Article

Plural Alternations and Word-Final Consonant Syllabification in Brazilian Veneto

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Abstract: In Brazilian Veneto (a heritage variety of Veneto spoken in several areas of Brazil), a stem alternation targets the plurals of masculine nominals ending in a consonant. While nominals with a word-final rhotic or nasal are pluralized by adding the masculine plural suffix /-i/ ([biˈt͡ʃer] → [biˈt͡ʃeri] 'glass'), pluralization in nominals with a final lateral involves deletion of the consonant (e.g., [niˈsol] → [niˈsoi] 'bedsheet'). I argue that these differences stem from word-final laterals having a distinct representation from rhotics and nasals: while the latter are represented as codas, the former are represented as onsets of empty-headed syllables. Based on a corpus analysis, I show that (a) speakers' productions of these plurals are stable, and (b) other patterns of pluralization (namely, in monosyllables and words with final stress on a CV syllable) are consistent with the proposal. In addition, the behaviour of laterals with respect to resyllabification, metaphony and intervocalic consonant deletion further suggest that laterals are represented as onsets word-finally.

Keywords: syllabification; laterals; codas; onsets; Brazilian Veneto

1. Introduction

The representation of word-final consonants has been a topic of investigation in many phonological frameworks. One reason for phonologists' interest in such consonants is that they often behave differently from word-internal (coda) consonants, in that they may or may not be assigned weight, or in that they may or may not be involved in phonological processes. To account for the dissimilar behaviour between word-internal and word-final consonants, analyses have proposed specific mechanisms to differentiate between the two, such as extrametricality (where the extrametrical consonant is not parsed into foot structure and therefore does not contribute to weight; e.g., Hayes (1995); Ito (1988)), and the sharing of syllabic or weight positions (which may result in the consonant being assigned weight; e.g., Kiparsky (2003); Watson (1997)), as well as distinct syllabic representations. Regarding the latter, it has been proposed that word-internal and word-final consonants are represented differently (e.g., Harris (1997); Kaye (1990)). For example, in Standard Government Phonology (Kaye 1990), word-internal codas are analyzed as such, while word-final codas are regarded as onsets of empty-headed syllables. Alternatively, it has also been argued that word-final consonants may be targeted by specific types of licensing, which allows them to be parsed as either codas or onsets (Piggott 1999).

In this paper, I examine the alternation observed in the pluralization of masculine nominals in Brazilian Veneto (henceforth BV), to argue that it is motivated by distinct representations of word-final consonants. Like in other Italo-Romance languages (such as Standard Italian), the pluralization of masculine nominals in Veneto varieties (those in Italy and elsewhere) involves suffix /-i/ (Belloni 2009; Luzzatto 2000; Stawinski 1982; Zamboni 1974). However, in BV (and a subset of other Veneto varieties), the pluralization of these nominals results in an alternation that targets the stem. On the one hand, 'regular' pluralization involves either the replacement of a theme vowel (/-o/ or /-e/) by the plural suffix (1-a) or the addition of the plural suffix to nominals ending in a rhotic or nasal consonant (1-b). On the other hand, in nominals ending in a lateral, pluralization yields

a VV string, with no lateral on the surface (2)—the VV string may be realized as a diphthong or hiatus (Guzzo 2023).

(1)   a.   [ˈsaso] 'stone.SG' → [ˈsasi] 'stone.PL'
                [ˈpese] 'fish.SG' → [ˈpesi] 'fish.PL'
       b.   [biˈt͡ʃer] 'glass.SG' → [biˈt͡ʃeri] 'glass.PL'
                [paˈroŋ] 'boss.SG' → [paˈroni] 'boss.PL'

(2)   [niˈsol] 'bedsheet.SG' → [niˈsoi] 'bedsheet.PL'
           [kaˈval] 'horse.SG' → [kaˈvai] 'horse.PL'

In what follows, I propose that this alternation can be explained if we assume that word-final rhotics and nasals are represented as codas, while word-final laterals are represented as onsets (of empty-headed syllables). I use corpus data (from the *Talian Corpus*; Garcia and Guzzo (2023)) to argue that word-final laterals behave differently from other word-final consonants in terms of plural assignment. In addition, I show that (a) the pluralization of other BV nominals (namely, monosyllables and words with final stress on a CV syllable) and (b) the behaviour of laterals with respect to other BV phonological phenomena are consistent with the proposal that word-final laterals are represented differently.

As will be detailed below, the *Talian Corpus* is a corpus of written texts in BV obtained from newspaper articles and book excerpts. As BV does not have a standardized orthography, the authors of these materials often mark their pronunciations in writing and follow their intuitions about the well-formedness of grammatical constructions. Since BV has developed (and still is) in a contact situation favouring linguistic variation, surface variation that is revealing of phonological structure could be potentially manifested in the writers' realization of plurals. In this case, examining written corpus data is a useful tool for capturing the patterns that reflect speakers' representations.

This paper is organized as follows. In the next section, I discuss the properties of BV stress and syllable structure, with a focus on the behaviour of consonants that can appear word-finally. In Section 3, I present the representations for word-final consonants in BV and discuss them based on corpus data. In this section, as well as in subsequent sections that include corpus data, the relevant patterns in the data are quantified and the distributions of such patterns in the writers' productions are provided. I examine corpus data from the pluralization of other BV structures in Section 4, as well as data from additional phonological phenomena in Section 5, to show that they are all compatible with the proposal. Section 6 discusses the BV representations in view of other approaches in phonological theory, and Section 7 concludes.

2. BV Stress and 'Coda' Profile

Brazilian Veneto is a heritage variety of Veneto (Italo-Romance) spoken in several areas of Brazil. BV is usually referred to by its speakers as Talian (the word for *Italian* in BV, even though BV is not a dialect of Standard Italian). BV was developed in Brazil after the massive wave of Italian immigration that started in the mid-to-late 19th century (De Boni and Costa 1979). A large proportion of these immigrants settled in southern Brazil and spoke a variety of Veneto. Particularly in southern Brazil, the Italian immigrant communities were relatively isolated from Portuguese-speaking communities and communities where the majority language was another immigrant language, which favoured the development of a Veneto-based koine (Frosi and Mioranza 1983, 2009).

Many characteristics of the BV phonology and morphosyntax can be associated with Central Veneto, the variety spoken in the Veneto region where Padova and Verona are situated (Frasson 2021; Guzzo 2023). However, BV also exhibits features of other Veneto dialects, properties from other languages brought by Italian immigrants and properties resulting from contact with Portuguese (Frosi and Mioranza 1983). As expected in situations of language contact, many processes observed in BV are variable, as is the use of certain lexical items (including borrowings from Portuguese). Still, although BV can be considered some sort of *lingua franca* in most Italian immigrant communities in southern Brazil (see

e.g., Pertile (2009)), some immigration areas correspond to linguistic islands where mostly one Italian immigration language or Veneto variety is spoken (see e.g., Bonatti (1974)).

Like other Romance languages and Veneto dialects, BV has a trisyllabic window for stress assignment. Stress is mostly penultimate, unless the final syllable is CVC, in which case stress is final (Guzzo 2023). This pattern is almost exceptionless, as the few items that deviate from it (and thus display penultimate stress when there is a final CVC syllable) seem to be loanwords that entered through Portuguese (e.g., [riˈvɔlver] 'revolver', [ˈvirus] 'virus') and verbs ending in *-er* (e.g., compare [ˈveder] 'to see', [ˈbever] 'to drink' with [laoˈrar] 'to work', [parˈtir] 'to depart'; Dal Castel et al. (2021)). Antepenultimate stress and final stress on a final CV syllable are also possible, albeit infrequent. The examples in (3) summarize the stress patterns found in BV.

(3) a. Regular stress:
 Penultimate: [ˈbazo] 'kiss', [kaˈrega] 'chair'
 Final when final syllable is CVC: [kaˈpɛl] 'hat', [piˈroŋ] 'fork'
 b. Irregular stress:
 Antepenultimate: [ˈzoveno] 'young', [ˈfregola] 'bread crumb'
 Final when final syllable is CV: [puˈpa] 'dad', [bakaˈla] 'cod'
 Penultimate when final syllable is CVC: [riˈvɔlver] 'revolver'

The consonants that can be found in word-final position in BV are [ŋ, r, l]. In the remainder of this section, for the sake of clarity, I will refer to BV word-final (and syllable-final) consonants as codas, even though the analysis that follows will revise this assumption. In derived words where the final nasal is followed by a suffix vowel, [ŋ] does not surface. What surfaces instead is either [n] or [ɲ]. This is illustrated in the examples in (4), where the masculine diminutive suffix /-eto/ attaches to a stem ending in a nasal. This observation suggests that the word-final velar nasal is not phonemic in the BV system, but rather the result of a neutralization process (Guzzo 2023).

