Raddoppiamento sintattico and Prosodic Phonology: A Re-evaluation

Authors[1]

Matthew Absalom
Department of French, Italian and Spanish Studies
The University of Melbourne
Victoria 3010
mabsalom@unimelb.edu.au
www.fritss.unimelb.edu.au/about/staff/absalom.html

John Hajek
Department of French, Italian and Spanish Studies
The University of Melbourne
Victoria 3010
j.hajek@unimelb.edu.au
www.fritss.unimelb.edu.au/about/staff/hajek.html

Abstract

Raddoppiamento sintattico (RS), or word-initial gemination, e.g. *tre* [kk]*ani* "three dogs", is a well-known external sandhi phenomenon in Italian. It has been widely discussed in the phonological and phonetic literature and its analysis was central to the formulation of Prosodic Phonology (PP) in the 1980s (N&V 1982, 1986). While approaches to phonology have changed radically since the 1980s, many of the tenets of PP with regard to RS, in particular its relationship with the phonological phrase (ϕ), continue to be reported uncritically (e.g. Borrelli 2002 and many others), despite the availability of strong counter-evidence. In this paper we evaluate PP claims with regard to RS, and show that the facts of RS do not appear to match the former. We show that the PP treatment of RS does not appear to be particularly data driven, nor is it accurate with regard to the prosodic phrasing of RS (see also Agostiniani 1992; Loporcaro 1995, 1997a, 1997b). We claim that a better analysis of when RS does/does not occur in Italian needs to account for much more data than prosodic phonologists are willing to refer to and cannot be reliably associated with ϕ.

Keywords

ITALIAN LINGUISTICS; PROSODIC PHONOLOGY

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[1] To access our work on the topics of RS and GT please visit The University of Melbourne Phonology and Phonetics Working Group site at http://www.groups.edna.edu.au/course/view.php?id=557

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Stating the problem

An important question in linguistic research concerns the relationship between theory and data: should theory drive data or data drive theory? It is our contention that, in relation specifically to Italian phonology, there is evidence of a persistent pattern of fitting the data to the theory (see Absalom 2004). The treatment of RS in Prosodic Phonology (PP) discussed in this paper illustrates this very problem, whereby the insistence on theoretical elegance and simplicity bears little or no relationship with the real complexities of the RS data.

Preliminary issues

What is raddoppiamento sintattico?

RS is a well-known external sandhi phenomenon found in Central and Southern Italy (see Loporcaro 1997a for a detailed study). Typically, RS involves the doubling of initial consonants and two types of RS are usually described in the literature: phonological RS and (morpho)lexical RS. Phonological RS is a regular and productive phenomenon in Italian spoken in Tuscany and elsewhere and is triggered by oxytones (1a and b below). Lexical RS triggers are restricted to a closed set of items which vary from variety to variety (1c and d below).

(1)a.	**all** polysyllabic oxytones	*farò* [b:]*ene* "he will do well"	**phonological** RS
b.	**all** stressed monosyllables	*sto* [b:]*ene* "I'm well"	
c.	**some** unstressed monosyllables	*a* [l:]*ui* "to him"	**lexical** RS
d.	**some** penultimate stressed polysyllables	*come* [t:]*e* "like you"	

Table 1. Types of RS (after Loporcaro 1997a:1, table 1)

Prosodic Phonology

The model of prosodic phonology which has had most impact on the description of RS is that developed by Nespor and Vogel (N&V 1982, 1986). Prosodic phonology here is conceived of as one of "a set of interacting subsystems, each governed by its own principles", which make up the phonological component of the grammar. Other subsystems include the metrical grid, lexical phonology and autosegmental phonology (N&V 1986:1). Prosodic theory is a response to the realisation that the approach to phonology expressed in early generative theory was inadequate. This earlier position saw phonology as the linear arrangement of segments upon which a set of phonological rules, which made reference to the boundaries of the syntactic surface structure, could act.

The premises which underlie the prosodic phonology approach are as follows.

