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Latin Enclitic Stress Revisited

Haike Jacobs

The well-known fact that Latin enclitics induce stress on the immediately preceding syllable has received considerable attention in metrical theory. Not only have these enclitics been analyzed in almost all the different models that have been proposed (Halle and Vergnaud 1987, Steriade 1988, Halle and Kenstowicz 1991, Kenstowicz 1994, Hayes 1995, Mester 1994, Halle and Idsardi 1995), they have also played a role in evaluating the empirical adequacy of the models involved. Unfortunately, none of these analyses provides an adequate account of the empirical data. This article shows why the previous analyses are wrong, provides an adequate analysis, and discusses its consequences for metrical theory.

Keywords: enclitic stress, Latin phonology, metrical theory, foot typology

1 Introduction

In Latin, enclitics such as -que ‘and’ always induce stress on the immediately preceding syllable. This fact, well documented both by Latin grammarians (most notably Priscian) and by detailed 19th-century philological studies such as those of Corssen (1870) and Lindsay (1894), has been analyzed in metrical theory in a number of different ways and a number of different models (see Steriade 1988, Halle 1990, Halle and Kenstowicz 1991, Mester 1994, Hayes 1995, and Halle and Idsardi 1995). Moreover, it has played a role in arguing in favor of each model. Unfortunately, all these analyses fail to provide an adequate account of the empirical data. The aim of this article is twofold: to show why the previously proposed analyses derive the wrong results and to provide an adequate analysis. The article is organized as follows: Section 2 provides an overview of the different models and the way in which they account for Latin stress. Section 3 discusses the Latin enclitic stress facts, shows why the previously proposed analyses derive the wrong results, and presents an adequate account of the data. Section 4 summarizes and discusses the proposed analysis and its relevance to metrical theory.

2 Latin Stress

Before going into the details of the enclitic stress facts, I would like to sketch the ways in which different models account for Latin stress. First, let us look at how the Latin stress facts can be analyzed in a model using moraic trochees (Hayes 1995).

This article arose out of a workshop, “Metrical Theory and Diachrony,” that I organized in the fall of 1995 at Nijmegen University. For discussion and comments I wish to thank Carlos Gussenhoven, Morris Halle, Leo Wetzels, and two anonymous Li reviewers. For help on Latin, CD-ROM and otherwise, I would like to thank Wouter Kusters and Willeon Slenders.

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(1) a. Mark the last syllable as extrametrical (indicated by angled brackets).

b. From right to left, construct moraic trochees noniteratively (i.e., until a stress is assigned).

c. From left to right, construct syllabic trochees.

The application of (1) produces the metrical representations in (2) for words like *arborem* ‘tree’, *cameram* ‘room’, *pedestrem* ‘on foot’, *voluptatem* ‘voluptuousness’, and *liberationem* ‘delivery’. Main stress is derived by application of the End Rule Final (2d).

(2)  
<table>
<thead>
<tr>
<th></th>
<th>ar</th>
<th>bo</th>
<th>rem</th>
<th>ca</th>
<th>me</th>
<th>ram</th>
<th>pe</th>
<th>des</th>
<th>trem</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>h</td>
<td>l</td>
<td>h</td>
<td>l</td>
<td>l</td>
<td>h</td>
<td>l</td>
<td>h</td>
<td>h</td>
</tr>
<tr>
<td>b.</td>
<td>(x)</td>
<td>(x)</td>
<td>.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>vac.</td>
<td>vac.</td>
<td>vac.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With respect to the rules in (1), two comments are in order. First, the moraic trochee construction rule (1b) must apply noniteratively in order to prevent secondary stress on the second (heavy) syllable of, for instance, *voluptatem* ‘voluptuousness’. Second, the secondary stress facts of Classical Latin have been accounted for by ordering the left-to-right construction of syllabic trochees (1c) after the assignment of primary stress (1b). The left-to-right assignment of syllabic trochees as in (1c), instead of right-to-left assignment, allows us to dispense with destressing rules for Classical Latin (see Jacobs 1989 for a more detailed account).