(4) a. [piˈroŋ] 'fork' → [piroˈneto] 'fork.DIM'
 b. [kaŋ] 'dog' → [kaˈɲeto] 'dog.DIM'

In word-medial coda position, [ŋ] surfaces as the result of place assimilation with the following consonant. The same is attested with other nasal qualities (e.g., [ˈmaŋko] 'less', [ˈkampo] 'field', [ˈgrando] 'large'). The velar nasal is not observed in onset position in BV.

Like other Veneto dialects, BV has only one rhotic phoneme, which is usually produced as a trill ([r]) or a tap ([ɾ]), although additional realizations (approximant, fricative and mixed) have also been reported. Following from the observation that rhotic quality can be correlated with duration (at least in what comes to the distinction between trills and taps; Ladefoged and Maddieson (1996)), Guzzo (2024) has found that rhotics in singleton onsets of stressed syllables (e.g., [ˈroso] 'red') are the longest, which is consistent with trill productions, while rhotics in branching onsets (e.g., [ˈbrage] 'pants') are the shortest, which is consistent with tap productions. Coda rhotics (e.g., [kuˈt͡ʃɛr] 'spoon', [ˈpɔrko] 'pig'), on the other hand, have an intermediate duration. This intermediate duration seems to stem from the observation that, even though all types of rhotics can appear in all prosodic positions, there is overall more variation in the types of rhotics produced in the coda. In other words, the distribution of rhotic types is more balanced in coda position than in branching onsets (where they are mostly taps or approximants) or singleton onsets of stressed syllables (where they are mostly trills).

The lateral coda is realized with an alveolar place in both word-final and word-medial position (e.g., [kaˈpɛl] 'hat', [ˈkaldo] 'hot'), although descriptions of the effects of contact between BV and southern Brazilian Portuguese indicate that occasional productions with velarization are also possible (Frosi and Mioranza 1983).[1] Velarization of the lateral is not reported in other varieties of Veneto (from Italy and Mexico; e.g., MacKay (2002); Zamboni (1974)). In the syllable onset, the lateral is also realized with an alveolar place in all Veneto dialects—but it can be variably targeted, in BV and other Veneto dialects, by a deletion

process when in intervocalic position (Canepari 1976; Guzzo 2023; MacKay 2002; Zamboni 1974). I return to this issue in the next section.

Similarly to the Feltrino–Bellunese variety of Veneto and the Trentino and Lombard varieties that were brought to Brazil by immigrants, BV also exhibits variable apocope (Frosi and Mioranza (1983); MacKay (2002); see also Alber (2014)). This phenomenon targets mostly unstressed final /o/ (e.g., [ˈsaso] → [sas] 'stone'), but word-final /e/ may also be affected (e.g., [ˈvale] → [val] 'valley'). Apocope may result in productions with a final obstruent (e.g., [tɔk] 'piece' and also the word for 'stone' above), as well as with a final consonant cluster (e.g., [pɔrk] 'pig').

As seen above, nasals, rhotics and laterals can also be found in word-medial coda position. Another coda consonant that can be found in word-medial position in BV and other Veneto varieties is /s/, whose voicing assimilates to the voicing of the following consonant (e.g., [ˈpesta] 'footprint', [buzˈnar] 'to buzz'). In addition, /s/ also exhibits coda-like behaviour in word-initial s+consonant clusters, as it may assimilate to the voicing of the following consonant (e.g., [spaˈkar] 'to break', [zluˈzar] 'to shine'; see Goad (2012) for an analysis of s+consonant clusters where /s/ is represented as a coda). S+consonant clusters may also be preceded by an epenthetic vowel, similarly to what is observed in Brazilian Portuguese (e.g., [ispaˈkar] 'to break; Guzzo (2023)). Word-finally, /s/ is only a coda when apocope applies.

Importantly, the alternation targeting masculine plurals examined in this paper is not exclusive of BV. Many examples in Zamboni (1974) and MacKay (2002) indicate that lateral deletion following pluralization (e.g., [faˈzol] 'bean.SG' → [faˈzoi] 'bean.PL') is also found in some Veneto varieties spoken in Italy (including Central Veneto) and in the Chipilo Veneto dialect spoken in Mexico. The analysis proposed here, however, applies only to BV, as it is unclear whether other varieties of Veneto behave similarly to BV with respect to all aspects of pluralization and the related phenomena discussed in what follows.

In addition, as will be detailed in Section 6, the plural alternation observed in BV does not stem from contact with Brazilian Portuguese. As will be seen, although the pluralization of word-final laterals in Portuguese involves replacing the lateral with the front semivowel [j] (e.g., /aniˈmal/ 'animal.SG' → [aniˈmajs] 'animal.PL'), the pluralization processes observed in BV and Brazilian Portuguese are independent.

The next section discusses the representation of word-final consonants in light of their behaviour in BV phonology.

3. The Representation of Word-Final Consonants in BV

As the examples in (1) and (2) show, masculine nominals ending in a lateral behave differently from nominals ending in a nasal or rhotic consonant. One possible explanation for this alternation is that BV avoids /li/ strings, which would result in the lateral being dropped. However, this does not seem to be the case, as /li/ is allowed in all other phonological contexts, namely, word-internally (5-a), in plurals where /l/ is the onset of a final CV syllable (5-b), in second person singular present verbs where the stem ends in a lateral (5-c) and across words (5-d). The observation that /li/ strings are allowed across word boundaries suggests that different constraints regulate the resyllabification of /l/ within and outside the word domain. We return to this in the discussion section.

(5)   a.   [gaˈlina] 'hen'
      b.   [ˈbolo] 'cake.SG' → [ˈboli] 'cake.PL'
      c.   [ˈbali] 'dance.2PS' (from the verb [baˈlar] 'to dance')
      d.   [niˈsol imporˈta] 'imported bedsheet'

An alternative way to account for the data is to propose a phonological mechanism that applies either to the word-final lateral or to the other word-final consonants. In traditional prosodic phonology (building on, e.g., Nespor and Vogel (1986a) and Selkirk (1980)), such a mechanism could be extrametricality, mora assignment (or mora delinking) and mora sharing, and it would target one set of consonants but not the other. However, neither of

these possibilities seems applicable to the case of BV. The reason for this is that words with a word-final consonant behave similarly with respect to stress assignment, regardless of the word-final consonant they exhibit. That is, words that end in a nasal, rhotic or lateral all exhibit stress on the final vowel. If any of these final consonants were extrametrical, were assigned (or lost) a mora, or shared a mora with an adjacent vowel, stress assignment in items with such consonants would require a specific form of lexical marking. I further discuss alternative accounts in Section 6.

Instead, I propose that the alternation observed in BV plurals can be accounted for if we assume distinct representations for the word-final consonants, in line with Piggott (1999). Specifically, while final nasals and rhotics are represented as codas, final laterals are represented as (weak) onsets of syllables with empty nuclei. These representations are shown in Figures 1 and 2. For the sake of conciseness, these and the representations shown in subsequent sections do not include the syllable node nor the x-skeleton, except when needed.
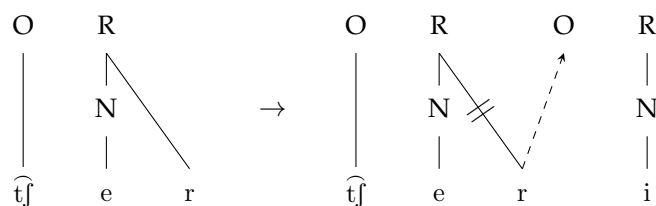

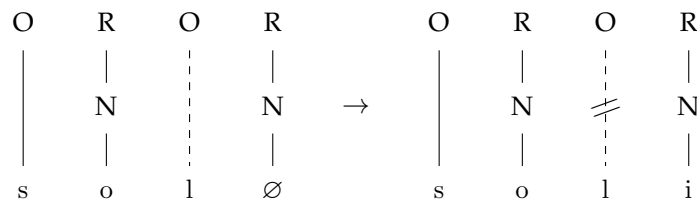**Figure 1.** The representation of word-final rhotics and nasals.

Figure 2. The representation of word-final laterals.

