

Metricae

Vindicating Quintilian.
Latin Has A Pitch Accent!

A. P. David
Independent Researcher

Abstract

Latin grammarians borrowed terms from Greek ones to describe their native prosody; so did Latin poets use Greek metres. This is not only because they admired or fetishised the ancient Greeks. The main reason they borrowed the Greek accentual descriptors and metres is because they *worked* for Latin. The nature of the prosody of Latin and Greek was almost identical: a recessive contonation of changing pitch. It is false to claim that classical Latin had a stress accent, except as a byproduct of pitch contours married to quantities.

Palavras-chave: Ancient prosody, Latin accent, Greek accent, Quintilian, Virgil, Indo-European linguistics.

Resumo

Os gramáticos latinos tomaram emprestados termos dos gregos para descrever sua prosódia nativa, assim como os poetas latinos valeram-se de metros gregos. Isso aconteceu não apenas porque eles admiravam ou fetichizavam os gregos antigos: a principal razão pela qual eles emprestaram os descritores de acentuação grega é porque funcionavam para o latim. A natureza da prosódia do latim e do grego era quase idêntica: uma recessiva contonação de mudança de tom. É falso afirmar que o latim clássico tinha um acento de tonicidade, a não ser como um subproduto de contornos de altura unidos a quantidades.

Keywords: Prosódia antiga, Acentuação latina, Acentuação grega, Quintiliano, Virgílio, Linguística indo-europeia.

Latin grammarians borrowed terms from Greek ones to describe their native prosody; so did Latin poets use Greek metres. This is not because they admired and fetishised the ancient Greeks. No doubt they did indulge both those impulses, to admire and to emulate. But the main reason they borrowed the Greek accentual descriptors and metres is because they *worked* for Latin. The nature of the prosody of Latin and Greek was almost identical: a contonation of changing pitch. It is false to claim that classical Latin had a stress accent, except as a byproduct of pitch contours married to quantities. This is, at last, to be true to the direct testimony of Quintilian. And this is why Latin prosody could reinforce the same quantitative foot-based metres that were, to be sure, developed natively for Greek.

1. The theory

A point of departure for the new theory of the Greek accent was W. S. Allen's comparison of the Vedic *udatta-svarita* system with the classical Greek descriptions and prosodic notation. The heuristic basis of such comparison is already the comparative-reconstructive framework of Indo-European linguistics. In light of such a context it is not strictly necessary, but all the same desirable, that comparisons between particular cognates yield fruit in the descriptive analysis of other cognates further afield. The procedure is not deductive but inductive, and not subject to prediction, so the interconnectedness and interoperability of models proposed in a particular comparison, applied successfully also to other cognates, is a welcome self-buttrressing to historical theory. Sometimes the whole

process is prone to disparagement as ‘circular reasoning’; it is difficult not to be biased in the search for corroboration of a proposal.

Induction of descriptive formulae, as an intellectual process, is, however, circular, and must not apologise for participating in the divinity of that figure. The only sort of ‘proof’ that a descriptive principle is in fact a principle, lies in its having distinct empirical consequences—that is, in this case, manifestations that solve or otherwise illuminate the description of known cognates. This is what we shall find, resolution and illumination, when we apply the model of the Vedic contonation to the quantities of Latin, and re-examine the question of Latin stress.

A multiplicity of distinctions and terms, produced separately by philologists, linguists and metricians, can be confusing. Allen’s term ‘contonation’ refers to the combination of a rising tone and a falling tone, in that order, over one syllable or two successive ones. The Vedic rising tone, *udatta*, occupies only one vowel mora, but the *svarita* or down-glide could occupy both moras of a following syllable. A ‘mora’ indicates an element of vowel quantity; its existential status depends largely on its utility in elegant descriptions. A short vowel has one mora (*níhil*), a long one has two (*râri*).

