Reduction of Spanish Word-Final
/s/ and /n/

JOHN M. LIPSKI
University of Houston

The non-linear analysis of Spanish phonology as proposed by Harris (1984) and others promises to augment the explanatory power of currently available phonological descriptions, and may offer significant insights into the description of phonological differences among dialects. However, the interaction between previously held notions of phonological processes and the new theoretical analysis has not yet been fully explored, and the claim that the latter apparatus must necessarily completely supplant the former is perhaps overambitious. The present note will deal with competing analyses of two frequent processes in Spanish, velarization of underlying /n/ and aspiration of underlying /s/, both of which have been used in support of the latest theoretical proposals. I will attempt to demonstrate that the data used to formulate these proposals have been excessively idealized. The full range of complexity and variation which surrounds these and similar phenomena necessitates a more ramified analysis, and even an idealization which does not distort the fundamental nature of the two processes casts doubt on the simple analysis suggested as a replacement for orthodox generative and traditional structuralist analyses.

The Processes

In a large number of Spanish dialects, representing the majority of the world’s Spanish speakers, underlying /s/ is weakened to an aspiration or deleted entirely in word-internal implosive position
In all these cases, the velarization is an intermediate step in a process whose ultimate realization is the elision of the nasal consonant with the concomitant nasalization of the preceding vowel, and even this nasal resonance may disappear under certain conditions (Mondejar 1970). Thus the extreme case of velarization has been described as:

\[
(5) \quad n \rightarrow \eta \rightarrow \frac{C}{\#}
\]

Harris (1984:48) notes that the above rules may be more feasibly be replaced by prosodic rules which, stated in the new format, become:

\[
(6) \quad s \rightarrow h \\
R[\text{hyme}]
\]

\[
(7) \quad n \rightarrow \eta \\
R[\text{hyme}]
\]

that is, /s/ is aspirated and /n/ is velarized when in the rhyme of the syllable (which Guitart 1982 calls "postnuclear" position). The extension of velarization and aspiration to word-final prevocalic position is accounted for by having the rule (8) of resyllabification (Harris 1984:43) apply after (6) and (7):

\[
(8) \quad [+\text{cons}] \rightarrow [+\text{cons}] / \rightarrow \# V \\
R[\text{hyme}] \quad O[\text{net}]
\]

Rule (8) is a reformulation of the normal rule of consonantal linking, by which a word-final consonant occupies syllable-initial position in the spoken chain if followed by a word beginning with a vowel. These rules are obviously attractive restatements of processes which find difficult and non-intuitive representations in the normal generative phonological framework, and yet both rules predict that all instances of word- (and syllable-) final /n/ and /s/ are to be velarized and aspirated, respectively, in the dialects in which these rules are present. Even making the maximum idealization of actual dialectal data, this does not occur in any Spanish dialect known to me.
Moreover, merely converting (6) and (7) into variable rules will not solve the problem, without accepting a variable status for the rule (8) of resyllabification, or ultimately, for the underlying phonological representations themselves.

Consider the data in Table 1, which displays the behaviour of /s/ in a number of key Peninsular and Latin American Spanish dialects.

These data demonstrate the clear existence of a group of dialects in which word-final underlying /s/ is aspirated in pre-consonantal positions, but not normally in prevocalic positions, with phrase-final position exhibiting its usual variability. For these dialects, under Harris's analysis, it would be necessary to order the aspiration rule (6) after the resyllabification rule (8), since application of the latter rule is clearly irrelevant to the aspiration process in these dialects. A careful examination of Table 1 reveals that in all those dialects where aspiration of /s/ is confined to pre-consonantal environments, phrase-final /s/ is quite resistant to aspiration, and it might therefore be suggested that the true environment for the rule is simply _ C. However, in the majority of these dialects, retention of phrase-final /s/, much more than of preconsonantal /s/, is conditioned by sociolinguistic factors (Lipski 1983a), perhaps having to do with the lasting impression produced by the presence or absence of /s/ in the most prominent position, that of the last segment in a phrase.