Halle and Vergnaud’s (1987:55–56) account for Latin stress is as follows (where *HT* stands for ‘‘head terminal’’ and *BND* for ‘‘bounded’’):

(3) a. Mark the last syllable as extrametrical.

b. Assign a line 1 asterisk to any metrical syllable of the word if it has a branching rime.

c. Line 0 parameter settings are [+HT, +BND, left, right to left].

d. Construct constituent boundaries on line 0.

e. Locate the heads of line 0 constituents on line 1.

f. Line 1 parameter settings are [+HT, −BND, right].

g. Construct constituent boundaries on line 1.

h. Locate the heads of line 1 constituents on line 2.

i. Conflate lines 1 and 2.
Given that for stress purposes quantity-sensitivity plays a role only in the penultimate syllable, any metrical syllable in (3b) should be replaced by the penultimate syllable.

The operation of rules (3a–h) is illustrated in (4).

(4) \[
\begin{array}{cccc}
(x) & (x) & (x) \\
\langle x \rangle & \langle x \rangle & \langle x \rangle \\
\end{array}
\]

The operation of rules (3a–h) is illustrated in (4).

(4) \[
\begin{array}{cccc}
(x) & (x) & (x) \\
\langle x \rangle & \langle x \rangle & \langle x \rangle \\
\end{array}
\]

The operation of rules (3a–h) is illustrated in (4).

\[\text{arbo rem ca me ram pe des trem} \]

\[\text{x} \]

\[\text{x} \]

\[\text{line 2} \]

\[\text{line 1} \]

\[\text{line 0} \]

\[\text{h l h l l h l h h} \]

\[\text{vo lup ta tem li be ra ti o nem} \]

(5) outlines an uneven trochee (a quantity-sensitive left-dominant foot) analysis (Jacobs 1990, Lahiri, Riad, and Jacobs, to appear).

(5) a. Mark the last syllable as extrametrical.

b. From right to left, construct one single uneven trochee (i.e., noniteratively until a stress is assigned).

c. From left to right, construct syllabic trochees.

d. End Rule Final.

The application of (5) produces the metrical representations in (6).

(6) \[
\begin{array}{cccc}
\text{arbo rem ca me ram pe des trem} \\
\text{h l h l l h l h h} \\
\end{array}
\]

Finally, a fourth possible analysis, due to Halle and Idsardi (1995), is given in (7), where Project: \(L\) means that the left boundary of heavy syllables is projected onto line 0, and where ICC: \(L\) means that a left boundary is inserted for each pair of elements going from left to right.
3 Latin Enclitic Stress

Having sketched the possible ways in which metrical theory can account for the Latin stress facts, I turn now to Latin enclitic stress. I begin by discussing Kenstowicz’s (1994:574–577) analysis, based on Halle and Vergnaud’s (1987) framework and on proposals by Steriade (1988). In Latin, if monosyllabic or bisyllabic enclitics are attached to words such as *ubi* (LL) ‘where’, *limina* (HLL) ‘thresholds’, *Musa* (HL) ‘the Muse’, and *ita* (LL) ‘so’, forms like those in (8) result.

(8) a. itáque ‘and so’
    b. limináque ‘and the thresholds’
    c. Musáque ‘and the Muse’
    d. ubílibet ‘wherever’

The surface stress pattern on the forms in (8) is different from that of other forms in that a light penult, as in (8a–c), is not skipped, a fact noted by almost all Latin grammarians: “plerúisque pleráque plerúmque feminininum enim, quamvis paenultima brevis sit, accentum tamen in ea habuit acutum, sicut masculinum et neutrum” ([In] plerúsque, pleráque, plerúmque the feminine too, although the penult is short, nevertheless has accent on the penult, just like the masculine and neuter) (Priscian, V:63, cited in Keil 1857–1880). Kenstowicz (1994) assumes the rules in (9) for Latin stress, which produce structures like those in (4).