Metricians distinguish between ‘heavy’ and ‘light’ syllables. Syllables containing long vowels are heavy, but closed syllables with short vowels also contain the equivalent of two moras, and are considered heavy from the perspective of metre. Philologists somewhat confusingly refer to these vowels as ‘long by position’. Short vowels followed by a mute and a liquid, however, are considered ‘doubtful’ or ‘common’; this is because such syllables can be either heavy or light, depending on their placement in the thesis (another ambiguous philological term, by which I refer to the ictus-bearing downbeat of a foot) or the *arsis* (the shorter or weak part of the foot, or upbeat). This ability stems from the fact that a mute + liquid can be seen either as divisible, closing one syllable and opening the next, or together as the initial plosion of the ensuing syllable. One should note that on my account, the ‘doubtfulness’ of such syllables closed by a mute and liquid is not a reflection of anything necessarily intrinsic, but only of the convention in Greek and Latin of using such syllables in either the *arsis* or the thesis of a foot, and so to be performed either as short or as long by a poet’s arrangement.

I have argued that *udatta* corresponds to Greek $\acute{\alpha}\tilde{\nu}\acute{\alpha}$ and *svarita* to Greek $\beta\alpha\tilde{\nu}\acute{\alpha}$.¹ The circumflex denotes a situation where the pitch rises on the first mora of a long vowel and drops on the second, *udatta* + *svarita* on one vowel. Thus the Greek prosodic notation is consistent in marking the mora where the voice rises, but only in this one instance (the circumflexed vowel) does it

1 A. P. David, *The Dance of the Muses: Choral Theory and Ancient Greek Poetics*, Oxford: Oxford University Press, 2006, 55 ff.

indicate the following drop in pitch. Allen suggests that the two elements fused in these situations, with the down-glide predominating; he cites Sanskrit grammarians who describe the cases corresponding in Vedic to the Greek circumflex simply as *svarita*.² Meanwhile, it is important to note that despite its name, the ‘grave’ sign in Greek written texts serves not to mark the ‘heavy’ *svarita*, which is an automatic down-glide following the *όξύς-udatta*; rather, it marks the suppression of the pitch-rise on the ultima of a non-prepausal word. In Greek sandhi, if the voice does not have ‘room’ to descend in pitch within the word, it is not permitted to rise: what cannot come down, must not go up. This ‘border rule’ makes the terminal contonation definitive of a Greek prosodic unit, which for lack of a better term we may call a ‘word’.

Hence the Greek version of the *svarita* is only indicated in the circumflex, where the pitch-rise occurs on the first mora of a long vowel. An acute sign on a long vowel simply indicates a pitch-rise on the second mora; any subsequent down-glide on the following syllable, whether the vowel is long or short, in this situation or any other, is left unmarked in writing. It should be noted that trochaic shapes with an initial closed syllable, containing a short vowel, are marked with an acute sign, on the only vowel mora available to be marked (e.g., *ἄνδρα*). Textual and metrical evidence suggests that the contonation was completed within such closed penults in trochaic disyllables, in that a new contonation may begin on the immediately following syllable if an enclitic adjoins, e.g. *ἄνδρά μοι*. But this need not happen in polysyllables — in *ἄνθρωπος*, e.g., the down-glide has to occur on the penult, not within the antepenult, as only one vowel mora may follow the end of the contonation in Greek.³

The new theory of the classical accent depends on the idea that *accentual prominence derives not just from rising pitch, but from the combination of pitch change with quantity*. Hence a down-glide over a closed syllable or a vowel of two moras would be more prominent (‘barytone’) than the preceding rise on a single mora. If, however, the syllable following the rise was short, or there was a following pause, the syllable containing the rise would itself register as more dynamically prominent (‘oxytone’). Although the combination of pitch change and duration is a feature of stress, along with intensity, in these contexts the weakening of adjacent vowels that is also characteristic of stress does not occur. Hence such phrases as ‘dynamic tone’ or ‘tonal prominence’ are in order for this peculiar prosodic phenomenon.

It was found that positions of tonal prominence described by the new theory corresponded exactly with the positions predicted for an hypothesised stress in ancient Greek by Allen’s study of the ends of lines of stichic verse. His rationale for the study follows:

2 W. S. Allen, *Vox Graeca*, 3rd edn., Cambridge: Cambridge University Press, 1987, 122.

3 see David, 65.