In Figures 1 and 2, only the final portion of the words [bi'tʃeri] 'glass.PL' and [ni'soi] 'bedsheet.PL' (from singular [ni'sol]) are shown. In Figure 1, where the final consonant is a coda, resyllabification is allowed. In particular, when the plural suffix is attached, the coda is resyllabified as the onset of the syllable containing the suffix. On the other hand, in Figure 2, the final consonant is an onset, and the the nucleus of its syllable is not filled. The dashed line indicates that it is a weak onset. The attachment of the plural suffix causes the weak lateral onset to be dropped and the result is a VV string. Note that the representation in Figure 2 (as well as some of the subsequent representations) does not make any particular assumption with respect to how the suffix is represented before attaching to the stem (i.e., as the nucleus of a separate syllable or as directly integrated into the empty nucleus).

These representations are able to capture the observation that word-final rhotics and nasals seem to be placeless, which is consistent with their representation as codas (Piggott 1999; Rice 1992). As mentioned previously, coda rhotics can be variably realized in BV (as trills, taps and other forms), word-final nasals are neutralized to [ŋ] and syllable-final nasals assimilate the place of the following consonant. On the other hand, laterals in all positions are realized as alveolars (with the exception of cases of variable velarization due to contact with Portuguese).

Furthermore, the representation of the lateral as a weak onset is consistent with its behaviour in other positions of the word. In BV (and other Veneto varieties), /l/ may be deleted in intervocalic position (e.g., [po'lenta] → [po'enta] 'polenta'). In some Veneto varieties from Italy (and marginally also in BV; Dal Castel et al. (2021)), intervocalic and word-initial /l/ may also be vocalized (to a semivowel or short vowel) (Belloni 2009; Canepari 1976; Zamboni 1974).[2]

It is important to note that other consonants are also targeted by variable intervocalic deletion in BV, in particular /v/ (e.g., [laˈvoro] → [laˈoro] 'work', [ˈuva] → [ˈua] 'grape') and /d/ (e.g., [ˈdedo] → [ˈdeo] 'finger', [spaˈkadi] → [spaˈkai] 'broken.PL').[3] As these examples and the examples with /l/ suggest, intervocalic consonant deletion may be observed in both stressed and unstressed syllables. I return to this issue in Section 4.2.

In the following subsection, I explore the patterns of pluralization in BV polysyllabic nominals based on data from the *Talian Corpus*. We will see that writers' orthographic forms are very stable, despite the absence of a standardized orthography and the fact that BV is in a contact situation, which provides further support to the representations in Figures 1 and 2.

Polysyllabic Nominals in the Talian Corpus

Before discussing the data on the pluralization of polysyllabic nominals, I will briefly present the features of the *Talian Corpus* (Garcia and Guzzo 2023). As mentioned above, the corpus is a compilation of materials written in BV. The texts that make up the corpus are newspaper articles (from two newspapers from southern Brazil) and book excerpts. The texts were written by a total of 45 different authors, and are mostly narratives about personal experiences, accounts of the historical struggles of immigration and fictional stories.[4]

At the moment of data analysis, the *Talian Corpus* had 237,774 words from 18,804 sentences (Garcia and Guzzo 2023). The corpus was compiled in RData format. Each word in the corpus is phonetically transcribed, syllabified and marked for stress assignment. As described in Garcia and Guzzo (2023), the phonetic transcriptions were obtained using R scripts that matched certain letters or orthographic strings to sounds—these scripts were adapted from the R package *Fonology* (Garcia 2023). For example, the string *gn* corresponds to the sound [ɲ], while the string *ch* (found before the letters *e* and *i*) corresponds to [k]. The scripts also accounted for sounds that are positionally conditioned. For example, the word-final nasal is pronounced as [ŋ], but orthographically represented with *n* (such as in the word *can* for [kaŋ] 'dog'). In this case, all word-final *n*s were transcribed as the velar nasal.

Regarding syllabification, R scripts accounting for the phonotactic constraints of the language were employed. Stress assignment was also determined based on orthographic patterns. Most words with irregular stress (i.e., antepenultimate stress, final stress on a CV syllable) displayed an orthographic accent, so stress on these words was marked based on the position of the accent. Since the position of stress is predictable in most other words (i.e., penultimate stress with a final CV syllable, final stress on a CVC syllable), specific scripts were employed to assign stress based on the type of final syllable (CV or CVC) they had. Since BV does not have a standardized grammar/orthography and authors may differ slightly in their spelling, the phonetic transcriptions were subsequently checked for accuracy, and the necessary adjustments were made. To avoid confusion, in this section as well as in the following sections, the corpus data are presented with phonetic rather than orthographic transcription, unless the orthographic forms are necessary for clarity.

As previously mentioned, the objective of the corpus analysis was to check which forms were employed by BV speakers (in this case, the writers of the texts included in the corpus) to indicate the pluralization of nominals. In the case of polysyllabic items, it is possible that writers display variation in how they mark the plural of items ending in a lateral consonant (for example, by writing the plural of a word such as [kaˈval] 'horse' sometimes as [kaˈvai] and sometimes as [kaˈvali]). A stable alternation between plural forms with and without the lateral could suggest that the deletion of the lateral is simply the effect of a diachronic rule and that, synchronically, speakers do not have a separate representation for the word-final lateral (relative to the other word-final consonants). In what follows, we will see that this does not seem to be the case.

For the present corpus analysis, I used additional R scripts (R Core Team 2023) to extract the relevant data points. All words with three or more segments and ending in the following orthographic strings were initially extracted: *l, li, ai, ei, ii, oi, ui, r, ri, n, ni*. A total

of 43,488 words were obtained. Subsequently, the items were examined individually and with the help of R scripts, since some of the strings matched other structures in BV which are of no interest to the present study. For example, the orthographic strings *ni, ri, li* could be in plural forms where the corresponding singular forms end in *n, r, l*, but they could also be in plural forms of singulars ending in *no, ro, lo* or *ne, re, le* (which are of no interest). Similarly, the endings *ai, ei, ii, oi, ui* could be in plurals of singular forms ending in a lateral (e.g., [kaˈvel] → [kaˈvei] 'hair'), but they could also be in plurals of singular forms that end in a VV string (e.g., [ˈdeo] → [ˈdei] 'finger'). The plurals of singular forms with penultimate or antepenultimate stress that do not end in a consonant were also all excluded.

The data inspection also led to the exclusion of items with the following profiles: (a) proper names, (b) verbs in the infinitive (all ending in *r*), (c) verbs ending in a clitic form (e.g., [ˈvederli] 'to see them'), (d) other verb forms (e.g., [poˈdei] 'to be able.2PL'), (e) clitic or functional forms (e.g., [ntel] 'in the', [voˈantri] 'you.PL'), (f) adverbs (e.g., [deroˈmai] 'already') and (g) onomatopoeia or exclamations (e.g., *aaai* 'ouch'). The remaining items (N = 12,774) were then distributed into three separate word lists: (i) one list containing singular and plural forms of monosyllables (N = 3850), (ii) another list containing plurals of words with stress on a final CV syllable (N = 744), and (iii) another list with singular and plural forms of polysyllabic items (N = 8180). In the remainder of this subsection, we focus on the list in (iii). I return to the lists in (i) and (ii) in Section 4.

As indicated above, the total number of singular and plural forms of polysyllabic items included in the analysis is 8180. These tokens belong to three major categories: (a) singulars/plurals of words ending in a nasal (N = 4682), (b) singulars/plurals of words ending in a rhotic (N = 1533) and (c) singulars/plurals of words ending in a lateral (N = 1965). Table 1 shows the number of tokens in each of these categories.

Table 1. Distribution of singular and plural forms in the *Talian Corpus* (polysyllabic nominals).

Type of Coda	Singular	Plural /-i/	Plural—No Suf.	Plural /Vi/
nasal (N = 4682)	3052	1485	145	N/A
rhotic (N = 1533)	776	757	0	N/A
lateral (N = 1965)	1128	100	4	733

For words ending in a rhotic, all of the plurals are formed by adding suffix /-i/. In the case of words ending in a nasal, most of the plurals display suffix /-i/, although a few do not have any suffix, in which case the singular and the plural forms are identical. Further examination of the data[5] reveals that only 13 of the 145 items where no suffix is added to a word ending in a nasal are masculine nominals. All other items in this group are feminine nouns ending in a nasal consonant. In this case, alternation between a word-final nasal and a final /ne/ string may be observed in singular forms (e.g., [atenˈsjoŋ]∼[atenˈsjone] 'attention'). It thus seems like the writers do not add a plural suffix to these forms to avoid what could be perceived as a morphological mismatch: if the plural suffix that usually replaces the theme vowel /-e/ is added (in this case, /-i/), the word would have the same profile as a masculine item; on the other hand, if the feminine plural suffix is added after a word-final nasal (that is, /-e/), the word might be interpreted as singular. If the feminine forms are excluded from the analysis, only a negligible proportion of all the plural forms of items ending in a nasal are produced without the plural suffix (0.9%).

