

English stress and destressing as rime adjunction

1. Introduction*

Usually, stress analyses of languages such as English make a principled distinction between rules of stress assignment and rules of de-stressing. Although much progress has been made in characterizing both rule types parametrically (Hayes 1981, Selkirk 1984, Hammond 1984, Prince 1985, Halle & Vergnaud 1987), important similarities between them remain unexpressed, of which quantity sensitivity and locality are most salient. This issue resembles an earlier one, in that current approaches to stress assignment are the result of a reduction in both the number and type of rules employed in especially Chomsky & Halle (1968). They noticed that the obvious contextual similarity in formally unrelated rules "is not a merit of this grammar but rather indicates a defect either in the analysis or in the underlying theory" (p. 115). In view of this, collapsing the rules of primary and secondary stress assignment in Halle (1973) (after an idea introduced in Schane 1975) was a major theoretical result. This was made possible by leaving the idea of first assigning main stress and adding secondary stresses of *n* values to the left, and introducing a procedure which assigns a binary stress value iteratively, and makes the distinction between primary and nonprimary stress only after that. Destressing, however, is still handled by independent rules. This approach finds its clearest statement in the metrical analysis by Liberman & Prince (1977), who assign stress as a binary feature, select prominence in a tree, and have one separate destressing rule.

The literature of the past decade (see the references above) succeeds in subjecting English stress assignment to universal principles from which it follows that it is local, and which makes binarity the only typological option for a language restricting the size of its metrical feet. Up until this point, however, no real effort has been made within this program to collapse stress and destressing; that is, schematically most accounts of English stress currently available proceed along the lines of the following model:

- (1)a Foot construction: going from right to left through the word, construct binary feet of which the left-hand rime is the head; if no binary foot can be formed, form a foot having its only rime as its head. The rightmost application (the English Stress Rule) may not group a heavy rime as a non-head into a binary foot, whereas other applications (the Strong Retraction Rule) may.
- b Prominence assignment: the rightmost head is made most prominent.
- c Destressing (Foot deletion): delete feet whose heads are (1) light (in a certain sense), (2) adjacent to another head, and (3) non-prominent; the remnants are readjoined to adjacent nodes, maximally conforming to foot types generated by foot construction.

If our intuition is correct that this model leaves unexpressed similarities between stress assignment and destressing, it may be worthwhile to investigate ways in which a unification of the central principles of the layers a and c of (1) may be accomplished. Our aim here will be to show how this can be executed. In order to do this we will take the following approach. In section 2 we will review the traditional evidence for separating stress assignment and destressing, where the discussion will take place in terms of the analysis of English

stress advanced in Hayes (1981). Section 3 is devoted to a general statement of foot construction, which eliminates the Strong Retraction Rule in favour of the English Stress Rule, Sonorant Destressing, and the Arab Rule. In section 4 we will decompose stress into three kinds of head-hood: weight, binarity, and prominence. We will show that this decomposition eliminates the need for Pre-Stress Destressing, leaving only left-dominant foot-affecting rules. In addition, we will show that viewing rules of stress assignment and destressing as adjunctions has favourable consequences: once constraints on destressing will now follow directly from independently proposed conditions on adjunction in phrasal rhythmic adjustment. Section 5 contains the desired unification of rules of stress and destressing, again relying on the adjunction format. Three rules of adjunction remain, best described as respective residues of the former English Stress Rule, the rule of Sonorant Destressing, and the Arab Rule.

2. Why stress assignment is separated from destressing

Approaching the issue from the broadest possible view, destressing rules function as a set of interpretive 'adjustment' rules, bridging the gap between stress assignment and the phonetic representation. This can also be put in two other ways: first, there is no 'theory' of destressing independently of a theory of stress assignment; and second, destressing rules originate from a desire to generalize other components of the grammar. In itself, we see no reason to criticize the notion of destressing rule on the basis of this latter observation; it may be desirable to shield general rules or principles from empirical material by complicating other parts of the grammar, and this may be just an instance of this strategy. A closer look, however, reveals that both types of rules are much more related than their current separate status suggests. Before we will go into this, the main functions of destressing need to be clarified.