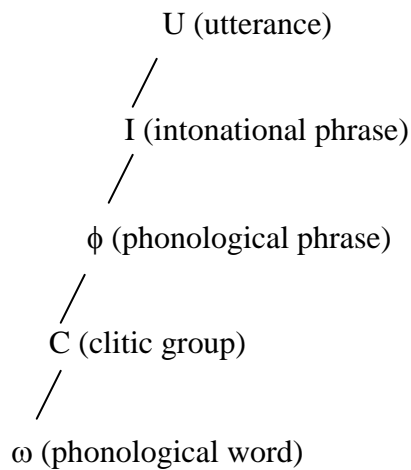- There is a separate prosodic hierarchy, parallelling syntactic structure. Its main components include:[2]

       U (utterance)

        /

      I (intonational phrase)

      /

     φ (phonological phrase)

    /

   C (clitic group)

  /

ω (phonological word)

Figure 1. The Prosodic hierarchy.

- Each component of the hierarchy is exhaustively dominated by the superordinate component in accordance with the Strict Layer Hypothesis (Selkirk 1984).

- Phonological rules are prosodic in that they refer *exclusively* to domains within the prosodic hierarchy. This has been expressed by Inkelas as the "Indirect Reference Hypothesis: phonological rules have access only to p-structure [phonology] (i.e., not to m-structure [morphology] or c-structure [syntax])" (1993:77 (2)).

- Mapping rules mediate between syntactic structure and prosodic structure. Importantly, syntactic structure and prosodic structure are relatable but need not be strictly identical.

According to N&V (1982:226), "[t]he fact that the hierarchical prosodic structure makes use of syntactic information but is not necessarily isomorphic to syntactic structure, is not surprising in that it parallels the situation below the word level, where the phonological and morphosyntactic structures do not necessarily coincide".

Nespor (1993:196-197) highlights two advantages of prosodic phonology. First, phonological rules can only make reference to a finite set of constituents contained in the prosodic hierarchy. If phonological rules had direct access to syntactic (or other grammatical) structure, no such limit would exist. Second, prosodic theory is built upon only three types of rules which, crucially, make explicit and exclusive reference to

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[2] N&V's original PP model (see N&V 1982) did not include C (clitic group), but they make reference to it in later works with reference to Italian including RS, e.g. N&V (1986), Nespor (1999), Vogel (1997). It remains controversial and is not accepted by many other scholars, e.g. Loporcaro (1995). It does not matter here whether the domain of RS is assumed to be either φ or C, since the analysis, facts and criticisms remain the same. See also Meinschaefer (2005) on non-RS-related evidence against the notion of clitic group in Italian.

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prosodic domains: limit rules (which refer to edges of domains), span rules (which apply to the whole of a domain regardless of internal branchings) and juncture rules (which apply across two domains of the same level).

According to its proponents, the set of constituents in the prosodic hierarchy is further motivated by phonetic evidence. Specifically, "the fact that prosodic theory provides a unique set of grammatical constituents, each of which may be signalled in the speech chain by specific phonetic cues, suggests that it is precisely the set of prosodic constituents, rather than other types of constituents, that accounts for the first level of processing in speech perception" (N&V 1986:3).

RS and PP

What is most relevant to the present discussion is the phonological phrase (ϕ). N&V (1982, 1986) help to motivate the existence of this unit in their prosodic hierarchy by showing how reference to ϕ captures purported patterns of RS. They posit a series of mapping rules for the formation of ϕ.

(2)   Phonological Phrase Formation (N&V 1986:168)

   a. ϕ domain

The domain of ϕ consists of a C [= major category: N, V, A] which contains a lexical head (X) and all Cs on its non-recursive side up to the C that contains another head outside of the maximal projection of X

   b. ϕ construction

Join into an n-ary branching ϕ all Cs included in a string delimited by the definition of the domain of ϕ.

   c. ϕ relative prominence

In languages whose syntactic trees are right branching, the rightmost node of ϕ is labeled *s*; in languages whose syntactic trees are left branching, the leftmost node of ϕ is labeled *s*. All sisters of *s* are labeled *w* [= weak].

