bede says, the sequentes uersiculi, etsi his sunt subiuncti, sibimet sunt tamen inuicem coniuncti et secundus primo dat supplementum. Sequitur enim:

Cum mens carnali nimium dominante tyranno
tot seruit sceptris dedita quot uitiis.

The following versicles, even though they are subjoined to these, are nevertheless linked in turn with one another and the second gives a supplement to the first. For there follows:

When the mind, with the fleshly tyrant too much in control, surrendered, serves as many sceptres as he does vices.

In the Sedulius quote, the hexameter and pentameter each contain an independent sentence. In the Prosper example, each couplet contains a clause which is clearly not finished at the end of the respect hexameters. We would regard the two clauses in this instance as part of the same sentence, but for Bede the important point seems to be the completeness of the clause, whether dependent or independent.

He continues this idea in the next chapter, which is entitled “Quae sit optima carminis forma”: “What the best form of verse is” (DAM XI, pp. 111-116). His first
subject here is enjambment, which, he says, is to be preferred in hexameter verse, within moderation:

At uero in exametro carmine concatenatio uersuum plurimorum solet esse gratissima, quod in Aratore et Sedulio frequenter inuenies, modo duobus, modo tribus, modo quattuor, aut quinque uersibus, nonnumquam uel septem uel etiam pluribus ad inuicem connexis (DAM XI, p. 111)...Verum huiusmodi connexio si ultra modum procedat, fastidium gignit ac taedium. Hymnos uero, quos choris alternantibus canere oportet, necesse est singulis uersibus ad purum esse distinctos, ut sunt omnes Ambrosiani. (DAM XI, p. 113)

But in hexameter verse a linking of several lines is usually most pleasing, as you often find in Arator and Sedulius, now with two lines, now three, now four or five, and sometimes seven or even more lines joined to one other...But if a linking of this sort goes on beyond measure, it gives rise to distaste and boredom. On the other hand, hymns, which are to be sung by alternating choirs, have to be strictly divided into individual verses, as are all the Ambrosian hymns.

The rest of this chapter concerns various ornaments to the verse, including rhyme at the caesura and the end of the line, and such exercises in variation as filling a whole line with nouns, or with verbs. Bede then introduces the convention of separating adjectives from the nouns they modify:
Studendum est praeterea metricis quantum artis decori non obstitit, ut mobilia nomina fixis nominibus praeponant, sed nec concincentia nomina coniunctim ponant, uerum interposita qualibet alia parte orationis, ut:

Mitís in inmitem uirga est animata draconem. (Sedulius, Carm pasch. 1.132)

Prius posuit “mitís” quam “uirga,” prius “inmitem” quam “draconem” (sed et hoc discretum, id est, interposito uerbo “est animata”), non quod haec semper obseruari necesse est, sed quia, cum fiunt, decori sit... (DAM XI, pp. 114-115)

Moreover, versifiers must take care, as far as it does not get in the way of the beauty of the art, to place variable nouns before fixed nouns, but not to put nouns that rhyme next to one another, but to have some other part of speech intervene, as:

The tender shoot is animated into a fierce serpent

He put “tender” before “shoot” and “fierce” before “serpent” (but also placed this apart, that is, with the words “is animated” placed in between), not because this rule always has to be observed, but because, when it is done, it serves as an ornament.

By concincentia nomina, Bede means nouns that rhyme, or nouns with similar endings: in his example, mitís modifies uirga and inmitem modifies draconem, but it is only with the latter pair that he emphasizes that they are “discretum, id est, interposito uerbo ‘est animata’.” On the other hand, his explanation suggests a recognition of mitís as related

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42 The word order cannot be rendered in translation, but Bede explains the word order in what follows.