In all variants of English stress assignment from SPE up to and including Hayes (1981), rules of destressing apply in two specific cases:

- (i) stress rules in cyclic derivations overgenerate in assigning stresses to phonetically destressed vowels; destressing eliminates this excess; as examples, consider the relation between atomic and atomicity, allége and allegátion, where the underlined cyclically stressed vowels would incorrectly remain non-reduced if they would not be destressed.
- (ii) stress rules in underived words overgenerate in assigning stresses to phonetically destressed vowels; due to the principle of exhaustive metrical interpretation, iterative binary footing rules reaching the left edge of the domain leave stresses on syllables which nevertheless reduce, as in (po)(lice), (Mo)(nonga)(hela), and (a)(braca)(dabra); destressing, again, eliminates this excess;

In general, rules of destressing generate rhythmical patterns by deleting stresses in the immediate context of stresses, leaving the most prominent stresses unaffected; this presupposes the prior application of both rules of foot-formation and prominence-assignment. In fact, most evidence seems to suggest that most rules of destressing apply non-cyclically at word-level: if the initial syllable of atomic would destress cyclically, its ability to take secondary stress by internal Rhythm in atomicity would remain unexplained, since it is assumed generally that only 'stressed' syllables can take prominence. Finally, rules of stress assignment generally cannot destroy the output of earlier applications, whereas rules of destressing can, and usually do.

It seems that in terminology of the seventies we have a situation of a so-called 'conspiracy', where rules which are formally different, aim toward iden-

tical goals. This point is also observed in Prince (1985), who specifically notes the following. First, foot construction rules and destressing rules conspire to place heavy rimes in stressed positions and light rimes in unstressed positions. Rules stressing only light rimes, as well as rules destressing only heavy rimes, seem to be universally absent. Second, both rule types share binarity by organizing adjacent rimes into feet; in Hayesian terms: unorganized rimes in the case of stress, and remnants of deleted feet by Stray Syllable Adjunction in the case of destressing. Prince (1985:479,482) suggests that "destressing is the reassertion of the basic foot vocabulary in the 'feature-changing' mode; that is, no longer governed by the [condition to] apply only to Free Elements - those that do not stand in the metrical relationship being established." However, he does not support his claims by an extensive analysis of English stress, and his partial analysis differs in important respects from the one proposed here. For further discussion, see Kager (1988).

The point of the present paper is to show how this 'conspiracy' can be expressed directly, and towards this unification we will take the following steps: first, we will eliminate the Strong Retraction Rule by showing how existing rules in Hayes' own analysis can perform the tasks assigned to the former; second, since the grammar resulting from this step lacks its major quantity-insensitive mechanism of foot assignment, we are able to propose an analysis in which quantity-sensitivity is the key to the desired unification. Anticipating these results, Hayes' proposals and ours will compare as follows:

(2) Hayes'	Foot Construction	ours: Rime Adjunction
	Long Vowel Stressing	---
	English Stress Rule	Light Rime Adjunction
	Strong Retraction Rule	---
	Foot Deletion	
	Pre-Stress Destressing	---
	Post-Stress Destressing	---
	Sonorant Destressing	Sonorant Rime Adjunction
	Arab Rule	Closed Rime Adjunction

Hayes' system of foot construction and foot deletion will be reduced to three adjunction rules with different weight conditions on the adjoined rimes.

3. Eliminating Strong Retraction

Crucial to the quantity-insensitivity of Strong Retraction are the following verbs, some of which are from Hayes (1981):

(3)a	démonstrâte	concentrate	b	dévastâte	coruscate	c	désignéte
	contemplate	standardize		confiscate	illustrate		recognize

The quantity-sensitive English Stress Rule places stress on the long suffix vowel; retraction clearly cannot be due to this rule, hence antepenultimate stress is placed by a different rule, the Strong Retraction Rule. In order to eliminate the latter, we require a rule or rules that accept the output of the quantity sensitive English Stress Rule, and turn its feet into those required by (3). One may be surprised to learn that, even in Hayes' own analysis, these rules are available as Sonorant Destressing and the Arab Rule, originally due to Ross (1972). Some cases of Sonorant Destressing are those in (4a) (versus (4b)): -ory, -ine etc. are adjectival suffixes, which (by extrametricality) have an application of the English Stress Rule before them rather than on them.