A number of comments are warranted. First, Italian is syntactically right branching therefore its non-recursive side is on the left. The relative prominence principle will cause the rightmost node of ϕ to be labelled *s*. For the purposes of phonology, lexical heads are N(oun), V(erb) or A(djective). P(reposition) is excluded from this group as is common in much phonological theory (see N&V 1986:169 for motivations). These mapping algorithms make no specification of the type of element that will form a ϕ with the lexical head: "[i]t is the position and not the category of the element that is relevant" (N&V 1986:169). To clarify the operation of the mapping algorithm proposed we examine below the sentence *Ho visto tre colibrì molto scuri* "I saw three very dark hummingbirds". Applying the prosodic mapping algorithm from right to left to form ϕs, A is the first lexical head we encounter. This joins with *molto* to form AP, the maximal projection of A and then we meet the next lexical head, the N *colibrì*. The first ϕ thus consists of *molto scuri*. N combines with *tre* to form NP, the maximal projection of N which is preceded by another lexical head, V. The second ϕ is therefore *tre colibrì*. The final ϕ consists of the past tense *ho visto*. The syntactic tree and prosodic bracketing of the sentence would look like this:

Ho visto tre colibrì molto scuri

(3)   [h<u>o vv</u>isto]ϕ [tr<u>e kk</u>olibrì]ϕ [<u>m</u>olto scuri]ϕ
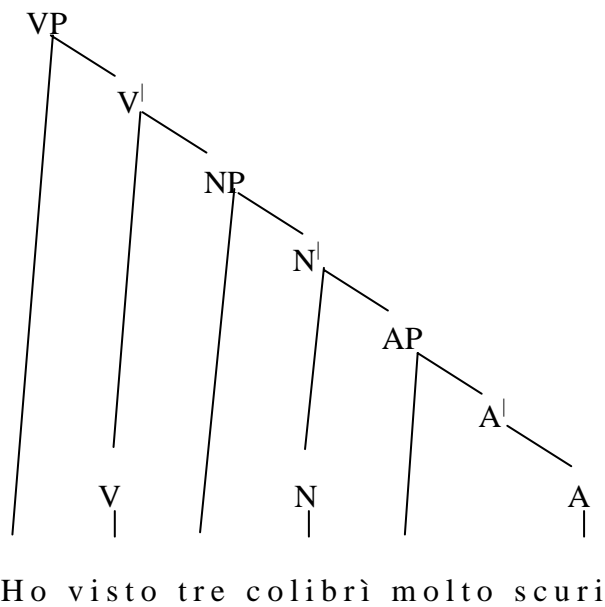
N&V's position in relation to RS essentially hinges on the description of the *non-occurrence* of stress-conditioned RS. The key claim made by N&V is that RS is a *domain span* rule and that the relevant domain is ϕ which is specifically motivated, they claim, by when RS occurs (1982:228). They therefore predict that RS will occur *within* but not *across* ϕs.

They propose the following rule to account for RS (N&V 1986:170 (9)), where [+DTE] means "designated terminal element" which is used to indicate the strong element in the string, in this case the stress-bearing vowel.

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(4)   Raddoppiamento Sintattico

C $\prod$ [+long] / […[… V]$_\omega$ [_ [+son] …]$_\omega$ …]$_\phi$
              [+DTE]   -NAS

Given the mapping in (3) and the rule in (4), N&V claim that RS can only occur in 2 of the 3 potential RS-sites (underlined in example (3)).

N&V motivate this rule by comparing their prosodic account with the earlier syntactic approaches. In analysing the sentence above, *ho visto tre colibrì molto scuri*, they point out that it is only the prosodic approach which correctly predicts what they claim as the *lack* of RS between *colibrì* and *molto*. Since *colibrì* and *molto* are in separate ϕs, RS is blocked. According to the authors, "[t]his generalization would be missed by a specification of the domain of application of RS that makes direct reference to syntactic notions, since such a specification would not amount to more than a list of environments. The superiority of prosodic constituents over syntactic constituents is thus demonstrated for RS" (N&V 1986:172).

They are aware that RS can occur in some cases outside the ϕ as mapped by the algorithm, but claim that this is only *optional* and can be dealt with by means of an additional restructuring rule. In these cases, adjacent ϕs optionally restructure into one ϕ (referred to as ϕ'), with an important restriction. It is claimed that ϕ'-formation takes place only "between a head and its following *non-branching* complement". The "optional rule" is as follows (N&V 1986:173 (13)):

(5)   *ϕ restructuring (optional)*

A non-branching ϕ which is the first complement of X on its recursive side is joined into the ϕ that contains X.