(9) a. The syllable rime is stress-bearing.
    b. Final syllables are extrametrical.
    c. Assign a line 1 asterisk to heavy syllables.
    d. Group line 0 asterisks into binary left-headed constituents from right to left.
    e. Group line 1 asterisks into a right-headed constituent.
The analysis now runs as follows: Following Steriade (1988), stress assignment under enclisis is considered to respect previously established metrical structure and to apply only to free, unparsed material, according to Prince's (1985) Free Element Condition. Following Halle and Kenstowicz (1991), the behavior of the Latin enclitics is treated as a noncyclic effect. The Latin enclitics, such as 
*que, are marked [−cyclic] and fail to activate the Stress Erasure Convention; this failure implies that previously assigned metrical structure is present and must be respected in the sense proposed by Halle (1990).

In (10) I have illustrated this by contrasting a cyclic prefix, *re-* (added to a verb stem *negat* 'he/she denies', yielding *rénegat*), with a noncyclic enclitic, 
*que (added to limina, yielding *limináque*).

<table>
<thead>
<tr>
<th>(10)</th>
<th>Cyclic block</th>
<th></th>
<th>Noncyclic block</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ne gat</td>
<td>li mi na</td>
<td>Encliticization</td>
</tr>
<tr>
<td>l</td>
<td>h</td>
<td>h l</td>
<td>Stress rules</td>
</tr>
<tr>
<td>x</td>
<td>x</td>
<td>x x</td>
<td>(x x)</td>
</tr>
<tr>
<td>Stress rules</td>
<td>(x) (x)</td>
<td>(x x) (x)</td>
<td></td>
</tr>
<tr>
<td>x</td>
<td>x</td>
<td></td>
<td>x x</td>
</tr>
</tbody>
</table>

Kenstowicz (1994:591) argues that if *limina* were grouped (H) L ⟨L⟩ instead of (HL) ⟨L⟩, that is, as a moraic trochee instead of an uneven trochee, the ill-formed *limináque* would be predicted. The Latin enclitics thus provide an argument in favor of an uneven trochee analysis of Latin stress and against a moraic trochee analysis.

Mester (1994) briefly discusses Latin enclitic accent and points out a problematic case for Kenstowicz's type of analysis: namely, a monosyllabic base to which a disyllabic enclitic is attached, as in *idcirco* 'for this reason' or *quápropter* 'because of which', where previously assigned metrical structure (*qua and id already being footed in the first round of foot assignment) is not respected. That is, after stress assignment in the cyclic block, the addition of *propter* and
circo leaves as a free element only the penultimate syllable of the enclitic, wrongly predicting *quaprópter and *idcírcō. This is illustrated in (11).

(11) Cyclic block

<table>
<thead>
<tr>
<th>id</th>
<th>x</th>
</tr>
</thead>
</table>

Stress rules

<table>
<thead>
<tr>
<th>(x)</th>
<th>(x)</th>
</tr>
</thead>
</table>

Noncyclic block

Encliticization

Stress rules

<table>
<thead>
<tr>
<th>id + circo</th>
</tr>
</thead>
</table>

Mester (1994) argues in favor of a moraic trochee analysis for Latin and therefore, in order not to be forced to accept the uneven trochee (see Kenstowicz’s argumentation around lìminaque) proposes the following analysis: the whole enclitic is extrametrical and the End Rule Right is assumed—which, he adds, must apply at the syllable level and not at the foot level. Let us see why the End Rule must be assumed to apply at the syllable level. Mester assumes a moraic trochee followed by the End Rule for main stress. In order to account for segmental processes (see Lahiri, Riad, and Jacobs, to appear, for a critical examination showing that the segmental processes are better analyzed if an uneven trochee is used), he assumes “subsidiary footing” after main stress assignment. If the End Rule Right (for enclitic stress) were applied at the foot level, it could apply either before or after subsidiary footing (SF). If it applies before SF at the foot level, unary feet (which are crucially forbidden in Mester’s analysis) must be allowed after all. However, if it applies after SF at the foot level, the wrong stress contours for words with a LL or HLL base (which are grouped (LL) and (H)(LL) according to Mester) are predicted, for example, *útíque ‘and how’, *ítaque, and *lìminaque.¹ This is shown for lìminaque and ítaque, which have the structures in (12a) prior to SF and the structures in (12b) after SF.