(4)a	désultòry	Argentine	b	reféctòry	directory
	legendary	byzantine		asbestine	ellipsoid

The difference between (4a), with antepenultimate stress, and (4b), with penultimate stress, is due to Sonorant Destressing, which has the following form:

(5) Sonorant Destressing



This rule immediately accounts for most of the data of (3a). To cover all of them, we will extend Sonorant Destressing to rimes closed by /s/. If only sonorants and /s/ can appear inside the nucleus, Sonorant Destressing can be formulated so as to be limited to rimes only dominating a nucleus. Strong retraction verbs such as *dévastâte* and nouns and adjectives such as *Pâlestîne* containing /s/ are frequent enough for this extension to be well motivated:

- (6)a *confiscate* *coruscate* *b* *monastery* *Palestine* *Ernestine*
devastate *legislate* *Augustine* *Wenceslaus* *Hellespont*

In Nessly (1974) similar observations on the effects of the closing consonant are made: sonorants and /s/ are skipped easily in any category.

The Arab Rule was introduced to account for the following observation: closed short-vowel syllables in English reduce if the preceding syllable is open and contains a short (stressed) vowel: if ordered before prominence assignment, this rule immediately accounts for strong retraction in words with initial light rimes: the verbs in (7a) as well as the nouns in (7b).

- (7)a *désignâte* *b* *âncèdôte* *assignat* *palimpsest*
recognize *paroxysm* *assymptote* *monophong*

It is hard to find similar words with initial heavy rimes both among verbs (*díagnòse*, *pernoctate*) and nouns (*Arbuthnòt*, *insectary*); as expected, most words of this segmental type are weak retractors (*humécâtê*, *impregnate*, *olfactory*, *anthracnose*). It should be mentioned, however, that negative exceptions to both Sonorant Destressing and the Arab Rule occur in all categories:

- (8)a *defálcâte* *cyllindroid* *b* *sequéstrâte* *asbestine* *c* *erúctâte* *stalactite*
remonstrate *semanteme* *confiscate* *molluscoid* *smaragdine* *Monadnock*

It is probably because of the fact that many more nouns and adjectives than verbs with medial closed rimes exist, that the former categories deceive one into considering them weak retractors; however, all categories tend to follow the same pattern, best characterized by Sonorant Destressing and Arab Rule.

Additional data suggest that this approach is correct. Iterating across morphemic words, retraction cannot be sensitive to feet to its left. On the contrary, if Sonorant Destressing (which requires a stressed rime to the left of its focus) is involved, it is predicted that verbal retraction is weak as long as no stressed rime is to the left. Although crucial data are scarce, Hayes (1981) gives the (at least quadri-syllabic) verbs in (9a) in support of Strong Retraction, since stressless closed syllables occur in positions that fail to match the Structural Description of Sonorant Destressing:

- (9)a *exácerbâte* *administrate* *b* *metamórhize* *reincarnate* *sycophantize*
subalternate *orientate* *propagandize*

Consultation of Kenyon and Knott (1944) and other sources, however, provides us with the data in (9b), which, contrary to Hayes (1981), may be taken as examples of stress-sensitive verbal retraction. More seriously, all of (9a) can be analyzed as derived from verbs (*ácerbâte*, *áternâte*, *mínister*) by stress-neu-

tral prefixing (compare *infiltrate*); among (9b), on the other hand, only *reincarnate* and *propagandize* allow for a stress-neutral analysis, leaving three genuine counterexamples to Strong Retraction. The verbal retraction patterns of (9b) matches that of nouns and adjectives with final secondary stress:

(10)	<i>èlephàntine</i>	anniversary	salamandroid	Agamemnon
	labyrinthine	elementary	archimandrite	Àdirondack