43 The Remigian gloss to this passage supports this reading (CCSL 123A, p. 114, note to line 50).
to uirga and immitem to draconem, in a relationship of mobile to fixum. His further examples from Prosper and Lucan concern the respective ordering of mobilia and fixa that can be placed next to one another because they do not rhyme. The terms of Bede’s discussion skirt the modern terminology of adjective-noun agreement, but this passage nonetheless provides evidence of a working concept of the relationship between noun and adjective which is completely absent from the morphological discussions of the parts of speech in Donatus.44

DAM XII concerns the caesurae, and Bede’s explanations are, predictably, clearer than Aldhelm’s. Bede also explains the difference between metrical and rhetorical cola and commata:

Item ubi post duos pedes superest syllaba, comma dicitur; ubi post duos pedes nihil remanet, colon dicitur. Quae tamen nomina apud oratores indifferenter ponuntur, qui integram sententiam periodon appellant; partes autem eius cola et commata dicuntur. Vt puta: “sustinetis enim, si quis uos in seruitutem redigit,” colon est; “si quis deuorat,” colon est; “si quis extollitur,” etcetera, (2 Cor. 11.20) usque ad plenam sententiam, cola sunt et commata. Plena autem sententia periodus est. Interpretantur autem colon “membrum”, comma “incisio”, periodus “clausula” siue “circuitus”. (DAM XII, p. 118)

44 See my Introduction, p. 60.
Similarly, when after two feet a syllable is left over, it is called a comma; when after two feet nothing remains, it is called a colon. Yet these names are used interchangeably by rhetors, who call a complete sentence a period; its parts are called cola and commata. So for example, “You bear it, if someone enslaves you,” it is a colon; “if someone preys on you,” it is a colon; “if someone is exalted,” etc., all the way up to the complete sentence, you have cola and commata. A complete sentence is a period. Colon means “member”; comma means “cutting”; period means “clausula” or “circuit”.

Although Bede claims that there is no meaningful difference in rhetoric between cola and commata, the metrical definitions he gives share with Isidore’s definition the sense that comma implies a cutting at a point where something is left unfinished, whereas a colon is a subsidiary unit that is to some degree integral in itself.45

Chapters XIII – XVI cover various forms of elision, dieresis, and other poetic licenses in a way that eliminates the pitfalls of Aldhelm’s method: Bede clearly identifies what happens to words when they are scanned in a line, taking into account which syllables are lost to elision and what part of each word occupies which foot of the verse. Chapter XVI, “Quod et auctoritas saepe et necessitas metricorum decreta violet,” “That both authority and necessity often violate the rules of metricians,” concerns words which would not normally be made to fit dactylic verse – another improvement on Aldhelm’s misleading catalogue of feet. The DAM closes with seven chapters on lyric meters, which

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45 See my Introduction, p. 66.
actually do provide a context for the feet listed in Aldhelm’s DPR; the famous chapter “De rithmo”, on accentual counterparts to quantitative verse forms; and a chapter on poetic genres.

Conclusion

Aldhelm and Bede offer two distinct approaches to explaining Latin quantitative meters. The Aldhelmian approach rejoices in the operation of meter as a system, finite, quantifiable as well as quantitative. His method requires the student to learn to track several quantitative elements – syllables, tempora, feet qua feet, and words as feet – that run in parallel through the structure of the hexameter line. Aldhelm’s approach requires that words as grammatical units be subsumed into the metrical system and treated purely as discrete forms with mathematical structures. The Bedan approach, by contrast, allows the grammatical and rhetorical units of word, sense, and sententia to be understood as semantic groups that overlap with the formal units described by the metrical system. This integration of metrics with concepts from elementary grammar is not only pedagogically useful; it also allows us to glimpse traces of syntactical doctrine that are hidden in the part-of-speech-oriented grammars. Bede’s other paragrammatical handbooks, the De schematibus et tropis and the De orthographia, share the pedagogical acuity shown in DAM and substantially extend our view of the syntactical teaching that must have supplemented the elementary grammars. These works form the subject of Part II of this study.