Towards a predictive theory of concord across categories

THE PROBLEM. Gender and number concord is often used in language-specific definitions of lexical categories: for instance, concord is taken as a characteristic property of A as opposed to N/V in Romance languages. The underlined element in (1a), but not (1b), is therefore classified as adjectival, and (2a) is assumed to have at least some adjectival properties missing in (2b).

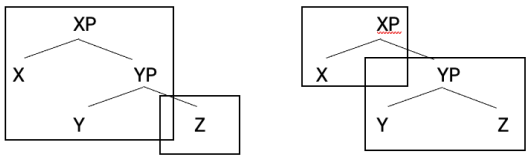
(1) a. l-o-s científic-o-s estrell-a
the-m-pl scientist-m-pl star-f.sg. 'the star scientists'
b. l-o-s científic-o-s prestigios-o-s
the-m-pl scientist-m-pl prestigious-m-pl 'the prestigious scientists'

(2) a. Ell-a-s están pelea-d-a-s con Juan.
3p-f-pl are-3pl fight-part-f-pl with Juan
'They are not in speaking terms with Juan'
b. Ell-a-s se han pelea-do con Juan.
3p-f-pl SE have-3pl fight-part with Juan
'They had a falling out with Juan'

We lack a predictive theory of where and why concord is introduced in the derivation; generally, theories explicitly propose (Bobaljik 2008) or implicitly assume (Baker 2003, 2008) that language-specific statements declare whether concord is present or not in a category, irrespective of syntax and semantics. My goal in this presentation is to present an alternative to this idiosyncratic treatment.

BACKGROUND. Nanosyntax (Starke 2002) predicts that, given a syntactic structure, there is a complementarity relation between the material spelled out by each one of the visible exponents, without overlaps and without leaving any feature unidentified by lexical insertion (see **fig. 1**). Allomorphy and suppletion emerge when distinct exponents correspond to different structural chunks within the same structure.

Fig.1. Complementarity of exponents given identical structures



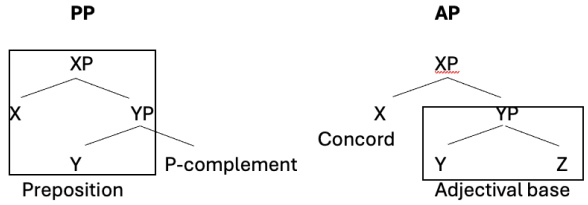
At the same time, there is converging evidence that PPs and adjectives in languages like Spanish share the same structure. Next to theoretical arguments (Hale & Keyser 1993), PPs and APs can be coordinated with each other (*a man [sad and in silence]; ??[a teacher and tall]; *[sad and walks]*); it is easy to find cases where PPs and APs are alternative lexicalisations of the same property (3), and PPs and APs are in complementary distribution (4).

(3) a. barb-ad-o
beard-part-m.sg 'bearded'
b. con barb-a
with beard-f.sg 'with beard'

(4) a. hombr-es (*con) barb-ad-o-s
man-pl with beard-ed-m.pl.
b. #hombr-es *(con) barb-a
man-pl with beard-f.sg.

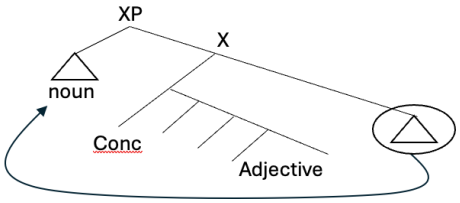
PROPOSAL. Given these premises, the immediate conclusion is that concord contains the high layer(s) of prepositional structures (at least, X; **fig. 2**).

Fig.2. PP and AP as spell outs of the same structure



PREDICTION 1: CONCORD PROJECTS AS P. The first prediction is that Romance concord is a relational head (p-like). I propose that, specifically, Concord is needed to integrate an <e,t> predicate (traditionally called 'adjective') in the spine where another <e,t> predicate (traditionally called 'noun') has been built. Languages without surface concords are languages whose adjectival exponents spell out up to XP, not leaving any material left for other exponents. Using Starke's (2018) Lexicalisation Algorithm, the adjective is built in a separate working space (see **fig.3**); projecting the relational head is necessary to integrate it in the spine; that layer is spelled out with concord exponents and acts as an LF-function that turns the adjective from <e,t> into <<e,t>,<e,t>>. Some ezafe-like elements are perhaps another instantiation of the same head (Kahnemuyipour et al. 2024).

Fig. 3. Concord as the spell out of a linker between A and N in Romance



In Romance languages (N-A), but not Germanic (A-N), the constituent containing the noun additionally moves and projects as a specifier of the highest head corresponding to concord.

PREDICTION 2. P COMPLETELY EATS UP CONCORD. Conversely, absence of concord in categories that otherwise display it means that the material above that category contains prepositional structure in its lower layers. This allows treating Auxiliary + Participle structures in an integral way that does not require positing independent differences in participles. In (2b) above the auxiliary *haber* corresponds to a structure [FP [PP]], in partial accordance with Kayne (1993), while *estar* (and *ser*) lack P.

CONSEQUENCES. The approach restricts concord to syntactically and semantically motivated instances where predicates built in different working spaces are integrated in the spine of the tree. Concord is semantically interpretable, so the approach makes the first step towards an account combining the best of the copy (Chomsky 2001) and the matching theories of agreement (HPSG, Pollard & Sag 1994, chapter 2): the concord projected to integrate the adjective in the nominal structure is used to build one single <e,t> predicate with N and A, so the gender and number specification of each must be at least compatible so that one single participant is identified in semantics.

References. Baker, M. C. (2003), *Lexical Categories*, CUP // Baker, M. C. (2008), *Case: Its principles and its parameters*, CUP // Bobaljik, J. D. (2008), 'Where's phi: agreement as a postsyntactic operation' // Chomsky, N. (2001), 'Beyond Explanatory Adequacy', in *MIT OPL 20* // Kahnemuyipour, A., M. Shabani & S. Taghipour (2024), 'Gilaki reverse ezafe', *Syntax* // Kayne, R. S. (1993), '*Toward a Modular Theory of Auxiliary Selection', Studia Linguistica, 47* // Pollard, C. J. & I. Sag (1994), Head-Driven Phrase Structure Grammar, ChUP// Starke, M. (2002), *Nanosyntax*, Ms. // Starke, M. (2018), 'Complex left branches, spellout and prefixes'.