Since Greek metrical patterns, unlike those of classical Latin, were, so far as we know, evolved specifically for Greek, it is likely that they represent, in Meillet's terms, 'a stylization of normalization of the natural rhythm of language'. So it is probable that any such patterns of metrical reinforcement would tend to agree rather than conflict with any similar patterns in speech. If this were so, then one might expect that particular syllabic word-patterns would tend to be placed in particular relationships to the strong/weak positions of the verse, even though their purely quantitative structure might qualify them for other placings. And conversely, if one were to discover a strong tendency of this type, it would suggest the presence, in both verse and speech, of some factor additional to quantity—whatever the nature of that factor might be.⁴

I describe his result in this way:

The study generates a remarkable formula that neatly reveals the 'preponderant tendencies' of correspondence between particular syllables and the strong positions of feet; [Allen] claims that these tendencies 'approach complete regularity.' ... As to the nature of this prominence, Allen is obliged to rule out both high pitch and length; on his understanding, the former belongs to the accent, while the latter is an independent phonemic variable. He concludes: 'of the three common prosodic parameters ... this then leaves only the dynamic, i.e., stress.'⁵

A. M. Devine and L. D. Stephens described Allen's study as 'the first work in the field of Greek metre that can truly be said to understand the requirements of scientific method and theory construction.'⁶

My own theory for Greek accent happily follows, entirely from two strands of Allen's work not connected by him:

It turns out, however, that the first four of Allen's [five] prominence rules constitute the rules for locating either the ὀξύς or the βαρύς accent as I have explained them, in all classes of Greek word with the characteristic recessive pitch accent, as well as two other types (in the traditional nomenclature, long-final oxytones and perispomena). In all of these cases, the syllable primarily stressed according to Allen's rules is also the primarily accented syllable according to my theory, whether ὀξύς or βαρύς. The only exceptions to this correlation—the only cases in which the stress rules do not predict the location of the ὀξύς accent in an ὀξύς ['oxytone'] word, or the βαρύς accent in a βαρύς ['barytone'] word—also involve [certain] exceptions to the

4 Allen, 132.

5 David, 69.

6 A. M. Devine and L. D. Stephens, *Language and Metre*, Chico, Calif.: Scholars press, 1984, 26.

recessive accent rule. The true nature of Allen's prominence is thus revealed. There appears to be a direct connection between the hypothetical stress and the traditional pitch system.⁷

2. The Latin case

No argument is needed, however, for the idea that Latin had a stress accent. This is the received wisdom. Can any insight into this supposed Latin stress accent be gained from the comparison between Vedic and Greek, by applying the model of the contonation?

The Latin rules are straightforward: disyllables are stressed on the penult, polysyllables on the penult when the penult is long, but on the antepenult when the penult is short or 'common' (closed by a mute and a liquid). According to Gildersleeve and Lodge (sec. 15), enclitics 'are said' to shift the accent of words accented on the penult to the ultima (prior to the enclitic); but in their own estimation, it is 'more likely' that they maintained their 'ordinary' location prior to the enclitic.⁸ We should consider this enclitic environment in light of the contonation, in case the re-analysis helps us decide on the choice of accentuation.

Gildersleeve and Lodge give the following samples, with acutes here marking the stressed syllables: *équus*, *mandáre* (to commit), *mándere* (to chew), *íntegrum* (mute+liquid), *circúmdare*, *supérstitēs*. Note that on the traditional understanding, accent on the ultima never occurs in Latin as it does in Greek; hence the contonation is always completed within the word, and its onset is never suppressed, as is the case with ultimas marked grave in Greek writing.