This would have the following effect (N&V 1986:173 (14)):

(6)   […C$_w$ C$_s$]$_\phi$ [C]$_\phi$ > […C$_w$ C$_w$ C$_s$]$_\phi$

In order to illustrate this process, it is useful to examine the sentence *I caribù nani sono estinti* "The dwarf caribou are extinct" (N&V 1986:172 (11)). Following the mapping algorithm for ϕ, N&V claim that this sentence would contain three ϕs:

(7)   [i carib<u>ù</u>]$_\phi$ [<u>n</u>ani]$_\phi$ [sono estinti]$_\phi$

According to this mapping, potential stress-conditioned RS after *carib<u>ù</u>* is blocked by the ϕ-boundary. However, if RS is registered in a sentence such as this, then N&V (1986:173) claim ϕ restructuring has occurred and the new ϕ structure would be:

(8)   [i caribù <u>nn</u>ani]$_\phi$ [sono estinti]$_\phi$

Restructuring (7) to (8) is necessary to account for RS between *caribù* and *nani*.

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Question closed?

Even a cursory examination of recent literature on prosodic phonology would suggest that the PP approach has resolved all descriptive issues dealing with RS. This is principally due to continued uncritical acceptance and citing of the *facts* of RS as described by N&V in more recent theoretical work cast within the framework of prosodic phonology (e.g. Chen 1990, Vogel 1994, Inkelas and Zec 1995, Nespor 1999, Tokizaki 1999, Frascarelli 2000, Borrelli 2002). A closer examination of RS, however, reveals that the PP treatment is highly problematic. In the next section we explore a number of difficulties which call for a complete re-evaluation of the relationship between RS and PP.

Problems with PP

Mapping difficulties

A number of scholars have outlined significant problems with N&V's mapping algorithms. Ghini (1993) demonstrates that at times the "phrasing proposed by Nespor and Vogel is not accounted for by their own algorithm" (1993:43). The ϕ-structure which N&V propose for *i caribù nani sono estinti* was reported above as:

(9)   [i caribù]$_\phi$ [nani]$_\phi$ [sono estinti]$_\phi$

According to Ghini, a closer examination of the syntactic bracketing of the sentence reveals that this bracketing does not match N&V's own phonological phrase formation rules (redundant levels of bracketing have been omitted):

(10)   [[[i]$_{DET}$ [[caribù]$_N$ [nani]$_{AP}$]$_{N'}$]$_{NP}$ [[[sono]$_v$ [estinti]$_{AP}$]$_{V'}$]$_{VP}$]]$_S$

The correct bracketing would see *sono* and *estinti*, both lexical heads separated by the maximal projection of A, in separate primitive ϕs, as in (11). Only after optional restructuring would they form a ϕ, as in (12):

(11)   Phonological phrase formation:

         [i caribù]$_\phi$ [nani]$_\phi$ [sono]$_\phi$ [estinti]$_\phi$

(12) ϕ restructuring (optional):

         [i caribù̀ nnani]$_\phi$ [sono estinti]$_\phi$

While N&V's analysis would still allow for RS in this case, the fact that their own prosodic phrasing was incorrect weakens the credibility of their approach. The problem for a treatment of RS is highlighted by a slightly modified example with the same syntactic structure:

(13)   [[[il]$_{DET}$ [[caribừ]$_N$ [n̠ano]$_{AP}$]$_{N'}$]$_{NP}$ [[[è̠]$_V$ [m̠orto]$_{AP}$]$_{V'}$]$_{VP}$]]$_S$

'The dwarf caribou is dead'

In (14) the phonological phrase formation rule has applied with blocking by φ-boundary of both potential RS triggers.