Turning to the items ending in a lateral consonant, Table 1 indicates that most of the plurals of such items end in a /Vi/ string (e.g., [kaˈval] → [kaˈvai] 'horse'). However, a considerable proportion of the plurals (N = 100, or 11.9% of all the plurals of words ending in a lateral) are formed by adding suffix /-i/ after the word-final lateral. A closer inspection of these data shows that most of the tokens with this profile (N = 85) correspond to words whose singular form may variably display apocope (e.g., [ˈpikolo]∼[ˈpikol] 'small', [ˈskapolo]∼[ˈskapol] 'bachelor'). It should be noted that the singular items in the corpus that exhibit alternation between a word-final lateral and a word-final /lV/ string are mostly words with antepenultimate stress. Specifically, in the corpus data, 70 out of the

85 items that display this alternation *and* are pluralized with suffix /-i/ have antepenultimate stress—the other 15 items have penultimate stress. Therefore, the only true exceptions to the observation that the pluralization of such forms involves the deletion of the lateral are (a) the items that do not exhibit variable word-final deletion in their singular forms, and (b) the items that exhibit no plural suffix despite being in a plural context. There are only 19 items (i.e., 2.3% of the 837 total plural forms) with such profiles (15 items with the profile in (a) above and 4 items with the profile in (b)).

The patterns of pluralization found in the corpus clearly indicate that polysyllabic masculine nominals with word-final laterals behave differently from nominals with other word-final consonants with respect to pluralization. However, to further support the proposal that word-final laterals have a separate prosodic representation from other word-final consonants, evidence from additional structures in the language is needed. The next section examines the pluralization of monosyllables and words with final stress on a CV syllable, to show that the behaviour of these structures is also compatible with this proposal.

4. Evidence from Other Patterns of Pluralization

If we assume that word-final laterals are represented differently from other word-final consonants, additional evidence for such a distinction should be found in the phonological grammar of BV. This section discusses two phenomena that support the idea that there are two possible representations for word-final consonants in BV. These phenomena are the pluralization of monosyllabic nominals (Section 4.1) and the pluralization of words with final stress on a CV syllable (Section 4.2).

4.1. The Pluralization of Monosyllables

Crosslinguistically, it has been observed that monosyllables often behave distinctly from polysyllables, in that they may be realized more faithfully than polysyllables or even spared from certain phonological processes (Alber 2001; Becker et al. 2012; Beckman 1997, 1998; Steriade 1994). Consequently, in a grammar where words of the same shape (for example, CVC) are not syllabified in the same way, differences may arise in the application of processes that are constrained by syllable structure.

Given the representations for word-final consonants in Figures 1 and 2, only items ending in a rhotic or nasal can be monosyllables in BV. In other words, as word-final rhotics and nasals are represented as codas, items of the shape CVC that end in a rhotic or nasal have only one syllable. On the other hand, since word-final laterals are represented as onsets, items of the shape CVC that end in a lateral actually have two syllables. Therefore, if the BV grammar has distinct faithfulness constraints for monosyllables and polysyllables, CVC words ending in a lateral should behave differently from CVC words ending in a rhotic or nasal.

It has been observed that (certain) monosyllables are invariable in BV. Stawinski (1982) provides a non-exhaustive list of such monosyllables that contains masculine nouns such as *bó* 'ox' and *can* 'dog'. On the other hand, for masculine CVC nominals ending in a lateral, Stawinski (1982) provides a plural form that is identical to the form found in polysyllables: [bɛl] → [bɛi] 'beautiful'. It is thus possible that CVC words ending in a rhotic or nasal (i.e., the true monosyllables given the representations in Figures 1 and 2) are constrained by the BV grammar in that they are immune from morphological processes resulting in resyllabification. CVC words ending a lateral, on the other hand, should be able to pluralize following the same patterns observed in longer words, since they are not in fact monosyllables.

This hypothesis can be tested by examining the corpus data. As previously mentioned, the *Talian Corpus* contains a total of 3850 monosyllabic items. Their distribution is shown in Table 2.

Table 2. Distribution of singular and plural forms in the *Talian Corpus* (monosyllabic nominals).

Type of Coda	Singular	Plural /-i/	Plural—No Suf.	Plural /Vi/
nasal (N = 1588)	1241	109	238	N/A
rhotic (N = 85)	71	14	0	N/A
lateral (N = 2177)	1733	29	3	412

Regarding the CVC nominals ending in a lateral, 32 items have an unexpected plural form: three are formed without a plural suffix, while 29 are formed by adding the plural suffix (without deleting the lateral). However, further examination of the 29 items that have a suffix but no lateral deletion reveals that 24 of such items correspond to words that, in their singular form, can be found with and without a final vowel in the corpus. That is, these 24 items exhibit variable apocope in BV (e.g., ['vale]∼[val] 'valley'). The other five items are all plurals of the word [fil] 'thread'. In this case, pluralization with the addition of a suffix *and* lateral dropping would result in an [ii] string. Even though this string is allowed in BV (for example, in the plural of words ending in [io]: ['zio] → ['zii] 'uncle'), VV strings where the two vowels are identical are overall marginal in the BV system. Thus, it is possible that this choice of pluralization is simply a way to avoid a sequence of identical vowels.

The overwhelming majority of the CVC nominals ending in a lateral have the expected plural form (N = 412)—that is, they exhibit the plural suffix but no lateral on the surface. Inspection of the data shows that a large portion of these data corresponds to morphologically complex functional items [kwai] 'which.PL' and [kwei] 'this.PL' (from singulars [kwal] and [kwel], respectively). If such items are removed from the analysis, the number of plurals ending in /Vi/ is 92. Still, even if these items are excluded, the vast majority of the CVC items ending in a lateral exhibit the expected plural form: 74.2% are pluralized as /Vi/, while 24.4% are pluralized by adding the suffix (and keeping the lateral) and 0.7% do not have a plural suffix. If [kwai] and [kwei] are kept in the analysis, the proportion of CVC items ending in a lateral that exhibit the expected plural form is 92.8%.

Turning to the CVC nominals ending in a rhotic, all the plural forms found in the corpus have a suffix. This observation apparently contradicts the hypothesis that CVC nominals, as monosyllables, should be protected from resyllabification, unlike CVC words ending in a lateral. However, examination of the corpus data shows that all of the items ending in a rhotic and pluralized with a suffix correspond to words that can also be found with a final vowel in their singular form. In other words, similar to what is observed with some of the plurals for CVC items ending in a lateral, all of the plurals of monosyllables ending in a rhotic correspond to words that exhibit variable apocope in BV (e.g., ['fɛro]∼[fɛr] 'iron'.)

The patterns for CVC items ending in a rhotic are thus not very elucidative. On the other hand, the pluralization of CVC nominals ending in a nasal is mostly realized without a suffix (e.g., [kaŋ] 'dog.PL', [piŋ] 'pine tree.PL'), as expected. Specifically, 238 of the 347 plurals (or 68.6%) exhibit this profile. In addition, variation in the data is observed—for the same lexical item, the plural may be indicated with or without a suffix (e.g., ['pini]∼[piŋ] 'pine tree.PL'). Comparison of the CVC nominals ending in a lateral or in a nasal thus shows that the behaviour of the CVC items ending in a lateral contrasts with the behaviour of the CVC items ending in a nasal. In the case of those ending in a lateral, most items are pluralized by adding a suffix (and deleting the lateral), while, for those ending in a nasal, most items are pluralized with no suffix.

Therefore, the patterns of pluralization of CVC items are consistent with the proposal that only the CVC items ending in a nasal or rhotic are monosyllables, while those ending in a lateral are instead a string of two syllables. As expected, monosyllables are more resistant to processes with consequences to their phonological structure. With respect to the pluralization of CVC nominals with a final nasal, resyllabification resulting from the addition of the plural suffix is variably blocked. In the case of CVC nominals ending in

a lateral, this constraint is not operative, since pluralization does not affect the number of syllables in the word.

