Computer modeling of syntactic microvariation: the problem of co-existing verb agreement patterns in European and Brazilian Portuguese dialects

One of the most outstanding traits of Brazilian Portuguese (BP) in comparison to European Portuguese (EP) is the progressive impoverishment of verbal inflections. According to Duarte (2000), Paradigm 1 in Table 1, active in EP dialects with the exception of 2P pronoun vós, ceased to be productive in BP in early 20th century and was firstly replaced by Paradigm 2 and then by Paradigm 3 in the speech of successive generations of speakers.

<table>
<thead>
<tr>
<th>Person and number</th>
<th>Pronouns</th>
<th>Paradigm 1</th>
<th>Paradigm 2</th>
<th>Paradigm 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S (first person singular)</td>
<td>eu 'I'</td>
<td>espero</td>
<td>espero</td>
<td>espero</td>
</tr>
<tr>
<td>2S (second person singular)</td>
<td>tu 'you'</td>
<td>esperas</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3S (third person singular)</td>
<td>ele 'he'</td>
<td>espera</td>
<td>esperar</td>
<td>esperar</td>
</tr>
<tr>
<td>1P (first person plural)</td>
<td>nós 'we'</td>
<td>esperamos</td>
<td>esperamos</td>
<td>–</td>
</tr>
<tr>
<td>2P (second person plural)</td>
<td>vós 'you'</td>
<td>esperais</td>
<td>–</td>
<td>esperar</td>
</tr>
<tr>
<td>3P (third person plural)</td>
<td>eles 'they'</td>
<td>esperam</td>
<td>esperam</td>
<td>esperam</td>
</tr>
</tbody>
</table>

Table 1: Inflectional paradigms of the verb to wait in Portuguese (based on Duarte, 2000: 19).

This relative simple account of verb agreement in BP, however, is far from reflecting contemporary dialectal reality as assessed in regional corpora and informant surveys, which have shown, among other things, that in some varieties of BP a simplified version of Paradigm 1 without 2P forms like esperais is relatively productive and co-exists with Paradigm 2. From this empirical research, a more complex picture of BP than suggested in Table 1 emerges, since speakers of some dialects mix apparently conflicting patterns, often in the same discourse segment. Some examples:

(1) a. você.3S espera.3S 'you wait'
   b. tu.2S esperas.2S
   c. tu.2S espera.3S (Non-standard)
(2) a. nós.1P esperamos.1P 'we wait'
   b. nós.1P espera.3S (Non-standard)
   c. a gente.3S espera.3S
   d. a gente.3S esperamos.1P (Non-standard)

   In (1), 2S pronoun tu alternates with 3S você in the expression of 2S, variably agreeing with both 3S and 2S verb forms in some dialects of BP (Lopes & Cavalcante, 2011).

   In (2c,d), DP a gente 'we' (literally 'the people') is semantically 1P, but morpho-syntactically 3S. In this case, agreement may take place between either the formal-syntactic or the semantic features (Vianna, 2006). 1P pronoun nós 'we', for its part, as exemplified in (2a,b), variably agrees with 1P and 3S in some non-standard dialects (Maia, 2009).

   In Portuguese, variation in the verb agreement domain is not restricted to BP. EP dialects also license the alternation between (2a), (2c) and (2d) and reveal some additional interesting patterns, as exemplified in (3) and (4) (Pereira, 2003).

   (3) a. gente.3S esperam.3P 'we wait' (Non-standard)
   (4) a. vocês.3P esperam.3P 'you wait'
       b. vocês.3P esperais.2P (Non-standard)

   Agreement patterns (2c), (2d) and (3) are well attested in the Azorean dialect of the São Miguel Island, the latter pattern, which also marginally occurs in some BP dialects (Vianna, 2006), being the most frequent one in the respective inquiries of Cordial (2011). In
pronoun *vocês*, formally 3P, refers to the second person plural and variably agrees with either 3P or 2P in the Covo dialect of Aveiro, Portugal (Cordial, 2011). As was observed above in relation to BP dialects, these different patterns also often alternate in the same discourse segment.

This co-existence of different verb agreement patterns in BP and EP dialects raises from a generative perspective some challenging questions: How can this behavior be accounted for in a principled way? How can it be formally modeled in a way that the observed data can be derived and ungrammatical constructions excluded?

In this paper, we argue that the above exemplified variation as well as the historical changes from which it has resulted can be derived by a very simple mechanism: restructuring (mostly by deactivating of features) in the feature complexes of pronouns and verbs, as suggested by some studies on grammaticalization of pronouns in BP, e.g. Vianna (2006). Opposing the syntactic account of patterns (2c) and (2d) by Taylor (2009), who claims this alternation results from an implicit 1P pronoun NÓS 'we' in either an "imposter" or a "pluringular" configuration, but in line with other generative approaches to the subject, e.g. D'Alessanddoro (2008), Costa and Pereira (2012), etc., we postulate complex feature structures for these syntactic objects distinguishing between phi (syntactic) features and sigma (semantic) features, both of which sets are argued to be grammatically active.

Previous generative accounts of these variable agreement patterns, however, do not cover the same range of agreement phenomena, excluding, for example, pattern (3), nor are sufficiently explicit in a way that all the relevant data can be automatically derived without resorting to implicit assumptions. Contrary to that, we propose a completely formalized representation of the structures involved in the context of a computer implementation of a grammar fragment of Portuguese in the LFG-XLE framework. From this general, supradialectal grammar, more restricted grammars of particular dialects are derivable by activation of phi or sigma agreement features in the relevant lexical entries.

References


