## CHAPTER 7

## Latin Prosody and Metrics

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Rather than providing a generic list of Latin metrical forms and descriptions, of a type readily obtainable elsewhere in greater detail (e.g. Raven (1965); Crusius (1967); Drexler (1967); Halporn (1963); Halporn et al. (1994); Boldrini (2004)), this survey explores a small set of partly interrelated issues in the historical and linguistic study of Latin metrics. We first examine the native background of Latin poetry in its Italic context, with emphasis on the Saturnian. From there we move to the meters of Roman comedy, noting how certain of their characteristics may reflect native poetic practices and how others provide a window onto details of the prosodic and rhythmic organization of spoken Latin. In the last section we provide an overview of the ictus/accent question and Roman recitational practices, especially in the context of the comic iambo-trochaics and Classical hexameters.

## Italic Background, Carmina, Saturnian

Among the inscriptions that have come down to us in the fragmentarily preserved Italic languages Oscan, Umbrian, South Picene, and Paelignian are a number of religious or solemn character, including prayers, curses, and epitaphs. These stand out stylistically in having distinctive poetic features. The oft-cited South Picene epitaph from Bellante (ST Sp TE 2) consists (except for the first word) of bipartite alliterative phrases postin viam videtas tetis tokam alies esmen vepses vepeten "Along/Behind the road you see the 'toga' (covering!) of Titus Alius buried (?) in this tomb"; simultaneously it can be divided into three seven-syllable $(2+2+3)$ cola, postin viam videtas / tetis tokam alies / esmen vepses vepeten. Bipartite alliteration is found also in e.g. fakinss fangvam "deeds (and) words (lit., tongue)" from an Oscan curse; sacaracirix Semunu "consecrator
of the crop-gods" from a Paelignian epitaph; and futu fos "be propitious" in Umbrian prayers from the Iguvine Tables. These prayers are the longest such texts, and feature not just alliteration but also other types of assonance, together with grammatical parallelism, repetition, and figurae etymologicae. These stylistic figures are also characteristic of the Latin carmina - solemn utterances like prayers, oaths, and legal formulae in the Roman world. Taken together, all these texts constitute the basis of our knowledge of native Italic poetry.

There is some uncertainty whether to call the longer texts "poems"; though they consist of recurring strophic and smaller units, it is not clear that they are genuinely metrical, and "rhythmic prose" is the term often applied instead (cf. Williams (1992) 54-55; for analytic studies of carmina see e.g. Thulin (1906) and Watkins (1995b)). But the important point for the continuity of the Roman poetic tradition is that they utilize the same species of verbal artistry that the Romans felt was suitable for use when writing later in Greek meters. This strongly suggests that they occupied at least some of the same linguistic-cultural "space" as later poetry, regardless of what one chooses to call them.

The dawn of attested Roman literature in the third and early second centuries BCE occurred at a time when Greek influence on the arts was increasing, and native meters would soon be abandoned in favor of the Greek ones, especially for extended poetry. Those meters have disappeared without a trace except for the Saturnian (on the versus quadratus see further below). This is usually agreed to be a survival of an indigenous Italic poetic form (the arguments of detractors like Williams (1992) 57 who posit a Greek source are very weak, and Fraenkel's (1951) identification of a model type in the Cretan hymn of Zeus Dikte is a grasp at straws). Introductions to the Saturnian typically enshroud it in great mystery, and it is true that in spite of innumerable attempts no descriptive model adequate for all the remains has yet found universal approval. But the majority of Saturnians do share a common pattern: verses consisted of two hemistichs, each further divisible into two quarter-verses by a caesura (the caesura Korschiana) usually before the last three syllables. The cadence of both hemistichs is normally a trochaic or spondaic $-\times$ (or ' $\times$, depending on whether one uses a quantitative or stress-based description, see below); the first-hemistich cadence is typically preceded by another $-\times$ sequence; and the second hemistich normally begins $-x$. The commonest verse-type consists of a threeword, seven-syllable hemistich ( $22 \mid 3$, just as in the South Picene epitaph above) followed by a two-word hemistich of six syllables $(3 \mid 3)$, as in the famous opening line of Livius Andronicus' Odyssey: Virum mibi| Camena || insece | uersutum. The problem has always been how to bring this common type under the same hat as less typical exponents like Andr. 3: mea puera quid uerbi ex tuo ore supra fugit. Additionally bedeviling the picture is the constant specter of corruption in the manuscripts.