4.2. The Pluralization of Words with Final Stress on a CV Syllable

In this subsection, I argue that the pluralization of words with final stress on a CV syllable is also compatible with the representation of word-final laterals as onsets. In general, words that end in a stressed CV syllable are invariable, that is, they are not assigned a plural suffix (6-a) (Dal Castel et al. 2021). However, one specific type of word with final stress on a CV syllable does display plural suffix attachment. This is the case of masculine participles (6-b). As can be noted in (6-b), the plural forms of BV masculine participles are thus very similar on the surface to the plural forms of masculine nominals ending in a lateral.

(6) a. [puˈpa] 'dad.SG' → [puˈpa] 'dad.PL'
        [bakaˈla] 'cod.SG' → [bakaˈla] 'cod.PL'
    b. [riˈva] 'arrived.SG' → [riˈvai] 'arrived.PL'
        [spaˈka] 'broken.SG' → [spaˈkai] 'broken.PL'

The behaviour of participles regarding plural assignment is puzzling, as they pattern differently from other words with a final stressed CV syllable, which do not allow the attachment of a plural suffix. Thus, if we assume that the group of words in (6-a) and the group of words in (6-b) have the same syllabification, one of them should be marked somehow, so that it allows (or, instead, blocks) the attachment of the plural suffix. Before positing any special mechanisms that regulate the plural forms in one of these groups, it is necessary to investigate whether they have indeed the same type of syllabification.

One way to do this is to examine the corpus data for participles and plurals involving /Vi/ in BV. In the corpus analysis, all the instances of /Vi/ plurals where the singular form ends in a stressed vowel were placed in a separate list. As mentioned previously, the total number of items on this list is 744. As we will see below, most of these items are participles. In effect, only 30 items are not participles and they correspond to only two types: [maˈlai] 'sick.MASC.PL' (the plural of [maˈla]) and [solˈdai] 'soldier.MASC.PL' (the plural of [solˈda]).

Further inspection of the corpus data, as well as examination of BV–Portuguese dictionaries (Loregian-Penkal et al. 2023; Luzzatto 2000), indicates that the singular form [solˈda] 'soldier' alternates with [solˈdado] and [solˈdato], and that the feminine form of singular [maˈla] 'sick' is [maˈlada]. This suggests that the representation of the words for 'soldier' and 'sick' has a consonant (/d/) after the stressed vowel.

The patterns of pluralization in masculine participles suggests that these items display a similar structure. An additional search of the corpus data has obtained 126 items where the masculine plural participles were written with *-adi* (and in a few cases *-idi*, for verbs of the third group)[6] instead of /Vi/. For example, alternation was observed in items such as [riˈvai]∼[riˈvadi] 'arrived.PL', [t͡ʃaˈmai]∼[t͡ʃaˈmadi] 'called.PL' and [ferˈmai]∼[ferˈmadi] 'closed.PL'.

It should also be noted that feminine participles exhibit a final VCV string where the intervocalic consonant is also /d/ (e.g., [riˈvada] 'arrived.FEM', [t͡ʃaˈpada] 'taken.FEM') (Stawinski 1982). Furthermore, as previously mentioned, intervocalic /d/ may variably delete in certain lexical items in BV. These observations, as well as the alternation between word-final VCV and /Vi/ strings in masculine participles, indicate that masculine participles, just like the items [solˈda] and [maˈla], have an underlying consonant after the stressed vowel. Similar to the word-final lateral, this consonant is the weak onset of a syllable with an empty nucleus. Following from this, plurals such as [solˈdai] and participles such as [riˈvai] do not deviate from what is expected for plurals in words with final stress, since they do not actually have stress on the final syllable. Figure 3 shows the representation of a pluralized masculine participle in BV.
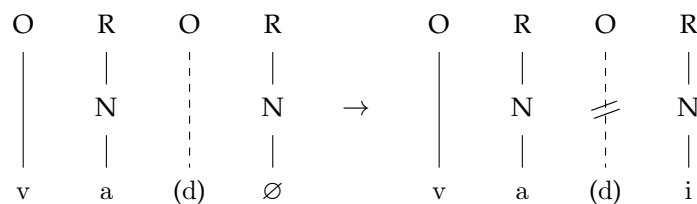
```
O     R     O     R            O     R     O     R
|     |     |     |            |     |     |     |
|     N     ┊     N      →     |     N     ╪     N
|     |     ┊     |            |     |     ┊     |
v     a    (d)    ∅            v     a    (d)    i
```

Figure 3. The representation of the pluralization of masculine participles.

In Figure 3, only the final portion of the word [ri'vai] 'arrived.PL' is included. The representation in Figure 3 is almost identical to the representation of word-final laterals shown in Figure 2. These nearly identical representations capture the observation that /d/ and /l/, when in absolute word-final position, are in fact onsets of syllables with empty nuclei. Once material is added to the syllable (such as the masculine plural suffix), this weak onset is deleted, yielding forms with a final /Vi/ string.

However, there is one important difference between the singular forms of nominals ending in a lateral and the singular form of masculine participles. In singular words with a word-final lateral, the lateral is always realized on the surface (e.g., [ni'sol], *[ni'so] 'bedsheet'). On the other hand, the final consonant in singular participles is not present on the surface form (e.g., [ri'va], *[ri'vad] 'arrived'). This may be due to a sonority issue: only sonorous consonants may surface at the right word edge in BV. While this requirement allows the realization of laterals, rhotics and nasals at the word edge (despite their different syllabic representations), it blocks word-final /d/ from appearing in this position on the surface form.[7]

In this section, we have seen that the plurals of CVC words and the patterns observed in masculine participles further support the proposal that (a) word-final laterals are represented differently from word-final rhotics and nasals, and that (b) word-final laterals are weak onsets of syllables with empty nuclei. The next section expands on this proposal by discussing three other phenomena, namely, the application of metaphony in words with a final lateral, the patterns of word-internal codas found in BV, and the patterns of resyllabification found in the language.

5. Evidence from Other Structures

This brief section discusses some implications of the present proposal for BV phonology in light of three phenomena. First, I analyze the behaviour of words with a word-final lateral regarding metaphony. Then, I examine the patterns of BV word-internal codas. Finally, I discuss resyllabification involving different word-final consonants in BV (namely, the lateral and the nasal). These phenomena will allow us to evaluate what the representation of the final /Vi/ string is and to determine whether or not laterals are always represented as onsets in BV.

In BV, like in other varieties of Veneto (such as Central Veneto), metaphony is the variable process where a stressed close-mid vowel (/e/ or /o/) becomes high when there is a final unstressed /i/ (Garcia and Guzzo 2023; Walker 2005, 2010). The trigger is usually a separate morpheme (either the plural suffix or the second person singular suffix). The examples in (7) illustrate metaphony in BV.

(7) ['pesi]∼['pisi] 'fish.PL'
  ['bevi]∼['bivi] 'drink.2PS'
  ['konti]∼['kunti] 'bucks (money)'
  ['kori]∼['kuri] 'run.2PS'

Metaphony is also found in plurals of forms ending in a word-final lateral, as shown in (8). In this case, the target vowel is always /o/, since metaphony with /e/ would result in a string of identical vowels (/ii/), which seems to be dispreferred by BV phonology (Garcia and Guzzo 2023). As previously mentioned, an /ii/ string also seems to be avoided in plurals of CVC words ending in a lateral when the stem vowel is /i/.

(8)   [niˈsol] 'bedsheet.SG' → [niˈsoi]∼[niˈsui] 'bedsheet.PL'
       [faˈzol] 'bean.SG' → [faˈzoi]∼[faˈzui] 'bean.PL'

The data in (7) suggest that metaphony obeys adjacency constraints, in that it is triggered by a vowel in a syllable adjacent to the stressed syllable.[8] Consequently, it is reasonable to assume that the vowels in the VV string found in the plurals of items with a word-final lateral (8) belong to separate syllable nuclei and that metaphony is licensed given that there is a syllable boundary between them. This observation is also in line with the idea that, at some point in the derivation, the word-final lateral onset intervenes between the stem vowel and the suffix vowel.

In summary, the metaphony data support the idea that /VV/ strings resulting from the pluralization of words ending in a lateral are nuclei of separate syllables rather than a complex rime. It should be noted, however, that once metaphony applies and the lateral deletes, surface effects related to coarticulation and speech rate may lead to the production of these VV strings as diphthongs (Guzzo 2023).