(12) a. ítaque

<table>
<thead>
<tr>
<th>l</th>
<th>1</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>(x)</th>
<th>(x)</th>
</tr>
</thead>
</table>

li mi na que

<table>
<thead>
<tr>
<th>h</th>
<th>l</th>
<th>1</th>
</tr>
</thead>
</table>

| (x) | (x) | (x) |

| (x) | (x) |

b. ítaque

<table>
<thead>
<tr>
<th>l</th>
<th>1</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>(x)</th>
<th>(x)</th>
</tr>
</thead>
</table>

li mi na que

<table>
<thead>
<tr>
<th>h</th>
<th>l</th>
<th>1</th>
</tr>
</thead>
</table>

| (x) | (x) | (x) |

| (x) | (x) |

¹ As a matter of fact, útíque and ítaque did exist as independent adverbs (see Priscian, V:64, cited in Keil 1857–1880), meaning “therefore” and “certainly”, respectively.
Therefore, the End Rule must be assumed to apply at the syllable level. However, formally applying a stress rule at the syllable level can only make sense if the idea is that there are two different levels of stress representation: one for nonenclitic stress (probably the level where morae are represented) and one for enclitic stress (the level where syllables are represented). This, in turn, implies that Latin main stress is represented in an unmotivated, ad hoc way on two different levels (syllable level for enclitic stress and foot/mora level for nonenclitic stress). Not only is this an unmotivated enrichment of the theory, but it also unnecessarily complicates the analysis: footing, Main Stress Rule (End Rule Right at the foot level), SF, Main Stress Rule (End Rule Right at the syllable level).

Halle and Idsardi (1995:440) offer an ingenious solution to the problems raised by Mester. In their theory bracketed grids are conceived of in a different way. They state:

The most significant innovation of the present theory is in the representations of bracketed grids. By eliminating superfluous parentheses, we change the meaning of the parentheses themselves. A single parenthesis is now sufficient to define a metrical constituent. This has the important consequence that metrical constituents can be open-ended. This, in turn, means that constituency can be modified while still respecting the already assigned structure in the sense of Halle (1990). The addition of new elements can augment constituents and the (re)application of parameter setting can subdivide constituents. Operations that must destroy previously built structure in tree theory can be formulated in the present theory so that they only add structure. Thus this theory gives a whole new meaning to constituent structure and Free Elements.

This is crucially motivated by Latin enclitic stress. Given that Halle and Idsardi’s theory uses only left/right brackets, as illustrated in (13), the metrical structure of a monosyllabic word looks different than it does in (11).

(13) Cyclic block id x
Line 0: Project: L (x Avoid x(x#
Edge: RLR
ICC: L
Head: L (x
x

Noncyclic block id + cir co
Line 0: Edge: RLR (x x )x
ICC: L x
Head: L x
Line 1: Edge: RRR (x x )x
Head: R (x x )x
x
The crucial difference between a monosyllabic and a polysyllabic host is that the former has a constituent that is not closed at the right edge. Furthermore, it should be observed that the stress rules for the two blocks are minimally different. That is, the syllable boundary projection rule (Project: L) must be assumed to be operative only in the cyclic block. In other words, noncyclic stress is quantity-insensitive. Although Halle and Idsardi have in this way solved the problems raised by Mester with respect to Kenstowicz’s analysis (monosyllabic host plus bisyllabic enclitic, such as idcirco and quapropter; other examples include síquando and nêquando (see Priscian, XV:29, cited in Keil 1857–1880)), their analysis can be shown to be inadequate.

In Latin more than one enclitic suffix can be added to a host, a fact that poses a problem for Halle and Idsardi’s account. Relevant examples include adding que to idcirco and eapropter, yielding idcirkóque and eaproptérase, and adding que to mécum, técum, and nobiscum, yielding mecúmque, tecúmque, and nobiscúmque. If a bisyllabic and a monosyllabic enclitic are added to a mono- or bisyllabic host and if two monosyllabic enclitics are added to a monosyllabic host, the analysis predicts the wrong stress contours—for instance, *idcirkóque, *eaprópterque (14a), and *mécumque (14b).