(14)   [il caribừ]$_φ$ [n̠ano]$_φ$ [è̠]$_φ$ [m̠orto]$_φ$

   Optional restructuring in (15) ostensibly eliminates these blockers and RS can occur:

(15)   [i caribừ nn̠ano]$_φ$ [è mm̠orto]$_φ$

   In our view, the phrasings in (12) and (15), independent of RS, are in fact to be preferred in natural speech and should not be optional, secondary derivations. Moreover, RS at all sites in both examples is fully acceptable and is not blocked by any presumed φ-boundary. The alternative structures in (11) and (14) are marked and provide less natural phrasing and should not be derived as preferred and basic by any phrasing algorithm. That RS should not be predicted to occur in the first instance, as in (14), is particularly disturbing.

   Even if the restructuring rule is assumed to exist, its formulation incorrectly blocks RS when it can occur. If we return to the example in (3), given here as (16), N&V's model predicts that RS is never possible after *colibrì*, since their optional restructuring rule given in (5) only allows for the merger of non-branching φs to the right. Yet other sources, e.g. Agostiniani (1992) and Loporcaro (1997a, 1997b), note specifically that RS can occur precisely in such contexts.

(16)   [h̠o vv̠isto]$_φ$ [tre̠ kk̠olibrì]$_φ$ [m̠molto scuri]$_φ$

   Further problems for N&V's mapping rules are cited by Monachesi (1999) when discussing so-called "Italian restructuring verbs". In relation to RS, Monachesi criticises the approach of N&V (1986) as it makes "the wrong predictions with respect to the prosodic structure of restructuring verbs" (1999:277). Monachesi notes that RS is triggered in both phrases with identical meanings which follow:

(17)   Lo potrò [l:]eggere

(18)   Potrò [l:]eggerlo

   "I will be able to read it"

   She argues that the two sentences have different syntactic structures and that N&V (1986), whose approach is driven by syntactic constituency, erroneously predict different phonological phrasing. In the first case, Monachesi suggests the following syntactic and prosodic structures based on N&V (1986). The algorithm correctly predicts RS in this case as in (20).

(19)   [[lo potrò]$_V$ [leggere]$_V$]$_{VP}$

(20)   [lo potr<u>ò l</u>:eggere]$_\phi$

In the second case, due to a different syntactic structure, N&V's algorithm predicts a different phonological phrasing:

(21)   [[potrò]$_V$ [leggerlo]$_{VP}$]$_{VP}$

(22)   [potrò]$_\phi$ [leggerlo]$_\phi$

In the first parse, RS is blocked, but optional ϕ-restructuring may occur. If it does, it results in a phrasing parallel to the first case:

(23)   [potr<u>ò l</u>:eggerlo]$_\phi$

This is problematic, according to Monachesi (1999:286), as RS is not optional in this case but *obligatory*.

The value of N&V's limited restructuring rule is further undermined by the results of a recent corpus-based study. Meinschaefer (2005) reveals that N&V's restructuring conditions do not hold in Italian. She states that "clearly, the data show that not only DPs/NPs, but also PPs [= prepositional phrases] can restructure with the preceding verb, even though they are syntactically branching. Moreover, post-verbal subjects can also restructure to form a ϕ-phrase with the verb, even though they are clearly not complements of the lexical head, i.e., of the verb" (2005:20-21). This state of affairs severely weakens the descriptive adequacy of N&V's mapping algorithms and, by extension, undermines the efficacy of prosodic domains in the description of RS and other phonological processes, such as unstressed vowel deletion examined specifically by Meinschaefer.[3]

The utility of N&V's optional restructuring rule, whose existence is necessitated by the inability of the original ϕ-formation rule to capture cases of RS that the authors are aware of, is further undermined by the data and the interaction between RS and speech rate. N&V state that "restructuring might turn out to be more frequent in fast speech than in slow speech" (N&V 1986:173-4. See also Tokizaki 1999). This implies that RS would occur more frequently in fast speech. In both cases, this would be the result of speech being grouped into larger domains via the cancellation of boundaries, allowing for RS to occur in contexts where it had previously been blocked by ϕ-boundaries. However, Troncon and Canepari indicate that in their observation of Italian spoken in Rome,

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[3]   One anonymous reviewer prefers a weaker position: the counter-evidence we have cited to this point does not necessarily undermine the utility of prosodic domains for the description of RS and other phonological processes. It may be that the mapping rules proposed by N&V are not useful. The latter is certainly correct but in our view not strong enough. In the first instance N&V use phenomena such as RS as evidence in support of specific prosodic domains and boundaries. Second, the results of Loporcaro's (1995) systematic review of the applicability of each of N&V's prosodic domains as proposed by the latter to deal with specific phenomena strongly undermine the concept of PP (see below for further discussion).