The second aspect to be examined in this section is the behaviour of word-internal codas in BV. One question that arises is whether laterals in all positions in BV are represented as onsets or whether they can sometimes also be codas. Although various theories of phonology argue that word-internal and word-final consonants do not necessarily have the same representation (Harris 1997; Kaye 1990; Piggott 1999), it is possible that, in the case of BV, the lateral is always syllabified as a weak onset, regardless of its position in the word. As seen above, partial confirmation of this possibility stems from the observation that the lateral variably deletes intervocalically (e.g., [poˈlenta] → [poˈenta] 'polenta'). However, it is still to be determined whether laterals in word-internal CC strings with falling sonority (such as the lateral and the alveolar plosive in the word [ˈkaldo] 'hot') correspond to onsets or codas.

To answer the question of whether laterals are always represented as onsets in BV, an inspection of all word-medial lateral, rhotic and nasal 'codas' in the *Talian Corpus* was conducted. Specifically, all tokens of word-medial CC strings with falling sonority where the first consonant corresponds to a lateral, a rhotic or a nasal were extracted from the corpus.

In total, 52,402 tokens were obtained, 32,369 of which with a word-medial nasal coda, 14,888 of which with a rhotic coda and 5145 of which with a (potential) lateral coda. A few observations should be made. The first observation is that most of the lateral 'codas' (3542, or 68.8% of the lateral tokens) are homorganic with the following consonant. Given the BV inventory, homorganicity in this case involves a following /t, d, s/. This observation is consistent with coda behaviour, as homorganicity in coda-onset sequences is favoured by natural language grammars (Goldsmith 1990; Piggott 1999; Yip 1991). On the other hand, the total number of word-internal lateral codas is much lower than the number of other word-internal codas. This suggests that, although laterals can be word-internal codas in BV, they are only marginally represented as codas in the BV system.

The additional aspect to be noted in this section is that laterals in BV behave differently from other word-final consonants (in particular, the nasal) regarding (re)syllabification. As seen above, syllabification of the word-final lateral is blocked within the prosodic word (PWd) domain (i.e., when the plural suffix enters the PWd), leading to the deletion of /l/. However, it is allowed across PWd boundaries, as shown in (9-a). In the case of the word-final nasal, the opposite pattern is observed. As indicated in (9-b), a word-final nasal is resyllabified as an onset when a suffix is added and the neutralized velar nasal does not surface. On the other hand, across PWd boundaries, resyllabification does not apply and the velar nasal is observed. The examples below come from consultation with native speakers of BV, as the *Talian Corpus* provides no information with respect to resyllabification.

(9)   a.   Resyllabification of a word-final lateral:
             Blocked: ni.só.l → ni.só.i, *ni.só.li 'bedsheet'
             Allowed: ni.só.l]_PWd im.por.tá → ni.só.lim.por.tá 'imported bedsheet'

b. Resyllabification of a word-final nasal:
Allowed: pa.róŋ → pa.ró.ni 'boss'
Blocked: pa.róŋ]$_{PWd}$ im.bam.bí.o → pa.róŋ.im.bam.bí.o, *pa.ró.nim.bam.bí.o
'stupid boss'

Given the present analysis, the differences in (re)syllabification patterns between word-final laterals and nasals seem to stem from their distinct representations. Although (re)syllabification may also be subject to segmental constraints and rule-ordering specificities crosslinguistically, these constraints or specificities do not seem at play in the BV data, as the examples shown in (9) display the same phonological contexts.

In the next section, I discuss the representation of word-final consonants in BV given the data presented so far and in light of other accounts in phonological theory.

6. Discussion

In the previous sections, I argued that, while word-final rhotics and nasals are represented as codas, word-final laterals are represented as onsets of syllables with an empty nucleus. In addition to the plural alternations found in words ending in laterals *versus* other consonants, many observations about patterns in BV phonology support this proposal: (a) laterals may be deleted (or, less frequently, vocalized) intervocalically; (b) CVC items ending in a lateral behave differently from CVC items ending in a nasal with respect to plural assignment, consistent with the idea that the latter, but not the former, are in fact monosyllables; (c) the plural of masculine participles, which results in a similar structure to the pluralization of words ending in a lateral, also involves the deletion of a weak onset; (d) the patterns of metaphony in words with a final lateral suggest that there is a syllable boundary between the stem vowel and the suffix vowel; and (e) resyllabification applies differently in words ending in a lateral compared to words ending in a nasal. In addition, examination of the *Talian Corpus* data for polysyllables indicates that authors are very consistent in the way they write the plurals of words ending in a consonant, which reveals that, even though BV developed as a contact language, speakers' representations are stable.

However, other representations for word-final consonants proposed in the literature might be able to account for the distinct behaviour between word-final laterals and other word-final codas in BV. In what follows, I discuss the way in which some of these representations could apply to BV, to show that they are unable to capture the differences observed.

In an expansion of prosodic theory (Nespor and Vogel 1986b; Selkirk 1980), the notion of extrametricality (or extraprosodicity) was put forward to account for cases where a constituent (such as a word-final consonant or syllable) seems to be ignored for the purposes of stress assignment or foot parsing. As a result, the extrametrical element does not contribute weight to the syllable and may not be parsed (or licensed) on the surface (Hayes 1995; Ito 1988).

In the case of BV, it could be argued that word-final laterals are extrametrical consonants that are deleted (by *Stray Erasure*) before the plural suffix is added. The representation in Figure 4 illustrates this possibility. As in Figure 2, only the final portion of the word [niˈsoi] is included in Figure 4. The same portion of this word will be used in the representations that follow.
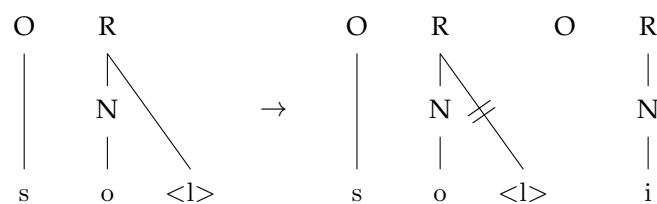

Figure 4. The representation of the word-final lateral as extrametrical.

The issue with the representation in Figure 4 is that it does not account for other BV phenomena, such as stress assignment. In BV, as previously seen, stress is final when there is a final consonant (e.g., [biˈt͡ʃer] 'glass', [niˈsol] 'bedsheet'). A representation that assumes that the lateral consonant is extrametrical would thus have to predict penultimate (regular) stress assignment on words ending with a lateral (*[ˈnisol]). On the other hand, the representation of word-final laterals as onsets does account for the stress patterns observed in BV—in this case, stress is indeed penultimate, as the final syllable in the word has an empty nucleus—see Figure 2.

A related possibility to be considered is that word-final laterals are represented as appendices directly connected to the PWd node or to the syllable node. In this sense, they would be similar to what has been proposed for the sibilant in s+consonant clusters (such as in *sky* and *spray*; Chierchia (1986); Goldsmith (1990); Hulst (1984)). Appendices, like extrametrical consonants, do not contribute weight to the syllable and may be immune to certain phonological processes. For example, in Standard Italian, *raddoppiamento sintattico*, the process where a word-initial consonant geminates when the preceding word ends in a stressed vowel, does not apply when the target consonant is in an s+consonant cluster; compare (10-a) and (10-b) with (10-c) (the examples are from Goad (2012)).[9]

(10)   *Raddoppiamento sintattico* in Standard Italian:
   a.   *paltò pulito*: [paltɔ́ppulíto] 'clean coat'
   b.   *città triste*: [t͡ʃittáttríste] 'sad city'
   c.   *caffè spesso*: [kaféspésso], *[kafésspésso] 'thick coffee'

The representation of the word-final lateral in BV as an appendix is provided in Figure 5. This representation assumes that the lateral is an appendix at the syllable level, although similar predictions could be made if it were linked at a higher prosodic level such as the PWd. The structure in Figure 5 implies the prediction that, as an appendix, the word-final lateral will be deleted once a suffix enters the word domain. However, an issue similar to the one found with the representation in Figure 4 arises. With the lateral as an appendix, it is unclear why words ending in a lateral would have final stress rather than (regular) penultimate stress that ignores the appendix.
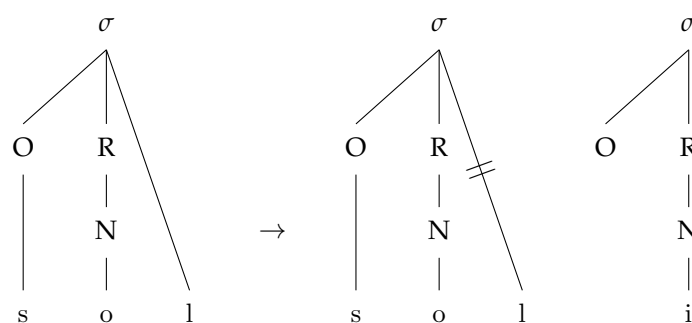

Figure 5. The representation of the word-final lateral as an appendix.