Finally, let us examine cases of Strong Retraction to the left of main stress. Clearly, Sonorant Destressing will skip the medial 'sonorant' rime in *gòrgonzóla*, *Conestoga*, etc. (exceptional are *chìmpànzéé* etc). The Arab Rule skips rimes closed by obstruents that are adjacent to stressed light rimes (11a). As expected, words with heavy initial rimes (11b) show the expected medial stress:

(11)a	<i>Aléxànder</i>	Erechtheum	b <i>dèlèctàtion</i>	ticktacktoe
	Epictetus	phylloxera	Tutankhamen	Timbucktoo

As further parallels to (9b) and (10), secondary stress in longer words generally matches the stress-sensitive Sonorant Destressing pattern (see 12ac):

(12)a	<i>Hàlicàrnàssus</i>	paleontology	b <i>èlecàmpàne</i>	c <i>Cònstàntinóple</i>
	rhodomontade	violoncellist	paraphernalia	Monongahela
	pithecanthropus	endocarditis	Kilimanjaro	Ticonderoga
	argumentation	instrumentation	Nebuchadnezzar	Valenciennes

It may be objected that the reduced pretonic rimes of b cannot be accounted for by Sonorant Destressing; but notice that heavy pretonic rimes show limited reduction anyway, as in the initial rime of *Kentúcky*; whatever will account for these words, will do as well for *elecampane* etc.

Resuming: if two syllables precede main stress, the surface pattern is that of either Sonorant Destressing or the Arab Rule, cf. (6,7); if three syllables precede main stress, the pattern is that of verbs such as *metamorphize* in (9b). We conclude (with Halle 1973) that the same mechanisms of foot-construction are involved in primary and secondary stress throughout the word. It follows that Strong Retraction can be eliminated as a rule of English grammar.

4. Foot construction as rime adjunction: destressing

One of the most conspicuous features of Hayesian destressing is the fact that it takes place in two steps: foot deletion (destressing) and foot re-creation:

(13)a	F	F		F		F
			Delete =>		σ	Adjoin =>
	σ	σ		σ	σ	σ

The second step (Stray Syllable Adjunction) is needed independently to adjoin extrametrical rimes to the tree. Both functions are illustrated in (14):

(14)		Stress =>	F ^w / F ^s	SSA =>	F ^w / F ^s \
	a me ri (ca) _{em}		a me ri (ca) _{em}		a me ri ca
	F ^w / F ^w / F ^s	Destress =>	F ^w / F ^s	SSA =>	F ^w \ / F ^s
	a bra ca da bra		a bra ca da bra		a bra ca da bra

So far, we have discussed two of Hayes' destressing rules: Sonorant Destressing and the Arab Rule. They have the following in common: their inputs contain adjacent heads, and their outputs are binary and left-headed. The remaining de-

stressing rules, Pre-Stress Destressing and Post-Stress Destressing, will be discussed below.

Examples of Pre-Stress Destressing are the underlined vowels of (15):

(15) $\begin{array}{ccccccc} \begin{array}{c} F \\ | \\ L \end{array} \begin{array}{c} F \\ | \\ H \end{array} & \begin{array}{c} F \\ | \\ L \end{array} \begin{array}{c} F \\ | \\ H \end{array} & \begin{array}{c} F \\ | \\ L \end{array} \begin{array}{c} F \\ | \\ L \end{array} & \begin{array}{c} F \\ | \\ L \end{array} \begin{array}{c} F \\ | \\ L \end{array} & \begin{array}{c} F \\ | \\ L \end{array} \begin{array}{c} F \\ | \\ L \end{array} & \begin{array}{c} F \\ | \\ L \end{array} \begin{array}{c} F \\ | \\ L \end{array} & \begin{array}{c} F \\ | \\ L \end{array} \begin{array}{c} F \\ | \\ L \end{array} \\ \underline{p}o & \underline{l}ice & \underline{m}o & \underline{n}on & \underline{g}a & \underline{h}e & \underline{l}a \\ \underline{p}e & \underline{r}i & \underline{o} & \underline{d}i & \underline{c}i & \underline{t}y & \underline{s}a & \underline{t}ire & \underline{c}an & \underline{t}een \end{array}$

Pre-Stress Destressing applies to weak monosyllabic feet dominating light syllables; these arise in cases where iterative foot construction is prohibited from conforming to maximality, and as the residues of cyclically assigned feet. It seems that we can eliminate this rule under the following, rather fundamental view of the role of weight in a quantity-sensitive stress-system.