A similar case exists in those dialects of Portuguese (for example, central and southern Peninsular and the Rio de Janeiro dialects), in which /s/ is palatalized to [ʃ] in preconsonantal position and in phrase-final position, which can be formalized by the rule:

$$ (9) \ s \rightarrow \ ^{c}f \ \left\{ \begin{array}{l} C \\ \# \end{array} \right. $$

This rule is not affected by the Portuguese resyllabification rule, nearly identical to that of Spanish, in which case it must be ordered after that rule. Portuguese has another rule, which voices word-final

---

1 Data from Spain and the Canary Islands were collected by me in 1983 while on a Fulbright Fellowship. In each case, 10 urban middle-class speakers were interviewed for approximately 30 minutes for each dialect zone. Latin American data are derived from personal research (Lipski 1983a, 1983b, 1984, 1985, 1986) and from other published sources; these include Terrell (1975, 1978), Cedergren (1973), Alba (1982), Caravedo (1983), Fontanella (1973), and Lafford (1982).
prevocalic /s/, an extension of a process which once affected word-
internal intervocalic /s/. This voicing is formalized as:

\[(10) \ s \rightarrow z \]  

and is ordered after resyllabification has taken place, since this rule is
complementary to (9). Ecuadorian Spanish of the central highlands
has a similar rule (Robinson 1979), although more variable in its
application, that voices word-final /s/ before a following vowel. This
rule is intimately linked to the resyllabification process and must be
ordered after resyllabification, if the naturalness of the process (a
limited version of intervocalic voicing of /s/) is to be captured.

In those dialects of Spanish in which word-final /s/ is aspirated
before a following word beginning with a vowel, the prosodic anal-
ysis presents the aspiration rule (6) as ordered before resyllabification
(8). Thus we have the case that in some dialects, the lexical rule of
aspiration applies before the post-lexical prosodic rule of resyllab-
ification, whereas in other dialects (phonologically more conservative),
the lexical rule actually must apply after the post-lexical rule. Moreover,
for the vast majority of speakers in the innovative dialects,
and for a good number of speakers in such conservative dialects
as those of central Spain, coastal Peru, highland Costa Rica and
much of Mexico, aspiration of word-final prevocalic /s/ is a highly
variable phenomenon, characterized by considerable polymorphism,
and more susceptible to sociolinguistic differentiation than in pre-
consonantal position. I have previously shown (Lipski 1983a) that
in formal styles, such as radio broadcasting and public speaking, the
rate of aspiration of word-final prevocalic /s/ is less than is the rate
of aspiration of word-final preconsonantal /s/. The only explanation
for this variable behaviour, within the analysis contemplated by rules
(6)–(8), is that speakers are rapidly and virtually randomly exchang-
ing the order of two fundamental rules, one a segmental rule, and the

\(^2\)Asóvedo (1981:35) considers this the existence of a uniform process of voicing
of syllable-final /s/ before voiced segments. Evidently, under this analysis, voicing
must apply before resyllabification, whereas the palatalization of syllable-final
/s/ must be ordered after resyllabification, since as *ar*as the *arms* is ordinarily
pronounced, in the dialects which palatalize /s/, as *[a*-tar-*mas]* and not as *[a*-tar-*mas]*. Some paradigmatic restructuring does occur, however, as indicated by
other a prosodic structure rule, a course of events that does not seem to fit the spirit of order and structure of the prosodic analysis.

The use of rule (6) to describe dialects such as those of Andalusia, the Canary Islands and the Dominican Republic, which have generalized word-final aspiration/deletion of /s/ to nearly all instances, shows the final stage of evolution in the process of rule generalization (Terrell 1983). However, for most dialects and for most speakers of Spanish, this final generalization is approached only gradually, and appears to be completely independent of resyllabification, which occurs normally and without exception in the spoken chain regardless of the phonetic realization of word-final /s/.

An additional difficulty with the interpretation entailing instantaneous and variable rule reordering is the formulation of dialectal isoglosses, since the idiolectal and regional variability is augmented even more when making the transition from dialects that largely preserve word-final prevocalic /s/ as [s] and those dialects where the /s/ is normally aspirated in this position. Such transitional zones include central Spain, extreme western Honduras, the Costa Rican midlands near both borders, and the midlands of Colombia and Ecuador. A detailed study of the regions of transitions (e.g., Lipski 1983b) often reveals that from one town to the next, perceptible differences in pronunciation occur, and it is the variability itself rather than the existence or non-existence of the rule of aspiration that constitutes the differentiating characteristics of each local dialect. The continuous nature of this variation is not consonant with the discrete jump predicted by the theory of rule reordering and the interaction with the resyllabification process.