It turns out that formulating a rule in terms of a Latin contonation is also straightforward: *the contonation is universally recessive, and must begin (that is, the pitch-rise must occur), where possible, on the second mora before the ultima*. Unlike in the Greek version—crucially—the rule is indifferent as to the quantity of the ultima. Tonal prominence in Latin then becomes an automatic consequence of the possible conjunctions of pitch change and quantity. Once again we should expect two kinds, corresponding to Greek oxytone and barytone, where 'barytone' also includes the special case of the circumflex. *When the down-glide occurs over more than one mora, it is prominent; otherwise the pitch rise is prominent*. This prominence is interpreted as the received Latin stress. Let us take up the examples.

Equus has a pitch pattern that is oxytone on the penult: *équùs*. The acute in my notation indicates rising pitch; the grave does not represent a suppressed acute, as in Greek, nor does it mean 'unaccented' as in a prevailing interpretation, but literally the 'heavy' down-glide in pitch that immediately follows the rise.

7 David, 72.

8 B. L. Gildersleeve and G. Lodge, *Latin Grammar*, London: St. Martin's Press, 1895, 8.

In this case, it occurs over only one mora (-*quûs*). Bold print indicates prominence according to the proposed rule. Clearly, we have a match for the stress rule. Disyllables appear to present no issues, but the iambic disyllables, short-long, do present a conundrum. We shall reserve its discussion to the end.

Mandâre, with its long vowel in the penult, would require that the contonation begin at the beginning of that vowel. Hence we could represent its prosody with a circumflex, rise + fall: *mandâre*. Again, a match for the stress rule.

In *mandere*, on the other hand, two moras receding from the ultima land on the antepenult, with a pitch-rise followed by a light syllable for the down-glide: *mândère*. In the other examples, similarly we have pitch-rise, prominent because immediately followed by a light syllable, occurring on the same syllable as expected from the stress rule: *întègrum*, *circúmdâre*, *supérstîtēs*. All these prominent syllables are the same as the ones supposed to be stressed. Hence it is reasonable to conclude that a pitch accent in the shape of a recessive contonation, when applied to the quantities of a Latin word, causes the attested stress pattern and received rule.

There exists, however, a different way to formulate the contonation rule which equally well replicates the received stress rules. It is as follows: *the contonation is universally recessive, and must begin (pitch-rise must occur) on the antepenult wherever possible*. When the penult is short or light, this rule predicts the same prosodic shapes and locations for prominence as the stress rule; the difference in the analysis comes when the penult contains a long vowel. *Mandâre* becomes *mândâre*, where the second version contains what I call in the Greek analysis a ‘post-acute barytone’, a svarita over two moras, rather than a circumflex. The circumflex would then only occur in Latin on disyllables like *rârî*. The first formulation produces many more instances of the circumflex in stressed penults; the second predicts post-acute barytones in the same locations. Both formulations result in tonal prominence on the same syllable that is supposed to be stressed. Is there any historical evidence that can help decide between the two, between circumflex and barytone, and the formulation of the recession in terms of moras rather than syllable position?

3. Quintilian’s witness

It is often claimed that Quintilian’s description of the Latin accent is hampered or confused by the use of descriptive terms borrowed from Greek grammarians:

The Roman accent was a stress, while the Greek was a pitch accent... Roman grammarians borrow the Greek terminology and speak of accents in terms of pitch.⁹

9 Harold Edgeworth Butler, *Quintilian. With an English Translation*, Cambridge: Cambridge University Press, 1920.

And in a more recent Loeb edition:

The use of Greek terminology gave rise to considerable confusion and difficulty for the Latin grammarians, who have to use *gravis* for unaccented syllables, and *acutus* both for the tonic acute accent of Greek and for the stressed syllables of Latin.¹⁰

There are in fact three terms in Quintilian's description of Latin prosody: 'acute', 'flex' and 'grave'. The more recent editor does not even mention Quintilian's use of 'flex', one presumes because he is embarrassed to impute to Quintilian the idea that Latin had a circumflex. He is also misleading about Quintilian's use of *gravis*, as we shall see. It is thought that a sort of Greek envy, or emulation, guides Roman poetry and scholarship generally, in this case to the point of misrepresenting the Latin accent as though it were defined by a Greek-style pitch change.