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"l'applicazione del rafforzamento (fono)sintattico è meno frequente nel parlato rapido" [the application of RS is less frequent in rapid speech] (1989:62).

Difficulties with N&V's data

A problematic issue in N&V's PP approach to RS is the nature of the data ostensibly used by them to confirm the predictions of their model.[4] A classic example hinges on the presence/absence of RS as a way of disambiguating meaning. In the sentence fragment *le mappe di città vecchie*, there are two possible interpretations which N&V contend are made clear by the appearance of RS (as predicted by the application of their mapping rules).

(24)   +RS *le mappe di città* [vv]*ecchie*
        maps of old cities

(25)   –RS *le mappe di città* [v]*ecchie*
        old maps of cities

While this suggested bipartite outcome appears to support a neat theoretical construct, a number of scholars, such as Agostiniani (1992) and Loporcaro (1997) have made it clear that RS is indeed possible in both contexts of this type. In any case, we hasten to add that the clear prosodic disambiguation proffered by N&V (and repeatedly cited in the PP literature) is unlikely in spontaneous speech, and may have been elicited from speakers under testing as the result of experimental direction intended to maximally differentiate the two possible interpretations. The result is the insertion of an RS-blocking pause after *città* in (25) but not in (24). That pausing should block RS is hardly surprising (see below), but we note that in real discourse phrasing is likely to be the same or similar and would cause no confusion. Context would be sufficient to make clear the intended meaning.

RS: what the data actually tell us

It is clear from the foregoing discussion that the PP approach to RS is based on a partial, theoretically driven and idealised representation of the phenomenon. A closer examination of the workings of RS in spontaneous speech reveals that it can occur variably across and within domains unless blocked (see also Agostiniani 1992; Loporcaro 1997a, 1997b; Vogel 1997). Further, phonological RS operates largely independently of syntactic or prosodic boundaries. The factors which block RS have been identified and discussed in detail in the literature (see Absalom, Stevens and Hajek 2002 for a useful summary) and include:

- Phonetic pausing
- Sudden F_0 shift

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[4]   They claim to draw their data from a pool of Tuscan speakers.

- Lengthening of the final vowel of the RS trigger

- Glottalisation

One or more of these phenomena may occur at the edge of prosodic domains such as φ-phrase. As such, scholars may be drawn to conclude that φ-phrase is governing the application of RS. However, they can also be absent at the same boundary *contra* N&V's analysis. Moreover, these blocking factors can also appear within domains, preventing the appearance of RS, in a way entirely unpredicted by current PP analyses.

We have already seen with respect to the effect of increased speech rate, the PP account of RS predicts RS will occur more frequently as the number of blocking φ-boundaries reduces through optional restructuring. Yet Troncon and Canepari's observation, as well as our own, confirm that RS is less prevalent as speech rate rises.

The other side of RS: GT and domains higher than the φ-phrase

A very strong empirical test confirming the inapplicability of N&V's φ-phrase treatment of RS is the observed complementary interaction of RS with so-called *Gorgia Toscana* (GT). GT is a pervasive consonant lenition process that effects single consonants, especially voiceless stops, in Tuscan Italian, e.g. /la koka kola/ *la* [h]*o*[h]*a* [h]*ola* 'Coca Cola'. It applies everywhere between vowels, across and within words, regardless of prosodic constituency below the I-phrase (N&V 1986. This has since been modified to utterance level by Vogel 1997). As Agostiniani (1992) and Loporcaro (1997a, 1997b) point out, it should then be predicted to occur in all contexts where RS doubling is blocked. According to N&V's analysis, in the phrase *venderà castagne arrosto* 's/he will sell roast chestnuts', RS is blocked after stress-final *venderà*, as in (26a), due to φ phrasing. Agostiniani (1992) and Loporcaro (1997a), however, note that RS is possible, as in (26b). When RS is blocked, however, and the initial /k/ is short, GT would be predicted in PP treatments (e.g. Nespor and Vogel 1986) to apply automatically to the string, across φ-boundaries, as in (26c). Yet this is never the case: the application of GT and RS can never co-occur. The absence of GT in (26a) is overlooked by prosodic phonologists and is not accounted for by prosodic treatments of RS.