Whether the meter was stress-based, quantity-based, or some combination of the two is still not agreed upon (see the useful survey of representative approaches in Beare (1957) 14-31 and Mercado (2006a) 7-35). Quantitative models, which represent the bulk of the hypotheses, fail because of the immense variety of quantitative patterns needed to account for all the verses; such models have tended to be highly complex, excessively flexible, and in the end not terribly credible as learnable or appreciable metrical schemes. Accentual models have fallen victim to disagreements over the nature and position of Latin accentuation. Since the Classical Latin penultimate stress rule does not yield a coherent and consistent rhythm across all the surviving Saturnian fragments,
some scholars have tried to deduce from those fragments other positions of the accent that may have obtained instead; but that approach begs the question.

The most recent in-depth treatment of the Saturnian and its place among the other native Italic meters is Mercado (2006a), a very important work that provides a minutely detailed and skillfully argued analysis based on a novel combination of stress and syllablecount. In Mercado's view, there are two basic cola, a six-syllable second hemistich (A) with two word-stresses and a seven-syllable first hemistich (B) with three. Each of these has a large number of variants which he derives via acephaly and anaclasis (inversion). Commonest are his type A.1.2 ( $\times \times \times$ | $\times^{\prime} \times \times$ ), with 50 "secure" exponents, and B.1.3 ( ${ }^{\prime} \times x^{\prime} \times \times \mid \times{ }^{\prime} \times \times$ ), with 66 . Combining the two produces the best-attested type of Saturnian verse noted above. Mercado also offers several new and stimulating observations on the connection of the Saturnian to other Italic meters, with interesting speculations on the antiquity of stress-based Indo-European poetry.

Though a published version of this thesis is still in preparation, it has already achieved some well-deserved notice and circulation, and so a brief critical reaction may not be inappropriate, subject to the usual caveats. Much of Mercado's overall scheme seems to work well, and it is admirable that he is able to make this disparate-looking corpus look regular. But the ability of any theory of the Saturnian to convince will depend on how cleanly it does this and on the degree to which it avoids (or appears to avoid) arbitrary application of licenses and multiplication of verse-types. On these two scores its success will probably lie in the eye of the beholder. With the acephaly and anaclasis noted above, a full 13 A and 14 B subtypes are generated for what are only about 130 secure verses. This sort of thing is unavoidable for theories of the Saturnian that seek to derive each specific attested pattern from one or two underlying ones. Though prompted on internal grounds by key features common to most of the extant specimens (e.g. the nearly universal Korschian caesura and cadence patterns), this approach could well benefit from more critical scrutiny (cf. Beare (1957) 24-25). That is to say, our surviving Saturnians could be like our surviving hexameters and all be examples of the same meter; or they could be like our surviving body of glyconics, pherecrateans, hagesichoreans, hendecasyllables, and phalaecians - different meters belonging to the same family and sharing certain structures. In either case, entities must be multiplied and Occam's razor must be violated; absent outside controls, it amounts to a matter of taste which set of entities one is more comfortable multiplying.

Like everyone else who posits templates that contain a set number of syllables, Mercado too has to resort to the usual metrical first-aid kit of resolution, elision, hiatus, and synizesis in order to make verses with ostensibly the wrong number of syllables fit. He does suggest constraints on the use of some of them (as in the case of resolution; cf. also Cole (1969) 30-31) and is judicious in their application; but his procedure does not free him from inconsistencies any more than his predecessors were free of them. For example, he assumes hiatus before the caesura in Andr. 24 tópper cíti | ad aédis (plausible on linguistic grounds if the prepositional phrase ad aedis was set off by a prosodic break across which elision was not licensed); simultaneously he allows elision across the caesura in order "to avoid recourse to hiatus, resolution, or both" (112), as in 34.3 múlta áli-a _in ísdem, where elision is posited in exactly the same environment as in the preceding example with hiatus (and hiatus is posited between multa and alia to avoid the stress-clash of múlt(a) ália). In e.g. CIL $\mathrm{I}^{2} 10.1$ quei ápicem_insígne | Diális
elision is posited after - $m$, but not in Naev. 25.1 postquam avem | aspexit or Andr. 11 pártim érrant| nequínont, which he stipulates is an example of "liaison" or resyllabification of the coda $-m$ as the onset of the next syllable (113). This would be descriptively, but not explanatorily, adequate. The underlying issue here is whether one expects the meter to have essentially demanded elision when possible (as is normally the case with the quantitative meters), in which case all instances of hiatus should have a coherent linguistic explanation; or whether one posits elision as the marked situation, in which case hiatus becomes the default and elisions need justification.

