Revisiting diachronic change in the nominal domain from Latin to modern Romance

Background: As is well-known, Latin underwent a diachronic change from being a language that allowed Left Branch Extraction (LBE) to the modern Romance languages, which systematically disallow LBE, i.e., are subject to the Left Branch Condition (LBC, cf. *i.a.* Ledgeway 2012: 424). (1-a), from Latin, illustrates LBE of an AP, and it is likewise attested for possessive adjectives, demonstratives, wh-determiners (cf. (2)), and others, cf. Devine & Stephens (2006, 542ff). (1-b) from Italian showcases the LBC being operative.

(1)a. *qui* ***summam***$_i$ *inter eos habet* [t_i ***auctoritatem***] (Caes. *B.G.* 6.13.8)
who highest.ACC.FSG among them.ACC has power.ACC.FSG

b. *chi* (*[***più alta***]) *fra di loro ha* [*la* ***più alta*** *autorità*] (Italian)
who more high among of them has the more high authority
'who has the highest authority among them'

(2)a. ***meo***$_i$ *tu epistulam dedisti* [t_i ***servo***]
my.DAT you.NOM letter.ACC gave.2PERF servant.DAT
'you gave the letter to my servant?' (Plautus, *Pseudolus* 1203)

b. ***hanc***$_i$ *cum habeat* [t_i ***praecipuam laudem***]
this.ACC since has.3SUBJ particular.ACC merit.ACC
'since he has this particular merit' (Cicero, *Brutus* 261)

c. ***quis***$_i$ *umquam* [t_i ***Graecus***] *comoediam scripsit*
which.NOM ever Greek.NOM comedy.ACC wrote.3PERF
'Which Greek ever wrote a comedy?' (Cicero, *pro Flacco* 27.65)

Analytically, this transition has been discussed in terms of the NP-DP-parameter (Bošković 2005a, 2005b, 2008), of "a change in the head-directionality parameter with a concomitant shift from specifier- to head-oriented syntax in the domain of functional structure on the other" cast in terms of roll-up derivations (Ledgeway 2012), and of phonological movement in conjunction with several other phenomena (Agbayani & Golston 2016). This paper offers a novel approach using recent developments in syntactic theory (Chomsky 2013, 2015/POP(+)).

Proposal and analysis: The intuition behind the current approach is the classical one (cf. Schwegler 1990) that morphological richness of nominal inflection underlies its LBE-characteristic in Latin and that the loss of morphological richness of nominal inflection yielded the LBC that characterizes modern Romance. Specifically, analogous to POP+'s notion of "strong" and "weak T", I propose that the functional nominalizing head *n* (cf. Borer 2005) comes in two kinds, strong and weak, correlating with rich nominal inflection on the one hand, and poor nominal inflection on the other. This is captured in the following hypothesis:

(3) ***The Nominal Strength Parameter***
a. strong n/n_{str}: Latin b. weak n/n_{wk}: Italian, Spanish, French …

(3) is a new instantiation of the classical Borer-Chomsky conjecture which localizes syntactic variation in properties of functional heads. The analysis is couched in the POP/+ framework in which the set-forming operation Merge applies optionally (i.e., freely), whilst phase-by-phase transferred syntactic representations meet 3rd factor principles of efficient computation (*Minimal Search*) and interface conditions. One of the latter is that every syntactic object requires a label. POP proposes that this requirement is achieved in a computationally efficient manner by the Labeling Algorithm LA. The first step in the derivation involves a category-neutral root R and a categorizer K (POP: 47) introducing an asymmetry: While R does not, K bears grammatical features and is thus identified by the LA. Thus, a nominal phrase comprises the nominalizing head *n* and R (cf., e.g. Borer 2005) yielding {*n*, R}=α. By (3) richness and poverty of nominal inflection is labeling-relevant: {n_{str}, R} is instantly labeled by n_{str}, while {n_{wk}, R} cannot be labeled but requires "support" by an XP, where the heads *n* and X share relevant features which are found by the LA (cf. POP+ on weak T). Following Sag, Wasow & Bender (2003), Chomsky (2007: 25-26), and, roughly, Leu (2014), I assume that determiner

categories are internally complex, i.e., phrasal, here represented as AP, i.e. XP=AP. (3) delivers the following six predictions:

(4) a. *[$_{\alpha=?}$ n_{wk} R] b. [$_{\alpha=\langle f,f\rangle}$ AP [n_{wk} R]] c. *AP$_i$ … [$_{\alpha=?}$ t_i [n_{wk} R]]