Whereas in many dialects the behaviour of /s/ is relatively constant, the behaviour of word-final /n/ is more variable and difficult to study in most dialects. Although a good number of Spanish dialects, those in northwestern, western and southern Spain, much of the Canary Islands, the Caribbean, Central America and much of coastal South America, velarize word-final /n/ before pause, in the remaining cases the data are not nearly so simple as suggested by the categorical rule (7). First, attempting to establish a parallel between the velarization of /n/ and the aspiration of /s/, we discover that the velarization of word-final preconsonantal /n/ is relatively less common in most dialects (Zamora and Guittart 1982:116), and the velarization of word-internal preconsonantal /n/ is rarer still. This is due to the normal process of homorganic assimilation of nasal consonants to following obstruents, and the variant process, which is the deletion of the nasal with nasalization of the preceding vowel. Unlike aspiration of /s/, velarization of preconsonantal /n/ is more sensitive to the nature of the following consonant, being generally more common before fricatives, especially /f/. I know of no dialect or even idiolect of Spanish in which the majority of instances of preconsonantal /n/ are velarized, although some areas exist in which a nasalized vowel is quite common in these cases, and it is impossible to separate the processes of posteriorization and homorganic assimilation of /n/.

It has also been noted (Guitart 1982) that postnuclear /n/ may be velarized even when not in syllable-final position, as in instante [instante] 'instant', construcción [konstruksiôn] 'construction', etc. According to Spanish phonotactics, the /n/ in such cases will necessarily occur before /s/, and is frequently velarized in dialects and idiolects where velarization of preconsonantal /n/ is rare in other contexts. Again, I know of no significant Spanish dialect where instante is consistently pronounced with both the first and the second /n/ velarized, although in a number of areas the combination /ns/ is pronounced as [nis] or [ni]. In fact, when velarization of /n/ is extended to preconsonantal environments, these are more often word-final, again following a pattern set by aspiration of preconsonantal /s/, which often shows a higher rate of application in word-final contexts (Lipski 1983a).

Velarization of word-final prevocalic /n/ is also multi-faceted, as indicated by the data in Table 2.

| Table 2 |

This table includes information on a number of dialects and sub-dialects, as well as a micro-survey of social class and slight regional differentiation (from the island of Fuerteventura), from which it is seen that the extension of velarization to word-final prevocalic environments ranges from a very low rate of application to nearly complete velarization. In some rural areas of the Canary Islands, the process of deletion of word-final /n/ appears to partially bypass the velarized stage, and in many dialects the rates of deletion and velarization are approximately equal to the rate of retention of [n], which suggests a balanced variability which is hard to reconcile with the

[Note 3: These data are largely from those sources reported in footnote 1, with the addition of material from López Morales (1981) and Terrell (1977).]
Table 2: Realization of /n/ in Key Spanish Dialects