Much more fruitful discussion will surely ensue once the revised work is published; even now, no researcher of ancient Italic metrics can afford to ignore it. In particular, since Mercado is mostly interested in providing a synchronic account of the Saturnian, many questions remain about its diachrony (in spite of Mercado's chapter on comparing it with other Italic poetic remains). In this light the analysis of Coleman ((1998) 10901093) is of interest (mentioned in passing by Mercado, p. 18). Although his programmatic treatment leaves the reader to connect a number of dots, Coleman's basic approach is to regard the synchronic variability of the meter not as the result of a set of optional metrical derivational procedures, but as the diachronic product of successive re-analyses of the meter that resulted from the historical shift to the penultimate stress rule. Thus in the original prehistoric Saturnian, each stressed position corresponded with the beginning of a word; after the stress system changed, the stress template remained but new possibilities of word-distributions were opened up, themselves leading to further re-analyses and the creation of verse types with greater or lesser numbers of syllables. These and other remaining issues will insure that the scholarship on this meter is far from being exhausted.

There is no evidence that the preliterate Italic peoples possessed any tradition of extended oral poetry of the Greek or Sanskrit type (in spite of Romantic-era claims of oral historical "lays," see Williams (1992) 56), and in fact the Sabellic poetic styles described above are much better suited for the short compositions we see them in like epitaphs and curses. It is probably the case that the Saturnian was also restricted to such genres, which makes sense in light of its probable cognacy with some of the Sabellic verse-forms (Mercado (2006a) and (2008)). When Livius Andronicus and Naevius used it for longer compositions, they were innovating. A striking difference should also be mentioned between the Sabellic material and the extant Saturnians, namely a rarity of contiguous alliteration in the latter (alliteration is an "occasional ornament," Beare (1957) 125). Within the preserved corpus, a line like Naev. 6.1 eorum sectam sequuntur multi mortales or a run of second hemistichs consisting of bipartite alliterative phrases like in the epitaph CIL $\mathrm{I}^{2}$ 1531: asper afleicta / ... /... leibereis lubentes / ... maxsume mereto / ... crebro condemnes is exceptional. Commoner are instances like Naev. 20.1: blande et docte percontat || Aenea quo pacto, where the alliteration serves to demarcate structural points in the verse (Mercado (2006a) 33).

On the whole, though, alliteration is much more characteristic of Latin poetry than it is of Greek (cf. Williams (1968) 693), which is surely rooted in the native tradition. And if one knows where to look, it is possible to find seven-syllable sequences combined with bipartite alliteration; note Plautus, Capt. 903: quanta pernis pestis ueniet, quanta labes larido, which has two bipartite alliterative phrases embedded in seven-syllable $(2+2+3)$ sequences, pernis pestis ueniet, quanta labes larido. Compare also traditional phrases like kalo Iuno Couella "I call (thee), Juno Covella" that was intoned on the

Calends (Fortson (2003) 73 with n. 35). Again, there is always the possibility that such resemblances are due to chance, but the matter deserves investigation. Faliscan, now widely considered a dialect of Latin (see most recently Bakkum (2009)), has in the famous inscription foied vino pipafo cra carefo "today I will drink wine, tomorrow I will do without" also a seven-syllable clause or colon followed by a shorter one that has often been cited in connection with Saturnians, though Mercado ((2006a) 199 and preceding discussion) is skeptical of any equation of the two.

## Comic Meters

Some aspects of the native poetic tradition that we have been discussing probably shine through in the poetry of Plautus (traditional dates 254-183 BCE), whose works form the largest surviving corpus from the early period of Roman adaptation of Greek meters. Plautus' metrical technique differs considerably both from that of his Greek models and from that of subsequent Roman authors, and opinions have varied widely on how to interpret these differences. Some have maintained that, since Plautus was one of the pioneers in using Greek meters, his generation was still relatively unskilled in this practice and therefore he frequently made mistakes from the Greek point of view. Others have averred that the many "licenses" reflect genuine pronunciations current in the colloquial Latin of the time. A third approach (which complements the second), not so frequently found, is that some of the deviations reflect native poetic compositional tendencies. We obviously stand to gain much more from pursuing the second and third approaches than from dismissing deviations from Greek practice as due to error or incompetence.

Let us now document some of the differences. We may first note that the treatment of the feet is much looser than in Greek. Here we will focus on the commonest meters in Plautus, the iambic senarius (derived from the Greek iambic trimeter) and trochaic septenarius (derived from the catalectic trochaic tetrameter); in spite of the nomenclatural difference, the former can be thought of as the latter with the addition of a cretic at the beginning. Below are two ways of comparing them from right to left: the first shows the identical location of the caesura $(\|)$, the second shows division into metra or dipodies:


Whereas the Greek iambic trimeter limited the number of allowable substitutions, especially of light syllables with heavy ones or their resolutions, in Plautus such substitution is free except in the line-final iambic cadence. The same applies, mutatis mutandis, to the trochaic line. A senarius consisting underlyingly of six iambs could therefore theoretically surface with anywhere from 12 to 22 syllables (though the attested maximum is 18). Many have wondered how it was possible for the Romans to perceive or project an even trochaic or iambic rhythm in lines where the feet can have
such uneven lengths and where the only guaranteed "pure" leftover iambic rhythm is at the end of the line. As Gratwick ((1993) 55-56) has shown, however, we must distinguish between the odd and even short positions (or, put another way, the first and second short positions of each dipody): the replacement of a short by a long is far commoner in the odd positions than in the even positions (and, as per above, forbidden in the last even position). Statistically speaking, then, an iambic rhythm still shines through, but primarily as a cadential rhythm (in the second foot of a given dipody) rather than as a rhythm characterizing the line as a whole. The Roman comfort with anisochronicity in the first five feet of a senarius (or the first six and a half feet of a septenarius) coupled with strict respect for the cadence is of course immediately reminiscent of what we saw with the native style that was flexible in the number of syllables and quantities per metrical unit, though one would be hard-pressed to prove such influence. A similar freedom obtains also in some of the lyric meters in Plautus, where there is on average much greater freedom than in Greek in substituting longa (or their resolutions as two shorts) for short positions (see further below).

Second, there are frequent apparent mismatches in Plautus between actual syllable weight and the weight that a given metrical position demands. The most familiar of these results from the process called iambic shortening or brevis brevians, where the heavy second syllable of an iambic sequence (either a full iambic word like homō, an iambic sequence at the beginning of a longer word like modestus, or a phrase-initial iambic sequence across word-boundary like sed ostendere or quod ad uos) must scan as light. Iambic shortening was a linguistically real phenomenon in the history of Latin (whence the short ultima of such words as mibi tibi bene male); disputed has been whether all instances of it in Roman comedy are to be attributed to linguistic factors or whether some of them are artificial poetic licenses. Concerning its appearance specifically in Plautus, the most likely theory in this writer's view is that iambic shortening is linguistically real and affected iambic strings that were destressed or whose stress was subordinated to that of surrounding material, whence its most typical appearance in pronouns, particles, sentence adverbs, and strings of clitics (Fortson (2008) ch. 7, building on Devine and Stephens (1980); note that, contrary to usual descriptions, the heavy syllable itself can be underlyingly stressed, as in modéstus above and in numerous other examples that are difficult or impossible to emend out of existence). The residue of full-content (and therefore typically fully stressed) lexemes exhibiting the phenomenon becomes more tractable when likely effects of pragmatic foregrounding/backgrounding on sentence prosody are considered. In a study of iambically shortened nouns (Fortson (2008) ch. 8), it was tentatively proposed that nouns expressing "old" (thematic) information were more likely to be shortened, evincing prosodic subordination to new or contrastive information that received greater emphasis. (Similar ideas were adumbrated at least as long ago as Lindsay (1922) 52-65, and cf. also Drexler (1969) passim) The fit is, however, not perfect, and many cases still require further investigation; but if the approach is correct, this example of a Plautine metrical "license" can allow us to recover (in a valuable and perhaps unparalleled way) the prosodic effects of information flow in a dead language.

Many other phenomena in Plautus, especially the metrical "laws," shed further light on sub-phonemic details of Latin pronunciation and phrasal organization. When a longum is resolved into two shorts, no word boundary may intervene (the law of the
split resolution or Ritschl's law); but if the word-break occurs inside a clitic group (type ut opiniōne), the split resolution is licensed. This may provide evidence for resyllabification of coda consonants in clitic groups (Fortson (2008) 7-8), resulting in a phonetic juncture that for the purposes of the meter was indistinguishable from that between syllables within one and the same word. The final position of the first and second dipody of the senarius (and equivalent positions in the septenarius) could be filled by a brevis in longo or light syllable counting as heavy (Jacobsohn's law); these breves in longo typically come before a syntactic boundary and presumed prosodic break and might provide evidence of phrase-final lengthening effects or lack of resyllabification of coda consonants at the ends of prosodic phrases (Fortson (2008) 86ff.). Other phenomena are discussed in Ceccarelli (1991), Questa (2007), and Fortson (2008) (with some necessarily speculative conclusions).

The most frequent meter in Plautus is the trochaic septenarius. It has often been averred that this meter is not merely the Roman adaptation of the Greek catalectic trochaic tetrameter, but also continues the so-called versus quadratus or "square verse" attested in popular and military songs. This consists of four trochaic metra (type Postquam Crassus | carbo factus, | Carbo crassus $\mid$ factus est); compare a literary example, Pl. Men. 1015: uos scelesti, | uos rapaces, | uos praedones.:: | Periimus (offered in Gratwick (1982a) 92). However, not all are agreed that the versus quadratus is a native form, since similar material is found in Greek and could have diffused into popular oral culture early on, and all the attested examples are from later periods. See Gratwick (1982a) 92-93 and Coleman (1998).

