The Nanosyntax of parameters of Romance nouns: from subphonemic to full phrases

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It is often held that "parameters" are purely lexical, yet the details are rarely worked out, let alone in any natural way. In this talk, we work out concrete and detailed proposals for two parameters of morphosyntax, using Italian and Spanish gender/number marking on nouns as our empirical basis. Spanish and Italian use two very different morphosyntactic strategies for marking number & gender on nouns. In Spanish, the plural (PL) morpheme stacks on the top of the singular (SG), whereas in Italian the final vowel changes its quality in PL:

(1) a. rued-a , rued-a-s (Spanish)

  b. rwot-a , rwot-e (Italian)

Within each language, different noun classes mark their number distinction differently, ranging from invariant classes to opaque portemanteaux to analytic morphology. We argue that the tools of nanosyntax offer an elegant explanation for both of these parameters, down to the individual features, and that they also uncover novel generalisations about the data.

In Italian, there are 5 main patterns of these SG-PL pairs:

(2) SG → PL

  a. rwot-a → rwot-e

  b. diplom-a → diplom-i

  c. libr-o → libr-i

  d. font-e → font-i

  e. film → film

Passino (2009) and Lampitelli (2014) showed that if one decomposes these vowels as per Element Theory, Italian underlyingly also has a separate class and number marker:

(3) SG → PL

  a. rwot-A-A → rwot-A-I

  b. libr-U-A → libr-U-I

  c. font-I-A → font-I-I

    d.   diplom-Ø-A → diplom-Ø-I

    e.   film-Ø-Ø → film-Ø-Ø

Both Spanish and Italian thus have two structural positions. The parameter distinguishing stacking vs vowel change is the size of the phonological chunk lexicalised by each position: a subphonemic element in Italian, a full phoneme in Spanish. There are furthermore two previously unnoticed generalizations here. First, not all the nouns in Italian show both the class and the number marker - some roots are followed by only one element and some have no elements at all. But if one element is missing, it's always the class marker, never the number marker. This leads to an interesting pattern:

(4)   Generalization no. 1:
      Zeroes spread from the root outward

Both this generalization and the different strategies used by different noun classes can be elegantly accounted for by allowing roots to spellout entire phrases of various sizes (e.g. Starke 2014, Caha & De Clercq & Wyngaerd 2018). For instance, the root *diplom-* spells out also the functional projection of Class, the result of which is that only the Number marker gets inserted separately.

Adopting different root sizes leads to a second generalization. Given a CV approach to phonology, consonant-final roots have a slot to host the class and number elements, but vowel-final roots such as *mare-A-A* do not. This suggests that there is an extra CV brought by a separate functional head which is under ClassP.

Since roots of the *diplom-* type spellout the structure all the way up the Class projection, neither the class marker, nor the extra CV will appear in this paradigm. This paradigm hence does not have enough V slots for both a vowel-final root and the class/number markers. We are thus led to predict that this class of roots never ends in a vowel. Strikingly, it is indeed the case that:

(5)   Generalization no. 2:
      In the *a-i* pattern, roots never end in a vowel (but can in all other patterns)

Both parameters and both new generalizations are thus captured via the notion of the size of the lexical entry: either phonological size (submorphemic or not) or syntactic size (roots spelling out larger or smaller phrases).

References

CAHA, P., DE CLERCQ, K. & WYNGAERD, G. (2018): *The Fine Structure of the Comparative*, `lingbuzz/003790`; LAMPITELLI, N. (2014): Plural Isogloss and Linguistic Change: A Comparative Study of Romance Nouns. `lingbuzz/001514`; PASSINO, D. (2009): An Element-Based Analysis of Italian Nominal Inflection. In *Selected Proceedings of the 6th Décembrettes. Morphology in Bordeaux*; STARKE, M. (2014): *Cleaning up the lexicon*, `lingbuzz/004309`