<table>
<thead>
<tr>
<th>Dialect</th>
<th>$n$# #</th>
<th>$n$# V</th>
<th>$n$# #</th>
<th>$n$# V</th>
<th>$n$# #</th>
<th>$n$# V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPAIN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cáceres</td>
<td>0 63 36</td>
<td>21 51 28</td>
<td>0 22 17</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
</tr>
<tr>
<td>Granada</td>
<td>0 77 23</td>
<td>48 35 17</td>
<td>0 22 17</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
</tr>
<tr>
<td>La Coruña</td>
<td>12 80 8</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
</tr>
<tr>
<td>Murcia</td>
<td>81 0 19</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
</tr>
<tr>
<td>Sevilla</td>
<td>2 42 56</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
<td>12 76 9</td>
</tr>
<tr>
<td><strong>CANARY ISLANDS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>La Gomera (urb.)</td>
<td>27 51 22</td>
<td>55 34 11</td>
<td>27 51 22</td>
<td>55 34 11</td>
<td>27 51 22</td>
<td>55 34 11</td>
</tr>
<tr>
<td>La Gomera (rur.)</td>
<td>49 18 33</td>
<td>80 11 9</td>
<td>49 18 33</td>
<td>80 11 9</td>
<td>49 18 33</td>
<td>80 11 9</td>
</tr>
<tr>
<td>Las Palmas</td>
<td>18 49 33</td>
<td>54 34 12</td>
<td>18 49 33</td>
<td>54 34 12</td>
<td>18 49 33</td>
<td>54 34 12</td>
</tr>
<tr>
<td>Gran. Canaria (rur.)</td>
<td>29 29 42</td>
<td>73 10 17</td>
<td>29 29 42</td>
<td>73 10 17</td>
<td>29 29 42</td>
<td>73 10 17</td>
</tr>
<tr>
<td>El Hierro (urb.)</td>
<td>71 5 24</td>
<td>96 0 4</td>
<td>71 5 24</td>
<td>96 0 4</td>
<td>71 5 24</td>
<td>96 0 4</td>
</tr>
<tr>
<td>Sta. Cruz Tenerife</td>
<td>13 51 36</td>
<td>63 19 18</td>
<td>13 51 36</td>
<td>63 19 18</td>
<td>13 51 36</td>
<td>63 19 18</td>
</tr>
<tr>
<td>Tenerife (rur.)</td>
<td>30 35 29</td>
<td>63 26 11</td>
<td>30 35 29</td>
<td>63 26 11</td>
<td>30 35 29</td>
<td>63 26 11</td>
</tr>
<tr>
<td>Lanzarote (urb.)</td>
<td>39 32 29</td>
<td>57 16 26</td>
<td>39 32 29</td>
<td>57 16 26</td>
<td>39 32 29</td>
<td>57 16 26</td>
</tr>
<tr>
<td>Lanzarote (rur.)</td>
<td>31 3 61</td>
<td>76 4 20</td>
<td>31 3 61</td>
<td>76 4 20</td>
<td>31 3 61</td>
<td>76 4 20</td>
</tr>
<tr>
<td>La Palma (urb.)</td>
<td>3 63 34</td>
<td>55 23 22</td>
<td>3 63 34</td>
<td>55 23 22</td>
<td>3 63 34</td>
<td>55 23 22</td>
</tr>
<tr>
<td>La Palma (rur.)</td>
<td>34 32 32</td>
<td>61 18 21</td>
<td>34 32 32</td>
<td>61 18 21</td>
<td>34 32 32</td>
<td>61 18 21</td>
</tr>
<tr>
<td>Pto. Rosario (high)</td>
<td>39 57 64</td>
<td>48 47 5</td>
<td>39 57 64</td>
<td>48 47 5</td>
<td>39 57 64</td>
<td>48 47 5</td>
</tr>
<tr>
<td>Pto. Rosario (low)</td>
<td>25 55 20</td>
<td>72 19 9</td>
<td>25 55 20</td>
<td>72 19 9</td>
<td>25 55 20</td>
<td>72 19 9</td>
</tr>
<tr>
<td>Antigua</td>
<td>60 27 13</td>
<td>65 21 14</td>
<td>60 27 13</td>
<td>65 21 14</td>
<td>60 27 13</td>
<td>65 21 14</td>
</tr>
<tr>
<td>Valle Ortega</td>
<td>33 2 11</td>
<td>54 7 13</td>
<td>33 2 11</td>
<td>54 7 13</td>
<td>33 2 11</td>
<td>54 7 13</td>
</tr>
<tr>
<td>Corralejo</td>
<td>14 33 53</td>
<td>14 33 53</td>
<td>14 33 53</td>
<td>14 33 53</td>
<td>14 33 53</td>
<td>14 33 53</td>
</tr>
<tr>
<td><strong>LATIN AMERICA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>11 70 19</td>
<td>6 80 14</td>
<td>11 70 19</td>
<td>6 80 14</td>
<td>11 70 19</td>
<td>6 80 14</td>
</tr>
<tr>
<td>Cuba</td>
<td>8 54 38</td>
<td>3 59 36</td>
<td>8 54 38</td>
<td>3 59 36</td>
<td>8 54 38</td>
<td>3 59 36</td>
</tr>
<tr>
<td>Dom. Rep.</td>
<td>4 74 22</td>
<td>7 80 13</td>
<td>4 74 22</td>
<td>7 80 13</td>
<td>4 74 22</td>
<td>7 80 13</td>
</tr>
<tr>
<td>Ecuador</td>
<td>2 87 11</td>
<td>11 74 15</td>
<td>2 87 11</td>
<td>11 74 15</td>
<td>2 87 11</td>
<td>11 74 15</td>
</tr>
<tr>
<td>El Salvador</td>
<td>5 60 25</td>
<td>11 74 15</td>
<td>5 60 25</td>
<td>11 74 15</td>
<td>5 60 25</td>
<td>11 74 15</td>
</tr>
<tr>
<td>Guatemala</td>
<td>4 80 16</td>
<td>23 69 8</td>
<td>4 80 16</td>
<td>23 69 8</td>
<td>4 80 16</td>
<td>23 69 8</td>
</tr>
<tr>
<td>Honduras</td>
<td>2 64 34</td>
<td>2 80 18</td>
<td>2 64 34</td>
<td>2 80 18</td>
<td>2 64 34</td>
<td>2 80 18</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>7 53 38</td>
<td>10 81 9</td>
<td>7 53 38</td>
<td>10 81 9</td>
<td>7 53 38</td>
<td>10 81 9</td>
</tr>
<tr>
<td>Panamá</td>
<td>1 86 11</td>
<td>5 80 15</td>
<td>1 86 11</td>
<td>5 80 15</td>
<td>1 86 11</td>
<td>5 80 15</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>22 69 9</td>
<td>8 79 13</td>
<td>22 69 9</td>
<td>8 79 13</td>
<td>22 69 9</td>
<td>8 79 13</td>
</tr>
<tr>
<td>Venezuela</td>
<td>1 86 13</td>
<td>13 72 15</td>
<td>1 86 13</td>
<td>13 72 15</td>
<td>1 86 13</td>
<td>13 72 15</td>
</tr>
</tbody>
</table>