(14) a. Cyclic block

<table>
<thead>
<tr>
<th></th>
<th>e</th>
<th>a</th>
<th>Avoid x(x#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

Noncyclic block

<table>
<thead>
<tr>
<th></th>
<th>e</th>
<th>a</th>
<th>prop</th>
<th>ter</th>
<th>que</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

b. Cyclic block

<table>
<thead>
<tr>
<th></th>
<th>me</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

Line 0: Avoid x(x#)
I can think of two possible ways of solving these problems within Halle and Idsardi's framework. The first would be to reapply the noncyclic rules after each addition of an enclitic. This is illustrated in (15) for *eaproptérque*.

(15) Cyclic block

<table>
<thead>
<tr>
<th>Line 0:</th>
<th>Project: L</th>
<th>x</th>
<th>x</th>
<th>Avoid x(x#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edge: RLR</td>
<td>x</td>
<td>)x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICC: L</td>
<td>x</td>
<td>)x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head: L</td>
<td>x</td>
<td>)x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Noncyclic block

<table>
<thead>
<tr>
<th>Line 0:</th>
<th>Edge: RLR</th>
<th>x</th>
<th>)x</th>
<th>x</th>
<th>)x</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC: L</td>
<td>x</td>
<td>)x</td>
<td>x</td>
<td>)x</td>
<td></td>
</tr>
<tr>
<td>Head: L</td>
<td>x</td>
<td>)x</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Noncyclic block

<table>
<thead>
<tr>
<th>Line 0:</th>
<th>Edge: RLR</th>
<th>x</th>
<th>)x</th>
<th>x</th>
<th>)x</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC: L</td>
<td>x</td>
<td>)x</td>
<td>x</td>
<td>)x</td>
<td></td>
</tr>
<tr>
<td>Head: L</td>
<td>x</td>
<td>)x</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Given the absence of Stress Erasure in the noncyclic block, this apparently "cyclic" application of noncyclic stress rules might be considered truly noncyclic. However, this modification of the conception of noncyclic stress is clearly not what was intended by Halle and Kenstowicz (1991:481), who, discussing Diyari, state, "Diyari stress must consequently be noncyclic. But
then, the root plus *all* [italics mine/HJ] affixes should be metrified in one pass through the stress rules.

A second possible way to deal with the Latin enclitics would be to consider them as prestress­ing suffixes, just like certain suffixes in Turkish or all suffixes in Diyari (see Halle and Kenstowicz 1991, Halle and Idsardi 1995). In order for this analysis to work, it must be assumed that Latin enclitic suffixes are lexically specified as being preceded by a right boundary. Furthermore, it must be assumed that the parameter settings for line 0 differ in the cyclic and noncyclic blocks. Specifically, no edge-marking specification is needed, and the ICC need not apply. What is needed, however, is a head-marking specification, namely, R in the noncyclic block and L in the cyclic block. The analysis is illustrated in (16) for *eapropterque*.

(16) Cyclic block

<table>
<thead>
<tr>
<th></th>
<th>e</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 0:</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Project:</td>
<td>L</td>
<td>x</td>
</tr>
<tr>
<td>Edge:</td>
<td>RLR</td>
<td>x</td>
</tr>
<tr>
<td>ICC:</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td>Head:</td>
<td>L</td>
<td>x</td>
</tr>
</tbody>
</table>

Noncyclic block

<table>
<thead>
<tr>
<th></th>
<th>e</th>
<th>a</th>
<th>prop</th>
<th>ter</th>
<th>que</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 0:</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Head:</td>
<td>R</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Line 1: Edge: RRR

<table>
<thead>
<tr>
<th></th>
<th>e</th>
<th>a</th>
<th>prop</th>
<th>ter</th>
<th>que</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Head:</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Although this analysis technically works, Halle and Idsardi explicitly seem to deny the possibility of stress systems that would require the parameter settings just given for Latin. They state (p. 441), "Furthermore, in the present theory constituent construction precedes the assign­ment of heads. By separating the construction of constituents from the marking of heads we predict that the constituents of a word will all have the same headedness. For instance, words parsed into a combination of trochees and iambic are forbidden within this framework." But this is exactly what happens in (16): by allowing different head-marking parameters for the cyclic and noncyclic blocks, we have derived line 0 constituents that are both left- and right-headed, although resulting from different blocks.

