Romance root suppletion and cumulative exponence: Fusion, pruning, spanning

In the perspective of Distributed Morphology (DM) (for an overview cf. Bobaljik 2017) the lexicon is distributed over several lists: morphosyntactic processes derive hierarchical structures using roots and functional elements and precede morphophonological realizations, by which Vocabulary Items are inserted in terminal nodes that are the outcome of syntax. Suppletive forms in DM, both of inflection as well as of stems, are analysed as particular, more specified cases of Vocabulary Insertion (VI). Yet, in DM, affix suppletion is far more studied than stem suppletion. Thus this talk wants to fill the gap by analysing verbal stem suppletion in Romance. Our focus is on the various suppletive patterns found with the movement verb GO and the locality effects observed in this context.

The Romance varieties all started with the loss of (certain) verbal forms of Lat. *īre* – there is no Romance variety that retained the full paradigm – but they reached different solutions: There are patterns for non-categorial suppletion (cf. Veselinova 2006, 2017) or, as it is called by Hippisley et al. (2004), contextual suppletion, i.e. cases where the suppletive pattern is dependent on the syntactic context, as it is the case for Agreement phenomena (e.g. French, Italian); and there is are patterns for categorial suppletion (cf. Veselinova 2006, 2017) or, as it is called by Hippisley et al. (2004), inherent suppletion, i.e. cases where the suppletive pattern is dependent on functional features inherent to the verb, like TAM (e.g. Spanish). We will mainly concentrate on non-categorial suppletion, which is limited to an inherent feature of tense: in Romance, only in the present tense, we find suppletive forms conditioned by Number and Person. In order to explain this fact as well as the differences in the patterns and structural interpretation of GO-suppletion found in Romance, we will explore three different theoretical approaches within the DM-framework: I) Fusion; II) Pruning; III) Spanning. In DM, the insertion of different Vocabulary items for the same root is dependent on properties of the subsequent syntactic context (note, that we assume Late Insertion also for roots, contrary to Embick & Halle 2005, Embick 2015, but in line with e.g. Haugen & Siddiqi 2013, exactly because there is root suppletion also for lexical categories like GO). Thus root allomorphy can only be triggered by elements that are linearly adjacent. The question that this paper tries to solve is to discuss which of the three approaches indicated above gives us the correct distribution of forms without being too unrestrictive as far as context conditions are concerned.

(I) Fusion: In most tenses the syntactic Tense head and the Agreement-features (which are added to it after a successful derivation) are kept as separated syntactic heads, e.g. span. *cant-a-b-a-mos* 'we sang': √CANT + Th + T°[PAST] + Th + φ[1PL] (Th = theme vowel). Suppletive forms conditioned by Number and Person are not found in Spanish, but they are in Italian and French (and were in Old Spanish). In Italian and French, the realization of the suppletive √GO is conditioned by φ, but these features are in a separate (and only post-syntactically added) position. Arregi (2000) assumes (for Spanish) that, in the present (= default) tense, a process of fusion of T° and φ to T/ φ. Therefore, Agreement could locally condition the selection of different Vocabulary Items for the root, as it does happen in French and Italian, whereas in other tenses the φ-features are not local enough to impinge on VI. In French, fusion goes even further in the sense that we find a kind of portmanteau-fusion in all forms but the 1pl and 2pl:

(1) Vocabulary Items for Italian √GO (only present tense is considered here)
   a. /va-/ → √ANDARE / _____ T°/φ-[present] [sg/3pl]
   b. /and-/ → √ANDARE (elsewhere)

(2) Vocabulary Items for French √GO (only present tense is considered here)
   a. /vɛ/ → √ALLER/v°/T°/φ-[present indicative; 1sg]
   b. /vɔ̃/ → √ALLER/v°/T°/φ-[present indicative; 3pl]
   c. /va/ → √ALLER/v°/T°/φ-[present indicative; sg]
   d. /aj/ → √ALLER/v°/T°/φ-[present subjunctive; sg/3pl]
   e. /al-/ → √ALLER (elsewhere)

The general problem with the fusion approach is that it remains unclear what it is triggered by and how is it restricted. Therefore, several researchers reject fusion (e.g. Trommer 1999).