The existence of rule (7). It has also been pointed out (Sosa and d’Introno 1984) that in variation studies of Spanish, it is often nearly impossible to distinguish between velar [ŋ] and a nasalized vowel when transcribing taped materials, and thus an even greater degree of indeterminacy may exist in the data. Nonetheless, the general lines are clear, and partially account for the affirmation of some Spanish linguists (Alvar 1959) that at least in Peninsular and Canary Island dialects, velarization of word-final prevocalic /n/ is rare, except for Galicia. In many dialects, then, velarization of word-final /n/ must apparently be applied after resyllabification, and in many others, the variability at a dialectal and idiolectal level produces the same anomalous interpretation of individual variation and isogloss differentiation via rapid rule reordering. The transitions between dialects where word-final /n/ is velarized and those where it is not are not as easy to trace, given that the deletion of /n/ and nasalization of the preceding vowel is a sporadically occurring variant in nearly all dialects of Spanish. Another fact of importance in arguing against the parallel between the aspiration of /s/ and the velarization of /n/ is that the latter process is not as frequently constrained by sociolinguistic limitations (Lipski 1983a), although there does exist a slight tendency to reduce the extension of velarization of word-final prevocalic /n/ in more formal styles.

Spanish phonology exhibits several other consonantal phenomena which have behavior patterns similar to those of /n/ and /s/, and whose rates of application in word-final environments are similarly variable:

1. Deletion of word-final /d/, which for some speakers has become lexicalized, normally exhibits variation in word-final prevocalic position: usted es ‘you are’ for example, may be pronounced with [s] or [ð]: [usté:s] or [usté:es].
Assibilation of syllable-final /r/, occurs in parts of central Mexico, in the central highlands of Costa Rica, in highland Guatemala and Ecuador, and in other parts of the Andean region. This process, frequent before consonants and pauses in these regions, is normally blocked in word-final prevocalic position, except in central Ecuador, where the assimilated variant (which is much closer to [ʃ]) is often heard in word-final prevocalic position; this sound is possibly linked to the strong Quechua substratum of this area.

(3) Lateralization of word- and syllable-final /r/, occurs in much of the Caribbean region, in some zones of the Canary Islands, and sporadically elsewhere in Spain and Latin America. In general, lateralization (which alternates with aspiration, reduplication of following consonants, and deletion) is normally blocked in word-final prevocalic position, although in some dialects there is an incipient extension of the syllable-final variants to prevocalic contexts (Terrell 1976).