(5) a. [$_{\alpha=n\mathbf{P}}$ n_{str} R] b. [$_{\alpha=\langle f,f\rangle}$ AP [n_{str} R]] c. AP$_i$ … [$_{\alpha=n\mathbf{P}}$ t_i [n_{str} R]]

α in (4-a) is unlabelable since both n_{wk} and R are too weak to label. In (4-b) n_{wk} receives support by AP such that α is labeled by the shared feature borne by A and n_{wk}, given here as a pair of *f*. In (4-c) α remains unlabeled because both n_{wk} and R are too weak to label, and AP's trace is invisible (cf. POP, Epstein et al. 2020). All of this contrasts with (5), where n_{str} is strong to label α in (5-a). In (5-b) α is labeled by the shared feature borne by A and n_{str}. Finally, AP-LBE does not undermine the labelability of α in (5-c), because n_{str} is strong.

(4) represents the modern Romance pattern and (5) represents Latin. (3-a) thus correctly and uniformly captures that in Latin, articles are optional (cf. Quintilian (*Inst*. 1.4.19)), cf. (5-a) and (5-b), and LBE is possible (5-c), shown in (1-a) and (2). Moreover, (3-b) correctly and uniformly captures that modern Romance obligatorily requires the presence of a determiner category, cf. (4-a) vs. (4-b), exemplified by (6) from Longobardi (1994: 612):

(6) *(Un/il) Grande amico di Maria mi ha telefonato.
(a/the) great friend of Maria me have called-up
'(A/the) good friend of Mary called me up.'

Moreover, the modern Romance languages are subject to the LBC as exemplified in (1-b), captured in(4-c). Relatedly, placement of possessive adjectives can be prenominally (7-a) and postnominally (7-b) in Latin since n_{str} can invariably label α. This contrasts with modern Romance, where possessives must show up in "SPEC"-n_{wk} (SPEC for illustration only) to support n_{wk} for the idenfication of α's label, as exemplified by French (7-c).

(7) a. Caesar suas copias subducit (Lat., Caes. *B.G.* 1.22.3)
Caesar.$_{NOM}$ his.$_{ACC.FPL}$ troops.$_{ACC.FPL}$ withdraws
b. copias suas Caesar […] subducit (Lat., Caes. *B.G.* 1.24.1)
troops.$_{ACC.FPL}$ his.$_{ACC.FPL}$ Caesar.$_{NOM}$ withdraws
c. César retire ses troupes (*ses) (French)
Caesar withdraws his troops his
'Caesar withdraws his troops'.

I tentatively suggest that *f* is Case, perhaps gender and number. The diachronic passage is thus:

(8) $n_{str} > n_{wk}$

The current approach thus sheds new light on "Latin's recourse to synthetic strategies, in contrast to those of a predominantly analytic nature in Romance" (Ledgeway 2012: 424): The historical development from a language with rich noun inflection (rich case paradigms and declension classes) to a set of languages with poor or no noun inflection is reflected in (8). While Merge applies freely, it has to abide by the interface condition that every syntactic object be labeled by *Minimal Search*. This can be met in n_{str}-languages like Latin without ado with concomitant optionality of determiners and the option of LBE, while this can be met in n_{wk}-languages only if {*n*, R}=α is accompanied by AP to yield {AP, {*n*, R}}, deriving the obligatoriness of determiners and LBC-effects. Loss of case morphology was thus a reflection of the parametric shift from n_{str} to n_{wk}, the underlying cause of rather dramatic syntactic changes in the nominal domain.

Selected references: **Borer, H. (2005)** *Structuring sense (vol. 1): In name only*. OUP. **Bošković, Ž. (2005)** Left branch extraction, structure of NP, and scrambling in J. Sabel and M. Saito (eds.) *The free word order phenomenon: Its syntactic sources and diversity* 13-73. Mouton de Gruyter, Berlin. **Epstein, S. D., H. T. Kitahara & D. S. Seely (2020)** Unifying labeling under minimal search in 'single-' and 'multiple-specifier' configurations, *Arizona Linguistics Circle, U. of Arizona, 2019*; published in *Coyote Papers*, U. of Arizona. **Longobardi, G. (1994)** Reference and proper names: A theory of N-movement in Syntax and Logical Form. *LI* 25(4).