Additional proposals within prosodic phonology have been advanced that account for alternations involving coda consonants or alternations related to weight assignment, as well as the dissimilar behaviour among codas. One such proposals argues that rhyme elements (such as a nucleus or a coda) may share a mora with other syllabic positions (Kiparsky 2003; Watson 1997). In the case of BV, one could assume that the deletion of the lateral upon suffixation would derive from a consonant that shares a mora with the previous vowel being blocked from occupying an onset position. Still, this approach cannot explain the patterns of stress assignment in BV—if the syllable nucleus and the word-final lateral coda shared a mora, the final syllable would still be light and penultimate stress would be predicted. In addition, similar to the extrametricality account and the appendix account, the mora sharing approach cannot explain the observation that

the lateral is also a weak onset intervocalically, as well as the observation that plurals of the type /Vi/ always seem to involve an intervening consonant at some point in the derivation.

Another possibility within the framework of prosodic phonology is that the lateral is linked to the syllable nucleus. This is shown in Figure 6. Following this assumption, the other consonants (rhotics and nasals) are part of the syllable coda and are therefore linked directly to the R node. This representation assumes that the lateral, being the most sonorous of the BV word-final consonants, has vowel-like properties. In this case, the addition of a suffix would cause the lateral to be deleted, since the resulting string (containing three rhyme elements, or one heavy rhyme followed by another rhyme) is not permitted in the language.
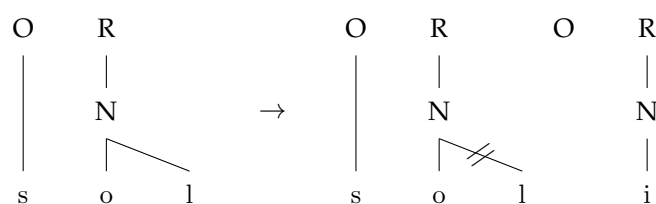
```
O    R              O    R        O    R
|    |              |    |        |    |
     N      →            N             N
    /  \               /  /x          |
s   o   l          s   o    l         i
```

Figure 6. The representation of the word-final lateral as part of the syllable nucleus.

The representation in Figure 6 accounts for the observation that the lateral may be vocalized intervocalically in BV (even though vocalization is marginal in the language, as deletion seems to be preferred over vocalization). Unlike the extrametricality and the appendix approaches, it also accounts for the stress profile of words ending in a consonant, as the final syllable of both words ending in a lateral and words ending in a rhotic or nasal has a heavy rhyme, which attracts stress.

However, the representation in Figure 6 fails to capture the observation that word-internal laterals, like a few other consonants (/d/ and /v/), may be deleted in BV. Thus, to be able to explain word-internal lateral deletion and word-final lateral deletion following pluralization, one would need to posit two separate representations for the lateral or, alternatively, one would need to assume that word-internal laterals are also part of the syllable nucleus. If the latter proposal were adopted, one would have to assume that word-internal laterals that surface are resyllabified as onsets (otherwise this would incur a violation of the Maximal Onset Principle; see e.g., Kahn (1976)). In addition, under this proposal, it is unclear whether the other consonants that can delete word-internally, as well as the consonant that is deleted in participles (see Figure 3), would be represented in the same way as laterals.

On the other hand, proposals that are more in line with Government Phonology, such as Standard Government Phonology (Harris 1997; Kaye 1990; Kaye et al. 1990) and CVCV Phonology (Carvalho 2017; Scheer 2004; Scheer and Szigetvari 2005), seem to be equipped to account for the onset-like behaviour of the word-final lateral in BV, and they do not encounter the same issues related to stress assignment as traditional syllable-based approaches. Based on weight-related phenomena such as vowel shortening in particular prosodic positions, Standard Government Phonology proposes that word-internal 'coda' consonants may be represented differently from word-final consonants. While word-internal codas may indeed be codas (i.e., they may be parsed in the syllable rhyme), word-final consonants are onsets of empty-headed syllables.

However, the issue with this approach is that it cannot account for the differences between word-final rhotics and nasals in BV, on the one hand, and word-final laterals on the other hand. In effect, if all word-final consonants are represented as onsets, the distinctions in pluralization observed between the word-final BV consonants cannot be explained without positing a special mechanism that requires the deletion of the lateral (but not the deletion of the rhotic or the nasal) before the masculine plural suffix.

A similar issue is found in an analysis following CVCV Phonology (Scheer 2004; Scheer and Szigetvari 2005), where consonants are represented as onsets, regardless of their position in the domain and their position relative to other segments in the domain. In this case, a special mechanism that explains the special behaviour of laterals is also needed. In both Standard Government Phonology and CVCV Phonology, this special mechanism would also have to be active in word-medial position, as the lateral variably deletes intervocalically, as well as in participles. Regarding its configuration, such a mechanism could be implemented in the form of a link between the word-final lateral onset and the previous rhyme, which would assign rhyme-like properties to the lateral (but not to the rhotic or nasal) and prevent it from being an onset to any following segment. Thus, unlike what is suggested in Figures 1 and 2, word-final laterals in a CVCV Phonology approach would be represented as having both onset and coda properties, while word-final rhotics and nasals would be represented as onsets. The representation of word-final laterals in CVCV Phonology is shown in Figure 7. Note that, as in the previous figures, the x-skeleton is omitted from Figure 7. Following the usual premises in CVCV Phonology, it should be assumed that each segment in the representation in Figure 7 is linked to an x in the x-skeleton.
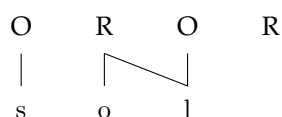
O   R   O   R

s   o   l

Figure 7. The representation of the word-final lateral as linked to both a rhyme and an onset.

Although such an analysis does seem to capture the differences between laterals and the other word-final consonants in BV, it is unclear how delinking (which would allow the deletion of the lateral) would operate in the language, as it would need to target two links, each of which connected to a separate node on the CV string. It is also unclear the extent to which this special mechanism would apply crosslinguistically to cases where consonants with a seemingly identical representation exhibit distinct behaviour, and the way in which it would operate with word-medial laterals in BV.

On the other hand, an analysis that assumes that word-final BV consonants may have different positions in the syllabic structure is consistent with the observations about their behaviour, as well as with observations about the behaviour of related constructions (such as participles) and phonological phenomena (such as metaphony). This analysis is in line with the proposal in Piggott (1999), which argues that two types of licensing regulate the representation of word-final consonants. Consonants that are directly licensed are those that are parsed locally as codas, while those that are remotely licensed are parsed in a separate constituent, that is, as onsets of syllables with empty nuclei. Languages differ with respect to whether or not they allow both direct and remote licensing. In the case of BV, the representations in Figures 1 and 2 indicate that it allows both.

The consonants that are allowed to occupy the position of onsets of empty-headed syllables are also weak onsets elsewhere in BV. These are the onsets (/l, d/), which are deleted when suffixation takes place and which may be deleted intervocalically.[10] If separate representations for these 'weak' consonants are assumed, no special mechanism is required to explain the plural alternations in BV.

The present proposal differs from the analysis in Piggott (1999) and from approaches that presume the existence of onsets of empty-headed syllables in that it assumes that onsets of empty-headed syllables are weak (at least in BV) and, as a result, may not be realized in some contexts (for example, when material is added to the right of the onset). However, the present proposal does not assume that consonant weakening (which results in deletion) stems from their licensing as onsets of empty-headed syllables. Instead, given the observations previously mentioned regarding word-internal consonant deletion, it is possible that the 'weak' (i.e., deletable) consonants are marked in the BV inventory and

that their distinct representation (and phonological behaviour) is a consequence of them being marked.

Other varieties of Veneto where the same patterns of pluralization are observed, such as Central Veneto and the Chipilo Veneto from Mexico (Belloni 2009; MacKay 2002; Zamboni 1974), should therefore have the same representations for their word-final consonants as BV. It is open to debate whether other Romance languages also allow two types of representation for their word-final consonants. The pluralization patterns of words ending in a lateral in some of these languages suggests that this could be the case. For example, in Portuguese and Old French, plurals of words with a final lateral involve vocalization. This is shown in (11).