Harris (1984) also mentions the vocalization of /l/ and /r/ in the Cibao dialect of the Dominican Republic, a process which also occurs, but less frequently, in parts of Cuba and Panama, and formalizes the process by the rule:

\[ l/r \rightarrow j \]

However, a consideration of the quantitative data on which this analysis is based (Alba 1979) reveals a considerable variation in word-final prevocalic position, which calls for an analysis similar to that dealing with /n/ and /s/, that is, of a fluctuation in the relative ordering of the resyllabification rule and the vocalization rule.

Given the undesirability of the notion of variable reordering of segmental and prosodic rules, we turn to alternative possibilities. Evidently what is occurring in those Spanish dialects where phonological process originally limited to word-final preconsonantal position are being extended to prevocalic position is a reduction of allomorphy, a paradigmatic simplification in which the lexical representation of the phonological word has fewer variants for the final segment of that word. If a word like casas ‘houses’ is pronounced [kásah] regard-

less of the presence, absence or nature of a following segment, this is clearly a simpler representation than the need to enumerate a set of factors which condition or impede an aspiration rule. At the same time, in no dialect of Spanish known to me is the application rate of the aspiration process as high in prevocalic contexts as in preconsonantal contexts, except perhaps for those extremely advanced cases as lower class Dominican and some Andalusian and Canary Island dialects, in which cases it is more appropriate to speak of a total relexification and not of the application of a rule. The same is true in those dialects where word-final /n/ is velarized nearly uniformly in prepausal and prevocalic environments; the appearance of a homorganic nasal in preconsonantal positions is due to the application of a low-level detail rule, as is the complete deletion of the nasal segment.

The true nature of this situation resides in the inevitable tension between the reduction of word-level allomorphy and the uniform application of consonantal linking, the prominence of the phonological phrase, and the non-discrete nature of the phonological word in the spoken Spanish phrase. Consonantal linking involves resyllabification, but more importantly, it involves the avoidance of phonetic signals of phonological word boundaries, phonetic discontinuities or discrete points. It is probably not coincidental that aspiration of word-final prevocalic /s/ occurs most frequently in those dialects where the underlying posterior fricative /x/ is also realized as [h], since this sound already occurs word-internally as in caja [káhə] ‘box’, or across word boundaries as in mi jefe [mihéfe] ‘my chief’. Given the comparatively low frequency of intervocalic and word-initial /x/ as opposed to /s/, confusion is rare, but it does occur at times, and in these cases speakers may consciously replace an [s]. In a conversation with me, a Puerto Rican once pronounced the title of Neruda’s Las Odas ‘The Odes’ as [lahóðah] ‘the fuck’s’, then immediately corrected himself by saying [lasóðah], thereby rectifying a potential unseemly pun.

In the dialects of Honduras and El Salvador, the frequent aspiration of word-initial postvocalic /s/ further blurs the phonetic signalling of word boundaries, by creating more instances of the combination [VhV] as in la señ[a] [lahéñə] ‘the sign’, and word-internal intervocalic /s/ may even be aspirated, particularly at morpheme boundaries or what appear to be such, as in presidente ‘president’ [prehidénte], desempleo [dehempléo] ‘unemployment’, licenciado [lihensiado] ‘lawyer’ (Lipski 1984a).
Extension of word-final velar [g] to prevocalic environments ostensibly creates a phonetic discontinuity as claimed by Hyman (1956), since Spanish does not normally exhibit word-internal intervocalic [g]. However, in many of the dialects where this extension occurs, the underlying combination /ng/ is also reduced to [y] as in tengo [tego] ‘I have’, in which the presence of an intervocalic velar nasal no longer signals the presence of a word boundary. In other dialects, the velar nasal has been gradually replaced by a simple nasal resonance in word-final prevocalic position, creating a half-nasalized hiatus at the word boundary which in normal speech is barely if at all distinguishable from an ordinary word-internal vocalic combination.

Word-final assimilated /r/ is not normally extended to prevocalic contexts in Mexico, Costa Rica, Guatemala and other conservative dialects, and significantly, with one exception known to me, Spanish provides no process which would cause instances of an assimilated underlying /r/ in word-internal intervocalic contexts. The one exception is the dialect of highland central Ecuador, where word-final /r/ is assimilated, not to the alveolar spirant [ɾ] found in Mexico and Central America but rather to the prepalatal spirant [ɾ], the same sound to which the underlying trill /rr/ is assimilated. In these highland dialects, extension of the prepalatal fricative pronunciation of word-final /r/ is quite frequent in prevocalic position, and this combination does not preferentially signal the presence of a word boundary, since, for example, the /r/ in ver ajo [beβako] ‘to see garlic’ and the /rr/ in verraco [beβasko] ‘boar’ receive essentially the same pronunciation.