(II) Pruning: This process has the effect that nodes that have no exponence with phonological material are removed from the structure with a direct effect on linear adjacency (Embick 2003, 2010). If we have the postsyntactic linearization √root ∩ X ∩ Y ∩ Z, e.g. √ANDARE ∩ v ∩ Th ∩ T ∩ Th ∩ φ, present tense T° has no exponents and thus can be pruned. Present tense T does not have a Th either (cf. *cant-a-te* 'you.PL sing' vs. *canta-v-**a**-te* 'you.PL sang') and the thus pruned input-structure for VI would be √ANDARE ∩ v ∩ TV ∩ φ. Here, at least two problems arise: First, v has a theme vowel in forms like *and-a-te* 'you.PL go', which indicates the position of v is not pruned. So are v° and the Th no intervenors between √ and φ? How is contextually locality guaranteed in this case? And second, in the suppletive forms, i.e. exactly the forms were number and person condition stem allomorphy, there is no Th (at least in our analysis, based on diachronic evidence, since these forms stem from Latin *vadere*), e.g. *vad-o* 'I go', *va-i* 'you.SG go', *va* 's/he goes', *va-nno* 'they go'. How is then pruning of v° and Th foreseen by VI, since it is the realization of the root that tells us whether a verb is thematic (/and/) or athematic (/va/), but the realization of the root is conditioned by φ (which is preceded or not by a Th)?

(III) Spanning: The spanning approach allows VI to operate over the hierarchical structure, allowing to insert phonological material not just in one terminal node at a time but also in spans of terminal nodes that are in a complement relation with each other (Williams 2003, Svenonius 2012, Merchant 2015). So a syntactic input-structure [$_Z$ [$_Y$ [$_X$ √ROOT X] Y] Z] would allow the spans <√ROOT>, <√ROOT, X>, <√ROOT, X, Y>, <√ROOT, X, Y, Z>, <X>, <X, Y>, <X, Y, Z>, <Y>, <Y, Z>, <Z>, but not the impossible spans *<√ROOT, Y>, *<√ROOT, Z> etc. This means that Z could trigger allomorphy to the adjacent span <√ROOT, X, Y>, Y could trigger allomorphy to the adjacent span <√ROOT, X>, or <Y, Z> together could trigger allomorphy to the adjacent span <√ROOT, X>. With this we are able to identify different spans for vocabulary insertion of Romance √GO, depending on language and syntactic context:

(1)

a. Spanish		b. Italian	
<√GO, v, Th, T:pres, Th>	↔ /va/	<√GO, v, Th, T:pres, Th>	↔ /va/ if < φ:sg/3pl>
<√GO, v>	↔ /i/	<√GO, v>	↔ /and/
<√GO, v, Th, T:indef, Th>	↔ /fwe/		

c. French		
<√GO, v, T:pres, φ: 1sg>	↔	/vɛ/
<√GO, v, T:pres, φ: sg>	↔	/va/
<√GO, v, T:pres, φ: 3pl>	↔	/vɔ̃/
<√GO, v, T:pres/subj, φ: sg/3pl>	↔	/aj/
<√GO, v>	↔	/al/

As we can see, TAM- triggered allomorphy is explained via the specification of the Vocabulary Item at issue in all three languages. The span comprises <√GO, v, Th, T:pres, Th> in the Italian and Spanish present tense as well as in the Spanish indefinido and <√GO, v> in both languages in all other tenses. In Italian, the φ-features furthermore directly trigger root allomorphy (to the adjacent span) in the present tense. In French instead, the selection of different roots seems rather to be linked to „cumulative exponence", in the sense that there are several Vocabulary Items at disposition with quite large (portmanteau) "span sizes" and different feature specifications.

Selected References:

ARREGI 2000. BOBALJIK 2017. EMBICK 2003; 2010; 2015; EMBICK & HALLE 2005. HARLEY 2011; 2014. HAUGEN & SIDDIQI 2013. HIPPISLEY, CHUMAKINA, CORBETT & BROWN 2004. MERCHANT 2015. SVENONIUS 2012. TROMMER 1999. VESELINOVA 2006; 2017. WILLIAMS 2003.