Requiring separate treatment are the lyric or canticum meters of Roman comedy. (Technically cantica include all meters besides the iambic senarius, the only meter that lacked musical accompaniment, but in Plautine studies the term usually also excludes the "recitative" trochaic septenarius.) The scansion and colometry of some cantica are still imperfectly understood due to problems in the manuscript transmission and the high degree of polymetry, which brings with it greater than usual uncertainty in when to invoke exceptional scansions like iambic shortening. (We are, however, on considerably surer footing overall than in the days of Leo (Leo 1905) and Lindsay, thanks in part to Cesare Questa's efforts, culminating in Questa (1995).) The sources of Plautus' lyric meters are not fully clear. Probably they originated with meters used in Atellane farce, which themselves may ultimately go back to the lyric meters of Greek Old Comedy as brought to Italian shores in earlier times. The New Comedies that Plautus based his plays on had almost no songs and did not use most of these meters; this has led to the widely held theory (Sedgwick (1930) 102ff.) that his early comedies (e.g. Miles Gloriosus, Asinaria), with their smaller number of songs and less metrical variety, follow the Greek models more closely, and that only as he matured did he add more original polymetric song and dance of a peculiarly Roman flavor. In infusing his works with more song than their models, Plautus was not alone: Plautus' successor Caecilius did the same, as did Ennius in his tragedies (Williams (1968) 361-365, 693; Gratwick (1982a) 116, 133). With the more reserved Terence, however, we return to the aesthetic of Greek New Comedy: his six plays contain a total of only 25 verses of song (Duckworth (1952) 380).

In the cantica, too, there are considerable deviations from Greek practice. First, the combinations of different metrical types are in many cases without antecedents in Greek. Plautus is quite fond of what are basically pairs of verses whose second member is a short
colon of some kind, and one wonders again if there is any echo of a Saturnian-like aesthetic in this. Second, strophic responsions are extremely uncommon. Third, cantica contain many typical features of the traditional Latin carmina, such as assonance, parallel phrases, repetition, and alliteration (Williams (1968) 361-365, 693). Because of their metrical challenges, the cantica have tended to be neglected, and a full investigation of them with an eye to identifying native poetic inheritances would doubtless be revealing.

Perhaps the most widely discussed issue concerning the relationship between Plautine metrics and spoken Latin is the interplay between the supposed verse-ictus or metrical beat and word-stress. This topic actually extends beyond Plautus, and we turn to it next.

## Stress, Ictus, Recitation

As a modern scholarly issue the verse-ictus dates back to Richard Bentley's prefatory $\Sigma \chi \varepsilon \delta i a \sigma \mu \alpha$ de metris Terentianis to his edition of Terence (1726). In this work, among other things, he took schoolmasters to task for two practices. The first was reciting hexameters with stress on the beginning of each foot; Bentley contended that the natural word-accents should be maintained instead. His second complaint was in regard to schoolmasters' neglect of Terence's verses, which he said were actually easier to teach pupils because they closely resembled English iambo-trochaic verse. In this way, ironically, the very thing Bentley militated against in the case of hexameters was applied to comic iambo-trochaics - a regular stressed verse-ictus on the English model. Subsequent scholars extended this to include the hexameter (more or less reversing Bentley's suggestion), and ultimately came to embrace all Latin and even Greek poetry. Soon a doctrine arose summarized by Kapp (1941) 87 as "the assumption that Greek and Latin poets composed their lines for singing or reading with a stressed accent at definite points in each metrical line." Once an emphatic verse-ictus had been postulated, its frequent conflict with the position of word-stresses turned into a scholarly problem. (Bentley himself was quite aware of this already in the case of Terence but was not overly troubled by it.)

Not often does a problem costing so many scholars so many years of toil turn out to be founded on false premises and therefore illusory: the theory that there was a verseictus, never universally accepted, has by now been conclusively discredited. The most recent discussion is Zeleny's ((2008) $1-32$ and $60-82$ ), who adds some additional textual evidence and arguments to those already forwarded by Madvig, Tamerle, Beare, Stroh, Soubiran, and others. As has been remarked on, the debate often took on a nationalistic cast: with some notable exceptions, English (/American) and German scholars, speaking languages with strong stress-accents, were its most ardent supporters; the opposing camp was primarily Italian and French. In what follows, we will review a modest selection of the evidence and arguments and then briefly summarize the prevailing view that stress-patterns and word-shapes alone (i.e., independent of quantity alternations) were decisive for line-construction and to the Romans' sense of rhythm.