These descriptors are indeed calques of the Greek terms ὄξύς, (περι)σπώμενον and βαρύς. The confusion, however, seems largely to be in the modern interpretation rather than the ancient author. A Latin theory of the contonation will be seen to vindicate Quintilian's use of Greek terms, to describe completely homologous phenomena in Latin in a completely homologous way.

It will be shown in particular that Quintilian does not mean 'unaccented syllables' when he designates them as 'grave', but is using this term to describe specifically the *svarita*, the down-glide of the contonation that automatically follows the pitch rise. In this sense his description, applying Greek concepts in a correct way to describe Latin phenomena, may serve to correct the misdirection caused by the use of this term 'grave' in the notational practice of written Greek manuscripts, where it indicates by a downward angled sign the suppression of an acute, rather than a positive phonic feature in its own right.

In Greek grammar a whole class of words (heretofore pointlessly) were called 'barytone'. Such a word is ἄνθρωπος; under the new theory, we describe this word as 'barytone on the penult.' The voice rises on the antepenult, as indicated by the acute sign, then falls in pitch over the two moras of the long penult. The prominent syllable according to Allen's stress rules is this penult. Latin is supposed to stress a long penult, and for Quintilian this means it must bear the acute or the flex (e.g. *anthrôpus*). Quintilian cites a name of Greek origin that Latin speakers pronounce with apparent error in relation to Latin usage: *Céthêgus*. He cites other names of Greek origin that from his youth were pronounced with pitch rise on the antepenult, although the penult is long, whereas the Latin habit should yield *Cethêgus*. He also cites *Cámillus*, a Latin name that shows this prosody in pronunciation, where the Latin rule expects *Camíllus*.

10 Footnote to translation of Quintilian, *Institutio Oratoria*, 1.5.22-33, tr. Donald A. Russell, *Quintilian: The Orator's Education*, Books 1-2, Cambridge, MA: Harvard University Press, 2001, 135.

The errors in question are described as switching acute and grave—as when *Camillus* is pronounced acute on the first syllable, and so the penult switches from acute to grave—or switching grave for flex, as happens in the penult when *Cethêgus* is pronounced with initial acute. (Quintilian seems always to focus on the pitch pattern of the penult.) Translators err badly in this passage when they have Quintilian say that acute on the initial syllable *Cêthegus* causes the quantity of the middle syllable to change; they presume upon the text—there is no mention of quantity; the only change (*mutatur, Inst. Orat. 1.5.23*) the author is discussing in the passage is the change from one kind of accent to another, not long to short. The middle ‘e’ remains long, but is pronounced grave rather than flex.

It is in fact a salient feature of both classical Latin and Greek accentuation that the accented syllables do not affect the quantity or vowel grade of neighbouring syllables in pronunciation. (There is of course evidence that the historical initial stress in old Latin did produce these effects in unstressed syllables.) In this sense the alleged Latin ‘stress’ does not bring with it the usual most obvious effects of stress upon unstressed syllables, and by itself this suggests its nature may have more kinship with the pitch accent of Greek than is generally thought.

When Quintilian articulates the Latin accent rule, where the acute must occur within the last three syllables of a word (1.5.30-31), but never the last one, it is worth noting how he describes the case of a short penult: ‘a short syllable in this place will invariably have a grave accent, and so will make the syllable which precedes it (the antepenultimate) acute.’¹¹ Note that a grave necessitates an immediately prior acute. This is an odd way of putting things if the story was simply that the acute located the stressed syllable in a word, and that all unstressed syllables are ‘grave’. Quintilian again focuses on the penult, or as he puts it, the middle syllable of the terminal three: whether this syllable is acute, flex, or grave, determines the accentual melody of the whole word. In point of fact, ‘grave’ cannot mean simply unstressed: Quintilian’s usage describes a prosodic phenomenon that is immediately, and necessarily, *post-acute*. The Greek borrowings can present the non-Latinate shape of a long penult that is all the same grave: that is, not ‘unaccented’, and neither acute nor flex (‘accented’), but grave post-acute. In this entire passage (*Inst. Orat. 1.5.22-31*), ‘grave’ therefore refers to the second part of the contonation when it occurs on its own syllable, rather than as part of the circumflex.