To summarize the discussion so far: Kenstowicz’s analysis wrongly predicts certain forms; Mester’s analysis requires an unmotivated separation of stress into different planes; and Halle and Idsardi’s analysis goes wrong in cases where a host is followed by more than one enclitic
suffix. Also, the two alternative analyses discussed within their framework seem to go against its central assumptions.

There is, however, a third possible analysis consistent with Halle and Idsardi's framework, as Morris Halle (personal communication) points out. If, instead of a right parenthesis before their leftmost syllable, Latin enclitics are marked with a right parenthesis before their rightmost syllable (that is, if they are lexically marked as RLR), there is no need to change the head-marking specification for line 0 in the noncyclic block to R; instead, just as in the cyclic block, it can remain L. This is shown in (17) for *eaproptērque*.

\[(17) \text{Cyclic block} \]
\[
\begin{array}{c|c|c|c|c|c}
| & e & a & x & x & \\
\hline
\text{Line 0:} & \text{Project: L} & x & x & \text{Avoid } x(x^\#) & \\
\hline
\text{Edge: RLR} & x & )x & \\
\hline
\text{ICC: L} & x & )x & \\
\hline
\text{Head: L} & x & )x & \\
\end{array}
\]

---

\[
\begin{array}{c|c|c|c|c|c|c|c}
| & e & a & \text{prop} & x & \text{ter} & \text{que} & x & x & x & x & x & x & x & x & x
\hline
\text{Noncyclic block} & & & & & & \\
\text{Line 0:} & x & )x & x & )x & )x & x & x
\hline
\text{Head: L} & x & )x & x & )x & )x & x & x
\hline
\text{Line 1:} & \text{Edge: RRR} & x & )x & x & )x & )x & x
\hline
\text{Head: R} & x & )x & x & )x & )x & x & x
\hline
\end{array}
\]

Finally, let us consider how the enclitic stress facts can be accounted for if an uneven trochee analysis of Latin stress is adopted (see (5)). If we assume such an analysis coupled with enclitic extrametricality (which is indeed similar to lexically stipulated boundaries in (16)), the initial problem of Kenstowicz's analysis (a monosyllabic host followed by a bisyllabic enclitic suffix) disappears, as illustrated in (18a–b) for *idcirco* and *eaproptērque*.

\[(18) \text{a. Cyclic block} \]
\[\text{a. Mark the last syllable as extrametrical.} \]
\[\text{b. From right to left, construct one single uneven trochee (i.e., noniteratively until a stress is assigned).} \]

\[\text{Two anonymous reviewers made a similar suggestion.}\]
c. From left to right, construct syllabic trochees.

\[ \begin{array}{c}
id \\
h \\
( x )
\end{array} \]

Noncyclic block

a. Mark the last enclitic suffix as extrametrical.

b. From right to left, construct a single uneven trochee.

c. End Rule Final.

\[ \begin{array}{c}
id + cir + co \\
h + h + h \\
( x ) + ( x ) \\
( x )
\end{array} \]

Cyclic block

\[ \begin{array}{c}
e + a \\
1 + h \\
( x ) + ( x )
\end{array} \]