Ancient authorities attest clearly to beating (the real meaning of the term ictus) metrical rhythm of Latin verse with the feet or hands, by snapping the fingers, or by elevating the voice (see the testimonia collected in Beare (1957) 63-65). But this was an analytic or pedagogical device and not part of performance practice. Stroh, in a famous study ((1990) 107-108), concluded that originally such physical gestures had nothing
to do with recitation per se, but were simply accompaniments to make podic units perceptible visibly or physically during the analytic (not recitational!) practice of scansion. In scansion, the line was broken up into feet; if pronounced out loud, the feet were spoken as separate units with no regard for the real word-breaks. A Roman, if reading these out loud, would unconsciously apply his native stress rules to each of these sequences of syllables, resulting in, e.g., Ármaui rúmqueca nóTro iaéqui primusab óris. In Late Antiquity, after phonemic quantity had broken down in the living language, a stress on the beginning of each foot became a necessary expedient for determining proper versification (cf. Sergius GL IV.522.25ff. on how scanning can help determine which syllables are long by nature). Our calling this an "ictus" is also a misnomer: as Stroh shows elsewhere ((1979) 13-18), our modern notion of reciting Latin poetry with a strong and regular metrical beat (of the kind that Bentley protested for the hexameter) was not established until around 1600 , and only after that did our understanding of "verse ictus" come to encompass stresses of this kind.

Modern scholarship agrees with the original Bentleyan position concerning the hexameter - that during recitation, words kept their regular stresses and the quantitative alternations were not highlighted (see the references in Becker (2004) 316 with n. 13). Direct evidence for this has been seen in the fifth-century Oxyrhynchus papyrus PSI 1.21 (= CPL 11), which contains two passages of Virgil where all but one of the word-stresses are marked with accents and there is no indication of any ictus. One should also add P.Ness. 2.1 (= CPL 8), a group of papyri unearthed in 1937 at Auja el-Hafr (present-day Israel; see Casson and Hettich (1950)) containing passages of Virgil arranged columnarly (normally one word per line) with facing Greek glosses; word stresses are sporadically marked throughout. Several passages from Cicero (most recently treated in Zeleny (2008) 68ff.) show that marking metrical rhythm was absent from performance and only distinctions in quantity were perceptible to an audience. All the other ancient reports are consistent with this.

Supporters of the theory that recitation of verses could shift stresses from their natural positions to metrical ictus positions have pointed to a comment by the third-century grammarian Sacerdos (GL VI.448.20ff.): "while beating out (percutientes), that is, scanning, verses, from time to time we pronounce accents differently from when we place them on words individually"; he offers the example of toro and pater in Aeneid 2.2 (Inde toro pater Aeneas sic orsus ab alto), which are stressed tóro and páter normally but (he says) toró and patér when scanning this line. Though something is awry with his ictus on patér (see Zeleny (2008) 63-64 with n. 152 for four possible interpretations), it is clear that Sacerdos is referring to scansion, not recitation. Remarks by Quintilian (Inst. 1.5.28) and Sergius (GL IV.484.2) have also been adduced regarding the penultimate stress placed on, respectively, uolúcres $(A .4 .525)$ and latébras ( $A .2 .55$ ) when reading these lines, as opposed to normal antepenultimate stress. But this also has nothing to do with a verse ictus. Ordinary nolucres and latebras had tautosyllabic muta cum liquida (no. lu.cres, la.te.bras) as per the usual syllabification rules, resulting in antepenultimate stress because the penults were light. But in poetry these clusters could optionally make position and be heterosyllabic (uo.luc.res, la.teb.ras) in order to fit the last three positions of the line; the alternative syllabification naturally attracted the accent to the penult. (Some have interpreted the scansion as reflecting poetic lengthening of the penultimate vowel, which would have had the same accentual effect.) See Kabell (1960) 28 n. 25.

The question of ictus/accent agreement and clash found its chief battleground in the pages of Plautus. Agreement of (surmised) ictus and accent is considerably more common than clash here, leading a long line of scholars to claim that he strove for coincidence wherever he could and to devise sometimes desperate hypotheses explaining away the clashes. In Terence, matches are even more frequent (Gratwick (1982a) 124). At the ends of lines, clash was essentially unavoidable; the line-final ictus can never coincide with a word-accent except when the final position was filled with a heavy monosyllable, which it only rarely was. For longer words at line-end (type èuenit with stress on the antepenult), one common claim was that there was a secondary stress on the final syllable, rendering the clash illusory. Evidence from syncope of medial syllables (type caldus < calidus, Spanish niebla < nebula) provides some support for this notion, but the explanation fails in the case of the many lines ending in an iambic word (over a third of the total, a number that only increased in later writers; Soubiran (1988) 431). These and practically all other mismatches were accounted for under a much grander theory, promulgated in particular by Fraenkel (1928) but adhered to by several others (e.g. Sturtevant (1940) 183), that the ictuses actually reflect re-accentuation or shifting of word-stresses within phrases. Although certain stereotyped, prepositional, and univerbated phrases unquestionably or arguably did undergo such stress-shifts (whence e.g. ádmodum < ad módum, ílico < *in (st)lócō), there is no inner-Latin or cross-linguistic support for a productive process of stressing whole phrases according to word-level stress rules. (At most, there is some evidence, from iambic shortening, of subordination of certain lexical accents relative to others within a larger phonological phrase, but no evidence of any wholesale shift in the position of stresses; see Fortson (2008).)