Quintilian’s description decides in favour of the first formulation of the Latin contonation rule:

In every word, the acute falls within three syllables, whether these are the only syllables in the word or the last three, and in these it is

11 tr. Russell

either on the penultimate or on the antepenultimate. Moreover, of the three syllables of which I speak, the middle, if long, will be either acute or circumflex; a short syllable in this place will invariably have a grave accent, and so will make the syllable which precedes it (the antepenultimate) acute.¹²

The formulation in terms of moras predicts that closed penults (where the vowel is ‘long by position’) will show pitch rise on the short vowel with the contonation completed within the syllable (*circus*), and that naturally long penults will show the circumflex (*mandâre*). It seems clear that Quintilian excludes from native Latin the shape of Greek ἄνθρωπος, with rise on the antepenult and long *svarita* or grave on the penult, but remembers this shape from his youth in the pronunciation of certain Greek names in Latin (plus the name Câmillus!).

What emerges is that these three calques of terms from Greek grammar—acute, grave and (circum)flex—are in fact perfectly natural descriptors for the prosody of Latin, as suited for Latin as they ever were for Greek. This is because Latin also had natural quantity in its vowels and a recessive contonation, which results in these three possible effects when the contonation is placed in such a way as to be either disyllabic or monosyllabic. The key difference lies in the fact Quintilian points out: that the acute (the *beginning* of a contonation) is differently restricted in its recession than in Greek; it can never occur on the ultima, and because the circumflex contains an acute, neither can the circumflex land there except in the case of monosyllables. In Greek, the restrictions are on the number of moras allowed after the *end* of the contonation—that is, its immediately trailing βαρύς or *svarita* component—the feature Quintilian calls ‘grave’, ‘heavy’. Hence in Greek there are oxytone final words that can sound with enclitics, and perispomenon words (circumflex-final), neither of which can occur except in particular circumstances in Latin. Quintilian mentions grammarians who encourage pronouncing certain prepositions with acute-final accents, in the case of *circum* to avoid confusion with the noun (1.5.25-7), although he himself treats them as proclitics which lose their accent in favour of the accent of the word governed; he cites *qui primus* (*qui prîmus*) and *ab oris* (*ab ôris*) from line 1 of the *Aeneid*.

There is therefore no Greek envy going on here. In sharing the disyllabic contonation, and therefore being both tonal *and* quantitative, same as Greek, Latin is naturally suited to reinforcing Greek-style metres. Of course there is a level of abstraction involved, if these idiosyncratic metres were simply borrowed rather than grounded in traditional Roman dance practice. Some of the Greek metres had no doubt become classical forms rather than stimulants of a living

12 Ibid.; *Inst. Orat.* 1.5.30-1.

jazz. But the German Mozart set new standards for Italian opera, and brought Italian coloratura to the German *Magic Flute*. Quintilian is not the least bit confused or filtered when he uses the terms acute, grave and flex to describe Latin prosody. Just as in Greek, this prosody in the classical period was genuinely tonal, and did not have the deleterious effects of stress on unstressed syllables.

As I mentioned, the prehistory of Latin *does* show direct evidence of the effects of stress; Quintilian's contemporary forms show the evidence of an antique initial stress upon the following syllable, which persists in the spelling when the accent (mysteriously) became a recessive tonal prominence (e.g., *ínimicus* > **inamicus**). I maintain that there is something as yet unexplained about the emergence of this species of recessive, tonal accentuation across Greek, Latin and classical Sanskrit.

It is possible Quintilian gives us a snapshot that describes only the practice of his day, which may once have been different. He himself speaks about the pronunciation of Greek names that he heard from teachers in his youth, who performed the grave (*svarita*) on a long penult where the *vetus lex*, as he understood it, required a flex. Hence it is possible to wonder how old the old law really was, and if perhaps the practice in the era of Virgil, or in the idiomatic usage of Virgil, may have been different—perhaps more Greek in the sense that it was possible in some cases for the down-glide to occupy two moras. Quintilian, for example, declares solemnly that the heroic verse does not allow an iambus (1.5.29). And yet there is the third word of the *Aeneid*.