The analysis given in (18) seems to work adequately; nevertheless, one point requires discussion. In the cases of enclitic stress discussed so far, it happens that all bisyllabic enclitics end in a heavy syllable: circa, propter, tamen, modum, libet, quandō. Now, if a bisyllabic enclitic with a final light syllable existed, and if it were added to a host and followed by another enclitic, then the analysis in (18) would predict stress to be located on the first syllable of the bisyllabic enclitic. I have been unable to find such a case in the literature. A CD-ROM search for hypothetical cases involving modo (LL) (e.g., quomodōque or postmodōque) produced no results.\(^3\) Still, for the sake of concreteness, let us consider an example that comes close to it. In cuiuscumquēmodi ‘of whatever kind’ (Priscian, V:60, cited in Keil 1857–1880) the base form is lexicalized as quis-cumque, giving genitive cuiuscumque, to which modi is attached. Suppose, however, it is built up as shown in (19): cuius + cum + que + modi. The analysis presented above with an uneven trochee in the noncyclic block would produce the ill-formed \(*_{cuiuscumquemodi}.\)

\(^3\) I checked two CD-ROMs for similar cases: CETEDOC, containing mainly Christian Latin texts (including the Corpus Christianorum), and PHI (Packard Humanities Institute, release 5), containing the works of most of the classical authors.
(19) Cyclic block

<table>
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<th>cu</th>
<th>ius</th>
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<tbody>
<tr>
<td>l</td>
<td>h</td>
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</table>

a. \( x \langle x \rangle \)
b. \( \langle x \rangle \langle x \rangle \)

<table>
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<tr>
<th>Noncyclic block</th>
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If cases like *quomodóque* or *postmodóque* did exist, and there is no reason to believe that they did not, then instead of an uneven trochee in the noncyclic block, a right-headed, quantity-insensitive constituent would be required. This analysis with a quantity-sensitive left-dominant foot in the cyclic block and a quantity-insensitive right-dominant foot in the noncyclic block would be similar to the second alternative in Halle and Idsardi’s framework discussed in (16).

The analysis in (17), on the other hand, where enclitics are lexically marked with a right parenthesis before their rightmost syllable (RLR), straightforwardly accounts for cases like *cuius-cumquêmodi* and *postmodoque*. It is instructive to consider why the account given in (17) where enclitics are lexically marked as RLR does not readily translate into an account along the lines of (18) where feet are theoretical primitives. The reason is that if, instead of the entire enclitic, only the final syllable is assumed to be extrametrical, the *iddrco* problem again arises.

Furthermore, even without the just-mentioned modification in (18) (a quantity-insensitive right-dominant foot in the noncyclic block), it is clear that the analysis in (17) is superior to the one in (18). The instruction in (18a) for the noncyclic block is a clear addition, whereas the insertion of boundaries in (17) is a generalization of the RLR edge-marking rule that is now extended to enclitics, in addition to words. The different extrametricality instructions in (18a) for the cyclic and noncyclic blocks cannot be generalized in a similar way. Hence, the analysis in (17) is superior on all accounts to the one in (18).

4 Summary and Discussion

In this article I have argued that the only analyses for enclitic stress in Latin that are empirically adequate are the one in (18) with the modification that the foot in the noncyclic block must be quantity-insensitive and right-dominant and the one in (17) (the third alternative discussed under Halle and Idsardi’s framework), of which (17) was shown to be clearly superior. However, the case for a constituent like the uneven trochee (as in (18) or (17)), grouping together a heavy syllable and a light syllable, is clear. As pointed out above, an uneven trochee constituent is consistent with other aspects of Latin phonology (see Lahiri, Riad, and Jacobs, to appear).

The question of how the discussion relates to Optimality Theory (OT) is rather difficult. Strictly speaking, OT does not decide on different analyses or on issues of foot constituency; and a full-fledged OT analysis taking into account Latin prosodic phonology and enclitic stress lies
far beyond the scope of this article. I will simply point out that in the OT framework the prestressing effects of Latin enclitics can be accounted for by a sufficiently high-ranked alignment constraint (see McCarthy and Prince 1993) requiring that the left edge of an enclitic coincide with the right edge of a foot (and in _quomodóque_ cases (should they be found to exist) with the right edge of a line 1 grid mark or with the head of a foot). The net effect is that, just as in (17), no different foot types or head-marking specifications would be required, an uneven trochee constituent alone being sufficient.

References