In the hexameter, ictus/accent agreement is the rule in the last two feet, while clash is the rule especially in feet two through four (agreement is more common in the first foot, Sturtevant (1940) 184). This led to a widely repeated claim that conflict earlier in the line was intentional: the poets are said to have desired a movement from clash and tension early in the line to peace and resolution at the end. According to Sturtevant ((1923)52), many words that because of their shape could only ever receive an ictus on an unaccented syllable (e.g. deōs) were relegated to the beginning of the line so as to save harmony for the end; the poets "thereupon made a virtue of necessity and actually preferred clash in the earlier part of the verse, in order to give their poetry the air of aloofness from common speech which was traditional in heroic verse." This is extremely implausible (note Zeleny's pithy critique, (2008) 74 n . 174).

It is still worth issuing the reminder that the observed distribution of stresses in the hexameter is largely epiphenomenal. Stressed monosyllables were avoided at the end of a line after Ennius, meaning the second-to-last syllable was almost always the (stressed) heavy penult of a two- or three-syllable word. (Line-final stressed monosyllables were not avoided so as to prevent ictus/stress clash, but because they upset the typical cadential stress pattern - a pattern increasingly favored over time, see below. There are at any rate not many full-lexical monosyllables in Latin and even fewer appropriate for poetry. Unstressed line-final monosyllables were equally inappropriate because they are mostly proclitic, and Latin poets from Plautus on - except for the satirists; Raven (1965) 102 avoided ending lines with proclitics because of the natural prosodic break that line-end entailed.) Working backwards, this means the initial longum of the fifth dactyl is usually a stressed heavy penult or antepenult as well.

The placement of the caesura is largely responsible for the lack of agreement earlier in the line. From Ennius' time on it occurs by far most commonly after the first longum of the third or fourth foot (penthemimeral or hephthemimeral caesura). The penthemimeral is also called "masculine," in contrast with the "feminine" caesura - - $\mid$; Skutsch ((1985) 46) in fact names the high proportion of masculine caesurae over against Homer as Ennius' most striking departure from epic practice ( 80 percent masculine as compared with less than 45 percent in Homer). To be sure, the general trend in Greek hexameters from the fifth century BCE onwards was a sizable increase in the use of masculine caesurae (West (1982) 153), but Callimachus, the major post-Homeric influence on Ennius, bucked this particular trend (rate of feminine caesurae 74 percent). The presence of a penthemimeral caesura has repercussions farther back in the line: the second half of the preceding foot must be filled either with the heavy penultimate or the light penultimate and antepenultimate syllables of the same precaesural word; in either case, the word stress would fall in this part of the foot. That in turn means the preceding strong time of the foot would be filled by a word-end (or by an unaccented ante-antepenultimate syllable).

Instead of poets striving for particular relationships between word-stresses and the nonexistent ictus, what we see instead is the favoring of particular patterns of stressed and unstressed syllables; over time these patterns became in some cases canonical. The evolution has nothing to do with Greek models, but was home-grown on Roman soil and "largely bound up with the accent" (West (1982) 189). This is most obvious in the cadence. In Ennius, lines ending in trochaic or spondaic disyllables or trisyllables with light penult were strongly preferred, which greatly constrained the variety of accentpatterns: 92.5 percent of his lines end with a word-stress on the beginning of the fifth and sixth feet (the familiar adonic clausula translated into a stress pattern). This rate only rises as one moves into the first century BCE and subsequent periods, to 99.5 percent in Virgil, 99.6 percent in Ovid, and ultimately even 100 percent at times in the Silver Age (certain books of Lucan and Statius); see Sturtevant (1923) 57. Thus line-ends of the type ígnis máre férrum, with a different stress pattern from the norm, become more than ten times rarer in Lucretius and Virgil than in Ennius (Humphreys (1879) 52; Sturtevant (1919) 383; Wilkinson (1940) 35). In other meters besides the hexameter, we see similar tightening of practice: ending pentameters with a disyllable rises from 39 percent in Catullus to 100 percent in Ovid (Wilkinson (1940) 38) which restricted the cadence to a dactyl-trochee-iamb stress pattern (type córpus ináne rógo, mórs adopérta cáput).