Suppose we say the following. Head status (stress) is assigned compositionally, by inherent weight, binary position, and prominence. Heads of feet that are binary or prominent are always stressed, i.e. unreducible. Stress in monosyllabic non-prominent feet is weight-dependent: here, only light rimes are reducible (police), heavy rimes are not (rhodomontade and canteen). Heads resulting from weight are derived automatically by projecting rimes (more or less as in Prince 1983). Now, one cannot escape observing that the structural description of Pre-Stress Destressing mentions precisely the complement of 'stress' under this view: light rimes in monosyllabic weak feet. Hence, we eliminate the rule as the one responsible for the reduced initial syllables of (15). The stressless element involved differs from Hayes' (1987) 'stressless foot' by being an automatic result of Project Rimes, not a specified member of a foot inventory.

It is a well-known observation that medial long vowels behave as short with respect to destressing (rétrogradation). As has been proposed earlier for these cases (Hammond 1984), we will assume a special rule to shorten long vowels in medial weak syllables, feeded by the Rhythm Rule. Finally, prefixes will be marked extrametrical to Project Rimes so that they count as light (abstract).

The most important result is not the elimination of Pre-Stress Destressing in itself: it is more important that we have succeeded in eliminating all right-dominant members from the inventory of destressing rules. This allows us to collapse foot construction and foot reconstruction into a format of left-dominant rime adjunction, foot deletion becoming an automatic result of the extraction of the head; in (16), a depicts Hayesian foot deletion plus automatic rime adjunction, and b our proposal, rime adjunction plus automatic foot deletion:

(16)a $\begin{array}{ccc} F & F & F \\ | & | & | \\ \sigma & \sigma & \sigma \end{array} \xrightarrow{\text{Delete}} \begin{array}{cc} F & \\ | & \\ \sigma & \sigma \end{array} \xrightarrow{\text{Adjoin}} \begin{array}{c} F \\ | \backslash \\ \sigma \sigma \end{array}$

b $\begin{array}{ccc} F & F & F \\ | & | & | \\ \sigma & \sigma & \sigma \end{array} \xrightarrow{\text{Adjoin}} \begin{array}{cc} F & F \\ | \backslash & | \backslash \\ \sigma & \sigma \end{array} \xrightarrow{\text{Delete}} \begin{array}{c} F \\ | \backslash \\ \sigma \sigma \end{array}$

Heads are left-peripheral by the convention that adjoined nodes are weak (Hayes 1981). The destressing rules are formulated as left-dominant adjunctions:

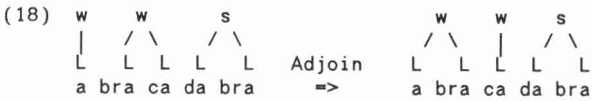
(17) Rime Adjunction (destressing version)

In ... $\begin{array}{c} | \\ R_1 \end{array} \begin{array}{c} | \\ R_2 \end{array}$..., adjoin R_2 to R_1

where R_2 is

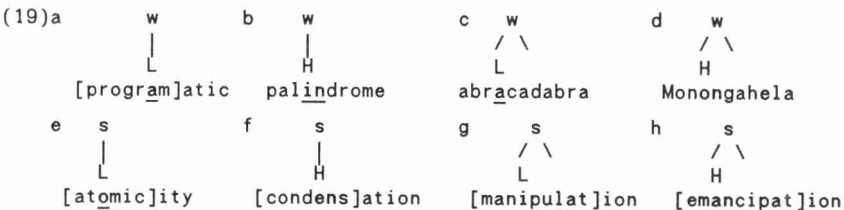
- a light rime (to be illustrated)
- a non-branching rime (Sonorant Destressing)
- a rime and R_1 is a light rime (Arab Rule)