(11)   a.   Vocalization of the lateral in Old French plurals:
           cheval 'horse.SG' → *chevaus* 'horse.PL'
       b.   Vocalization in Portuguese plurals with a word-final lateral:
           animal 'animal.SG' → *animais* 'animal.PL'

In the case of Old French, the vocalization of the lateral is triggered by the plural marker /-s/ (Gess 1998). In this sense, the alternation observed in Old French is similar to the one targeting laterals in BV. Although this alternation is taken by Passino et al. (2022) as evidence for the hypothesis that word-final consonants were onsets in Old French, it is unclear what the representation of the vocalized lateral is after pluralization and whether a similar phenomenon may be observed in other consonants represented as onsets of empty-headed syllables.

In Portuguese, the pluralization of words ending in a lateral also contrasts with the pluralization of words ending in another consonant, such as a rhotic or a fricative. While the pluralization of words ending in a lateral results in a surface form with no lateral (/aniˈmal/ → [aniˈmajs], as seen in (11-b)), plural forms of words ending in a rhotic or fricative exhibit no consonant deletion (e.g., /poˈmaɾ/ → [poˈmaɾis] 'orchard'[11]). At first glance, all word-final consonants in Portuguese seem to behave similarly regarding pluralization, in that an epenthetic vowel (/i/) is inserted between the word-final consonant and the plural suffix /-s/. Under this assumption (i.e., that all final consonants behave the same), the only difference between them is that a final lateral deletes after pluralization, while the other final consonants do not.

However, previous analyses have argued that the pluralization of words with final laterals differs systematically from the pluralization of words with other final consonants. Importantly, these analyses have all proposed that, while epenthesis is in effect observed in the plural forms of words ending in a rhotic or fricative, it does not apply to plurals of words ending in a lateral. Regarding the pluralization of words ending in a lateral, it has been argued that the attachment of the plural suffix /-s/ forces the lateral (represented as a coda) into the nucleus, which triggers its vocalization (Mateus and d'Andrade 2000). Alternatively, it has been assumed that, as word-final laterals are already partially nuclearized, pluralization forces them to fully nuclearize and, as a consequence, become semivowel [j] (see Vigário (2022)). Lipsky (1973), despite not proposing a specific syllabic representation for word-final laterals, agrees that the pluralization of words ending in a lateral involves vocalization of the consonant.

With respect to the prosodic status of word-final rhotics and fricatives, previous analyses have diverging proposals. Mateus and d'Andrade (2000), for example, contend that these word-final consonants are not associated with syllable structure and become onsets when the plural suffix (and the epenthetic vowel) is added. Vigário (2022), on the other hand, assumes that they are coda consonants. Regardless of these analytical differences, both approaches are similar to the present proposal about pluralization in BV in that they argue that laterals are represented differently from other word-final consonants.

Portuguese and BV are similar in the sense that plurals of words ending in a lateral do not display the lateral on the surface. In spite of this similarity, pluralization in Portuguese is fundamentally different from pluralization in BV: while the Portuguese word-final lateral

vocalizes in plural forms, the BV word-final lateral is deleted. In other words, the final /i/ in pluralized BV forms corresponds to the plural suffix, while the semivowel [j] in pluralized Portuguese forms derives from the stem-final lateral consonant. The pluralization patterns observed in BV are not the result of contact with Portuguese.

We have seen in this section that other approaches related to syllabification and to the representation of the syllable domain are unable to account for the BV plural alternations. The next section summarizes the analysis and discusses some points to be considered in future research.

7. Conclusions

In this paper, I argued that the plural alternations found in BV nominals suggest that word-final consonants in the language are represented in two ways: as codas (in the case of rhotics and nasals) and as weak onsets of empty-headed syllables (in the case of laterals). A corpus analysis showed that BV polysyllables ending in a consonant have stable plural forms, and that the patterns of pluralization for monosyllables and words with stress on a final CV syllable are also consistent with the proposal that laterals are represented differently from other word-final consonants. In addition, the behaviour of words with a final lateral with respect to metaphony and (re)syllabification, as well as the observation that laterals may delete intervocalically in BV, further support the idea that word-final laterals are weak onsets.

This analysis is in line with Piggott (1999), who proposes that the representation of word-final consonants is regulated by different types of licensing which may result in them being parsed as codas or onsets. The analysis was also compared to other approaches to syllabic representation in phonological theory (within prosodic phonology as well as in other frameworks), but these approaches were unsuccessful in (a) accounting for the plural alternations, and/or (b) explaining stress assignment in BV.

It should be noted that, especially with respect to pluralization in monosyllables, the corpus analysis did not yield categorical data. The majority of plural forms were compatible with the proposal that CVC items ending in a nasal are monosyllables while CVC items ending in a lateral are not. However, a portion of the pluralized CVC items does not conform to these patterns, which suggests that speakers' representations for monosyllables may be less stable than those for polysyllables. Further research including production data is needed to determine whether this is indeed the case and which factors condition the variation in plural forms observed in CVC items.

The case of BV substantiates the observation in phonology that alternations may stem from representational differences. Furthermore, it gives support to the idea that representations of similar segments (in this case, consonants) may be complex in a particular position within a phonological domain (in this case, the word-final position). Complexity, in this case, refers to the possibility of assigning distinct representations to elements in the same prosodic position and the outcomes that these representations have in terms of phonological process application. The question of whether other BV structures may also exhibit multiple (and, in this sense, complex) representations is left for future research.

Abbreviations

The following abbreviations are used in this manuscript:

BV	Brazilian Veneto
2PS	second person singular
2PL	second person plural
SG	singular
PL	plural
MASC	masculine
FEM	feminine
DIM	diminutive
PWd	prosodic word

Notes

[1] Lateral coda velarization is variably observed in southern dialects of Brazilian Portuguese (Quednau 1993), which could explain the observation that the BV lateral may be velarized in the coda. In most dialects of Brazilian Portuguese, however, lateral codas are vocalized to [w] (e.g., /sɔl/ → [sɔw] 'sun'; see e.g., Massini-Cagliari et al. (2016)).

[2] This alternation may also be lexically conditioned, since not all intervocalic laterals seem to be susceptible to deletion or vocalization in BV.

[3] Word-initial /v/ may also be variably deleted in some lexical items (e.g., ['vɔlta] → ['ɔlta] 'turn'; Dal Castel et al. (2021)). Apparently, word-initial /d/ is not targeted by this alternation.

[4] The texts were published between 1979 and 2013, although some of them may have been written before their publication date. The texts obtained from one of the newspapers were published between 2008 and 2013, while those from the other were published between 2018 and 2020 (the latter were all written by a single author). Excerpts from four books are included in the corpus. Each of these books was written by a different author, and their publication years are 1979, 1982, 1994 and 2003. Examination of these materials indicates that the BV plural alternations are spelled consistently across authors, type of publication and publication years.

[5] To confirm the morphological properties or the possible pronunciations of a given item, the following materials were consulted: two BV–Portuguese dictionaries (Loregian-Penkal et al. 2023; Luzzatto 2000), a descriptive grammar and BV–Portuguese dictionary (Stawinski 1982), and further inspection of the corpus data. This applies to all corpus-based observations presented in this section as well as in the next section.

[6] This alternation is only possible with verbs of the first and third groups (i.e., ending in *-ar* or *-ir*), as the participle suffix for verbs of the second group is *-esto/esta* (e.g., ['bever] 'to drink' → [be'vesto] 'drunk').

[7] Such a requirement does not apply to cases where apocope is observed.

[8] Metaphony of a stressed vowel in antepenultimate position is also possible in BV. In this case, examination of the corpus data indicates that an intervening close-mid vowel may be immune to raising (e.g., ['zoveni]~['zuveni] 'young.PL'; Garcia and Guzzo (2023)).

[9] But see Goad (2012) for an analysis where the /s/ in s+consonant clusters is a coda rather than an appendix.

[10] As previously mentioned, /v/ may also be deleted intervocalically and thus also has 'weak onset' properties. However, unlike /l/ in masculine nominals and /d/ in masculine participles, /v/ is not found word-finally.

[11] This transcription follows what is observed in most Brazilian Portuguese varieties. The quality of the epenthetic vowel and the pretonic vowel may be different in other varieties of the language and also in certain varieties Brazilian Portuguese.

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