4. Virgil

In other writing I have already made the case for the prosody of *canō*. Let us now also add the *Aeneid*'s second word, *virum*—or *virumque* with its influencing enclitic. Both these disyllables are unheroic iambs, where the long final coincides with the thesis of the dactyl. The Latin rule stresses them as *vírum* and *cánō*, however, each accenting in context the second short of their respective dactyls, and leaving the ictus unstressed. This seems an unlikely effect to be intentional in the first line of the poem, for its very first phrase and cadence at mid-line. In the case of *virumque* one grammatical school allows that the enclitic causes the accent to shift to the ictus position, *virúmque*, but we are still left with *cánō* accenting the foot and line audibly out of place. I am well aware that there may be many educated modern generations used to pronouncing *cáno* here, from a distance beyond that of Quintilian's barbarians. But the truth here lies with the Latin contonation.

This is not to deny that Quintilian's 'old law' is not old. It is rather to claim that Virgil's hexameter, like Homer's, was a locus of *excepta* for the sake of the music—*Musae gratia*. Iambic disyllables represent the only shape where recession of the acute portion of the contonation requires that the down-glide occupy a

long syllable of two moras. It seems more than plausible that Virgil deployed such shapes for a rare ultima emphasis. The voice still rises on the short penult, but descends on pitch on the incantation of *cânô*.

The dispute about accentual shifts due to enclitics is also resolved by means of the Latin contonation: the idea that the accent shifts may have come precisely from examples like *vírùmque*, where the enclitic happens to close the final syllable of *virum*. This brings the grave down-glide into prominence, perceived as a shift in prominence from the preceding acute. Such a shift is indeed highly unlikely in cases like *egomet* and *amāreve*, cited by Gildersleeve and Lodge, which the disputed enclitic rule would stress as *egómet* and *amāréve*. The enclitics here do not change the equation of moras, however, and one should expect the old law applied to the whole collocation, in these cases causing no shift: *égomet* and *amáreve*. (In the latter case, however, we see perhaps a change from flex to acute, *amâre + ve = amáreve*.) In this way, analysing in light of the contonation, as I would claim does Quintilian, helps explain an occasional accentual shift caused by enclitics in a completely straightforward way.

There follows a suggested performance text for the opening of Virgil, using acutes for the pitch rise of the contonation and for short vowels in closed syllables, circumflexes for the contonations completed within long vowels, and graves written to follow acutes only on the rare occasions when they are more prominent than the acutes in Virgil. One rediscovers a pattern, familiar to the method from Homer, of syncopation yielding to moments of agreement, but with all the nasalizations and falling cadences of Latin.

Árma vírùmque cânò, Troïae qui prímus ab ôris
Itáliam, fâto prófugus, Lavíniaque vênit
lítora, múltum ílle et térris iactâtus et álto
vî súperum saêvae mémorem lunônis ob îram;
múlta quoque et béllô pássus, dum cónderet úrbem,
inférrètque déòs Látio, génus únde Latînum,
Albánique patrès, atque áltae moénia Rômae.

References

ALLEN, W. SIDNEY, *Vox Graeca*, 3rd edn. Cambridge: Cambridge University Press, 1987.

BUTLER, HAROLD EDGEWORTH, *Quintilian. With an English Translation*, Cambridge: Cambridge University Press, 1920.

DAVID, A. P., *The Dance of the Muses: Choral Theory and Ancient Greek Poetics*. Oxford: Oxford University Press, 2006.

DEVINE, A. M., and STEPHENS, L. D., *Language and Metre*. Chico, CA: Scholars Press, 1984.

GILDERSLEEVE, B. L. and LODGE, G., *Latin Grammar*. London: St. Martin's Press, 1895.

RUSSELL, DONALD A., *Quintilian: The Orator's Education*, Books 1-2. Cambridge, MA: Harvard University Press, 2001.