(26) a. [venderà] $_\phi$ [[k]astagne arrosto]
     b. [*venderà*] $_\phi$ [[k:]*astagne arrosto*]
     c. *[*venderà*] $_\phi$ [[h]*astagne arrosto*]

Even at higher levels of phrasing, N&V's φ-phrase analysis makes incorrect predictions. RS can occur across I-boundaries and its presence or absence parallels the functioning of GT. Agostiniani (1992:7, n. 10) provides the following pair of sentences (27 and 28) which demonstrate that both phenomena act in a similar fashion with interpolated clauses.

(27) *È arrivato a,* [kk]*ome dire, un punto morto*
     'He has arrived at, how can one say it, a dead point'

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(28)   *È capace di,* [h]*ome dire, incasinare tutto*
      'He is capable of, how can one say it, messing up everything'

RS: a re-evaluation

It is worrying that despite detailed critiques of PP and RS by Agostiniani (1992), Loporcaro (1995, 1997a, 1997b), Absalom, Stevens and Hajek (2002) and others, theoretically-driven but factually inaccurate accounts persist.

If we take into account the variable application of RS across a range of prosodic constituents, it becomes obvious that RS cannot be used to motivate the category of phonological phrase. This is particularly clear since RS has been shown to operate *across* purported phonological phrase boundaries.

An alternative approach is Loporcaro's rule-based formulation. He proposes the following rule for RS (1995:27 (57)) which he maintains can account for all data:

(29)   C ∏ C: /   V# __ [where # = $]

                    [+stress]

Loporcaro's major contention is that RS is a purely segmental phenomenon and as such does not need to refer to boundaries or prosodic hierarchies for its environment. Although it does not account for all issues, as noted by Absalom and Hajek (1997), we agree that RS is better treated as a segmental phenomenon and that Loporcaro's rule is better motivated, given the inadequacies of prosodic analyses.

The last word

It is disappointing that prosodic phonologists have failed to take into account the inexplicable discrepancies between the PP treatment of RS and observed facts. Certainly, sources such as Loporcaro (1997a, 1997b), Vogel (1997), Absalom, Stevens and Hajek (2002) are easily accessible. In the case of PP and RS, the apparent theoretical elegance of the analysis seems to have been paramount, and new generations of prosodic phonologists have simply repeated it uncritically and without adequate checking.

While we are certain that current PP analyses of RS are inaccurate and not useful, we have no view at this stage on whether PP might be useful for the description of other phenomena in some languages. However, it is worth observing that some of our colleagues reject the utility of the endeavour. In a detailed assessment of PP treatments of various types of phonological processes across Romance languages, including Italian RS, Loporcaro (1995) provides a stinging critique of Prosodic Phonology and concludes:

> in *all* the cases considered, an analysis in terms of the PH [prosodic hierarchy] (i.e. a prosodic-domain based analysis) demonstrably yields incorrect results, leading to inconsistencies, false predictions, or, at the very least, to unnecessary complications in the rule statement. There is no one single case, it is argued within the wide - and easily accessible - empirical field of Romance, in which a (segmental) PR [phonological rule] expressed with reference to prosodic domains actually stands closer inspection" (1995:2-3).

We can only state that his re-evaluations of the data involved in each case considered appear cogent and convincing.

Finally, we turn to the current thinking on RS by Vogel, one of the original proponents of PP. Although prosodic phonologists continue to cite N&V's (1982, 1986) analysis of RS as a given, they appear unaware of Vogel's radically altered position. On the basis of compelling evidence put forward by Agostiniani (1992), Loporcaro (1995, 1997a, 1997b) and others, some of which is presented here, Vogel now accepts that the PP treatment of RS as a φ-phrase domain span rule is inaccurate. In her own words, RS in Tuscan and Roman varieties of Italian "seems to apply throughout sentences, without regard to their syntactic (and phonological) constituency" (Vogel 1997:66).[*]

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