It is not surprising that stress was so important in Latin poetry (even if not in quite the same way that supporters of the ictus/accent theory imagined): all the linguistic evidence strongly indicates that Latin had a strong expiratory stress-accent throughout its history (not just in its prehistory and in later Antiquity, contrary to a longstanding view), quite probably secondarily accompanied by change in pitch-contour relative to unstressed syllables. It was at any rate not a melodic accent as in Greek.

We do not want to oversimplify the poets' technique; regard for accent was not the only factor that influenced the evolution of the cadence. Several verse-end types used by Ennius and Lucretius having the favored dactyl-spondee stress pattern were all but abandoned later. Thus Ennius freely ends lines with quadrisyllables of the shape opulentae, which Virgil strongly avoids doing; but, as Leumann ((1977) 250), following Nougaret, points out, Virgil avoids such words in general if they would have followed a stressed
monosyllable or longer elided word with stressed ultima (types dī genuērunt, aeu(om) agitābant Enn.). Quintilian (Inst. 9.4.64) tells us that words filling two feet were felt to be effeminate at sentence-end; perhaps dī genuērunt was considered equivalent, but this goes only so far in explaining the line-internal avoidance. What might be relevant is the word-break after the first position in the fifth foot which was generally avoided; of the three types of line-ends noted by Wilkinson as only "occasional" in Latin hexameters ((1940) 35), two have a word-break there; of the 15 "rare" and unattested types (35-36), fully eight have a word-break there (one of which has an elided syllable, ment (em) animumque). Why a word-break after the fifth long was perceived to make the cadence improper or at least inferior is what really needs explanation, especially since a "feminine" caesura within the second half of the foot was perfectly licit (types arma requirunt, nocte per umbras).

It is this insistence on a regular and predictable cadence that shines forth as the most salient feature of all the hexametrists and that provides the meter, especially in the context of the variability of the early part of the line, with its true Roman stamp. This was ably emphasized by Engelbert Tamerle in vol. 1 of his Der lateinische Vers (1936) 21, non vidi, quoted in Zeleny (2008) 26 n . 31), who pointed out the important additional fact that these cadential rhythms and word-shapes are specific to the cadence - they are not typical of other two-foot sequences in the line or met with at (line-internal) sentenceends. Tamerle also attributes the increasing desire to begin lines with dactyls to distinguish line-beginnings from line-ends (apud Zeleny (2008) 225 n .408 ). In all respects these practices differ markedly from those of the Greeks. (Absolutely regular stress every four moras was strongly avoided, probably as monotonous, whence the rarity of a line like Lucr. 1.674: dé nibilóque renáta nigéscat cópia rérum, cited in Zeleny (2008) 18.) We have seen this same cadential strictness in the other meters discussed above - both Plautine iambo-trochaics (though the Greeks also prohibited substitutions in the last two positions of the line, it was only here that their strictness was adhered to by the Romans, not earlier in the line, as we saw above) and the Saturnian, and if any native practice is still reflected in the hexameter, this may well be where we see it. (Coleman (1998) 1094-1095 has suggested that certain hexameters with five stresses, such as Ennius' matronae muros complent spectare fauentes or Virgil's Italiam fato profugus Lavinaque uenit, are attempts to incoporate a Saturnian aesthetic. Though an intriguing idea, at least in the case of Ennius, the claim seems odd given his scornful rejection of the Saturnian at Ann. 206-207. Not all will even agree that the Virgilian examples sound like Saturnians. Though both authors are in many ways indebted to certain aspects of native Latin poetic technique, these particular similarities are probably coincidental.)

## Conclusion

When immersed for too long in the sometimes dry business of metrical analysis and distributional percentages and quantity patterns, one can lose sight of the art and the beauty of these cultural monuments, which were the poets' primary creative purpose. The danger exists today as much as it did when Wilkinson opined ((1940) 33) that Virgil did not start the Aeneid by writing *Arma uirumque cano qui Troiae primus ab oris
because he "was at pains to make ictus and accent conflict in the fourth foot where there was a choice." No reader of this survey needs to be told the degree to which such a statement trivializes the artistry of this most famous of Roman poem-openings - how essential it is that Troiae be clause-initial to balance its sentence-final mate Romae, which is simultaneously the destination of the journey traced by the sentence as well as the city that must be equated with Troy (compare altae moenia Romae with Troiae sub moenibus altis in line 95, cf. Morwood (1991) 212). Our greatest challenge in analyzing these meters is the fact that the corpus is not mechanically rule-generated output. Great art breaks rules. But this fact is not incompatible with modern analysts' desire for cut-anddried, testable frameworks, as the artists were not also unprincipled. As we get closer to understanding their technique, we can set into relief the greatness of their achievement whenever they left the pedestrian in pursuit of the empyrean.