The final Hayesian destressing rule is Post-Stress Destressing. We account for it in the following way. The process is obviously quantity-sensitive, affecting only medial open rimes in weak binary feet. Assuming medial shortening, the effect of Post-Stress Destressing is limited to light rimes. So here we have the third example of a left-dominant adjunction rule, one adjoining light rimes only; we will account for its distribution with respect to (17b,c) later. Adjunction is restricted to rimes adjacent to the landing site, whereas the typical victims of this destressing rule are binary feet; therefore, the second of the two rimes will remain solitary and headless in the sense explained above:



Notice that we may now eliminate Stray Syllable Adjunction, having removed the need for any ternary (or larger) foot: solitary non-prominent rimes reduce by their lack of head status. Obviously, this holds for extrametrical rimes too.

Recalling that destressing applies in two cases, i.e. interpreting both non-cyclic and cyclic stresses, we will now pay attention to the latter. Both classes include cases where destressing is blocked where one might expect it to apply. We will first discuss foot types that are in interstress position. By combination of head features, the eight constituent types in (19) arise. All of the feet labelled strong are cyclic cases represented in their form before the Rhythm Rule has applied. It appears that adjunction is blocked in prominent heavy or binary heads (19f,g,h) and in heavy binary heads (19d,h).



Rules destressing heavy rimes (17b,c) cannot affect either binary or prominent feet, and rules destressing light rimes (17a) cannot affect feet that are both binary and prominent. This distribution can be derived from the Strong Domain Principle, proposed by Kager & Visch (1988) for phrasal rhythmic adjustments:

(20) Strong Domain Principle



This principle accounts for the effects that are normally attributed to a special prohibition against the destressing of strong feet. Furthermore, it correctly allows for destressing of atomicity, and excludes destressing of Monongahela. As shown in (21), prominent upper nodes block extraction of both binary heads and quantity heads (heavies), and strong upper nodes of binary feet block extraction of a heavy rime. Since head-hood by binarity implies intra-rime structure, it prosodically dominates rime-internal head-hood by quantity:



Although the presence of the layers is a language-specific option, the hierarchical ordering between the layers is universal. The binarity layer characterizes bounded systems, the quantity layer quantity-sensitive systems.

To effectuate the influence of prominence shown in (19), Adjunction must be ordered before the Rhythm Rule. We will derive this ordering from the Bottom-to-Top Principle, proposed by Kager & Visch (1988) for phrasal rhythm:

(22) Bottom-to-Top Principle

in π_n π_{n-1} is a domain of prosodic rules before π_n

$$\begin{array}{c} \pi_n \\ | \\ \pi_{n-1} \end{array}$$

The Structural Description of the Rhythm Rule includes three elements: the adjoined node, the landing site, and the DTE (Hayes 1984). Since Rime Adjunction does not mention the DTE, its SD will always be included in the SD of the Rhythm Rule, and its application will be prior. Cases that have been put forward as arguments for the reversed order (explanation) can be reanalysed without adjunction: their head status is removed compositionally by the Rhythm Rule (prominence) and vowel shortening (quantity).

The Strong Domain Principle explains why only a, b, c, and e of (19) may adjoin. It does not explain why the landing site can only be a solitary rime, i.e. why no rime may adjoin leftward to a binary foot:

(23)a

w	b	w	c	w	d	w
				/ \		/ \
L		H		L		H
[diagram]atic	Halicarnassus	Apalachicola	paleontological			
e s	f	s	g	s	h	s
				/ \		/ \
L		H		L		HH
[periodicity]	[representation]	[artificiality]	[irreversibility]			

Again, cases a and e need not be derived by Adjunction, since the relevant rime of a is headless anyway, and the one in e ends up as such by the Rhythm Rule. The remaining blockades follow from a condition on phrasal rhythmic adjunctions proposed in Hayes (1984):

(24) Maximality Principle

Rules that manipulate tree structure must analyze maximal terms.