In dialects where word-final /r/ is lateralized, the extension of this variant to prevocalic positions would not produce a phonetic discontinuity, and in fact the extension does occur with a limited frequency. At the same time, the potential for phonological confusion is considerably higher, given the frequency of occurrence of word-final, word-initial and intervocalic /l/, and this may act to impede the full extension of the lateralization. The case of vocalized word-final liquids in the Cibao dialect of the Dominican Republic is more variable, Harris’s analysis notwithstanding, but it should be recalled that intervocalic /y/ is not articulated particularly strongly in this dialect, with the result that él habla ‘he speaks’ and ella habla ‘she speaks’ may both sound rather like alla va [aˈyaʎa] ‘there it goes’.

The generalization of phonological processes affecting word-final consonants in syllable-final position (i.e., before a following word beginning with another consonant) to prevocalic position (i.e., before a following word beginning with a vowel) is an inevitable step in the reduction of allomorphy and phonological complexity. When at the same time such an extension will not drastically affect the overall phonotactics of the Spanish phrase, including the non-preferential phonetic signalling of word boundaries, such extensions may proceed unchecked, limited only by extraphonological factors. Most Caribbean Spanish dialects have extended aspiration of word-final /s/ and velarization of word-final /n/ to prevocalic contexts, and have initiated the extension of lateralization of word-final /r/ to prevocalic environments. To state that resyllabification applies after the rule has affected the phonological word is merely a restatement of the fact that the phenomena in question are in the process of being lexicalized, or that word-level allomorphy is being reduced. However, since in normal speech resyllabification is an automatic, nearly exceptionless process, whereas the other phenomena under discussion are variable and subject to considerable regional, idiolectal and sociolinguistic differentiation, it is not feasible to include these processes in derivations with the automatic process of resyllabification. The fact that a speaker may on one occasion pronounce los amigos ‘the friends’ as [lɔamosiɣo] and on another as [lɔamɔiɣo] says less about the application of resyllabification, which affects both strings equally, than about the gradual phonological levelling of word-final /s/ as [ʃ]. To opt for the general rule of the form:

\[ (12) \ x \rightarrow y \]

regularly formalizes the end point, reached only gradually, since exceptionless application of such a rule is in fact relexification. The intermediate stages, constrained by the real variation which cannot be conjured away by any theoretical manipulations, can only be described by the balance between paradigmatic simplification and syntagmatic levelling. Moreover, in a large number of Spanish dialects, the rates of application of aspiration of /s/ and neutralization of /l/ and /r/ are lower in word-internal contexts than in word-final environments, which supports the observation that such processes originally affected only word-final environments, being rapidly gen-
eralized to word-internal syllable-final environments in accordance with the phonotactic structure of Spanish, which normally does not preferentially signal word boundaries. Thus the occurrence of the consonant in syllable- (or rhyme-) final position is not as important as its occurrence in word-final position, a fact illustrated by the differential behaviour of /n/. The dynamic nature of this phonological variation and restructuring cannot be represented by a static model, which, however much it provides an adequate formulation of the underlying direction of the phonological modifications, and of the end points to which these processes are directed, fails to do justice to the process itself.

REFERENCES

Alba, Orlando

Alvar, Manuel

Azevedo, Milton

Caravedo, Rocío

Cedergren, Henrietta

Fontanella, Beatriz

Gryner, Helen, and Alzira Tavares de Macedo

Guillot, Jorge

Harris, James

Hyman, Ruth

Lafford, Barbara

Lipski, John


López Morales, Humberto

Mondéjar, José

Robinson, Kimball
Sosa, Juan, and Francesco d'Introno
1984 ¿Elisión de nasal y/o nasalización de vocal en caraqueño? Presented at the VIII Simposio de Dialectología del Caribe Hispánico, Florida Atlantic University.

Terrell, Tracy

Zamora, Juan Clemente, and Jorge Guitart