The formalized version of Maximality in effect requires the adjoined node to be c-commanded by the landing site; from this it follows that only rimes in non-branching constituents can be landing sites. These effects are captured in Hammond (1984) by obliging destressing rules to resolve clashes. But clash is, by its inherent bidirectionality, too weak a constraint on destressing, which as we argued is strictly L-dominant. That is, clash does not suffice to express the generalization that the right-hand rime involved in a clash is the one which destresses and adjoins to the left-hand one. Therefore, even if clash would supplement Adjunction, both the right-hand target and the left-hand landing site would have to be mentioned.

5. Unification: foot construction as adjunction

We will now collapse destressing (Adjunction) and foot construction. To this end, we only need to apply the three adjunction rules assumed above to strings of unorganized rimes before prominence assignment. The English Stress Rule surfaces as Light Rime Adjunction; furthermore, the main stress determining cha-

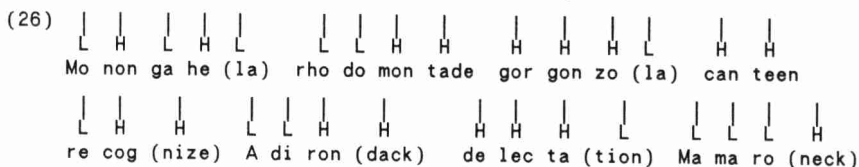
racter of both Sonorant Destressing and the Arab Rule is explained. All foot construction will be binary, though head-hood may as well be produced by either quantity or prominence in solitary constituents.

(25) Rime Adjunction (unified version)

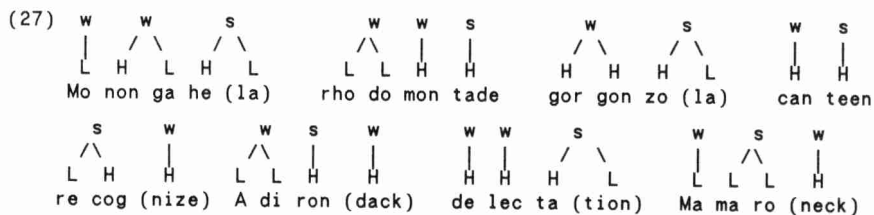
In ... $R_1 R_2 \dots$, adjoin R_2 to R_1

- where R_2 is
- a light rime (Light Rime Adjunction)
 - a non-branching rime (Sonorant Rime Adjunction)
 - a rime and R_1 is light (Closed Rime Adjunction)

For reasons that will appear below, cases a-c must apply iteratively, and disjunctively ordered. Since conditions on R_2 decrease in specificity, the Elsewhere Condition may be involved; but case c, with its additional condition on R_1 , argues against this. Project Rimes produces the inputs (26), where (parenthesized) extrametrical rimes are projected just as other rimes.



The derivation proceeds with Adjunction a-c and Prominence Assignment, which takes the form of the End Rule:



The reason for disjunctive ordering will be clear: only heavy rimes which are in solitary constituents after light rime adjunction can be adjoined. For these rimes, the 'destressing' effect derives from their explicit subordination into non-head positions, which overrides inherent weight and head status. Solitary light weak rimes end up as they were after Project Rimes, unspecified for any head feature. As for *abracadabra*, a post-cyclic reapplication of Rime Adjunction will suffice; notice that late adjunctions can never interfere with any of the above results. Lacking space, we will not go into the adjunction properties of extrametrical rimes, but Kager (1988) presents an analysis of this and related matters.

6. Conclusions

By assuming rime adjunction and compositionality of stress, an analysis of English word stress became possible which relates the functions of stress and destressing as two instantiations of one rule scheme, guided by general prosodic principles. Most importantly, Strong Retraction and Long Vowel Stressing were eliminated among the stress rules, and Pre-Stress Destressing and Post-Stress Destressing among the destressing rules, in favour of three disjunctively ordered rime adjunction rules, corresponding roughly to the former English Stress Rule, Sonorant Destressing and the Arab Rule.

Notes

- * Thanks go to Wim Zonneveld and Wim de Haas for their valuable comments on earlier versions of this paper.

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