

GENDER and NUMBER spell-out on NPs. The case of Lunigiana dialects

1. The geolinguistic scenario. Lunigiana dialects are a group of Tuscan dialects spoken in the southernmost portion of northern Italian dialects (NID) on the Tyrrhenian side. In Lunigiana dialects, as in other NIDs, unstressed vowels (henceforth uV) occurring in internal and word-final position get reduced (cf. Carrarese ['libr] 'free.M.SG' < LĪBĒR-U(M)). The degree of vowel reduction is not uniform across all the Lunigiana dialects: while uVs in northern varieties are massively dropped, southern varieties, i.e. those spoken at the border between NIDs and central Italian dialects (CID), feature 'milder' effects. One way of formalizing this phonological process is by resorting to Element Theory (Bacley 2011), and representing vowel reduction as a gradual decrease in uV melodic complexity.

2. Interaction with morphosyntax. In Lunigiana dialects, while word-internal uVs are consistently deleted, word-final uVs display a higher degree of resistance. This might result from the fact that word-final uVs in Lunigiana dialects, as in other NIDs and CIDs, have the property of expressing inflectional information. For instance, when the word-final [e] corresponds to the F.PL, it never reaches the final stage of the complexity reduction process. These facts are illustrated in (1), with reference to the F.PL noun *women* of three different Lunigiana dialects, namely Carrarese, Colonnatese and Ortonovese:

(1)	a. Carrarese	b. Colonnatese	c. Ortonovese
Phonetics	['dɔn - e]	['dɔn - j - a]	['dɔn - a]
Phonology	$\begin{array}{c} \text{X} \\ \diagdown \quad \diagup \\ I _{\text{PL}} \quad A _{\text{F}} \end{array}$	$\begin{array}{c} \text{X} \quad \text{X} \\ \quad \\ I _{\text{PL}} A _{\text{F}} \end{array}$	$\begin{array}{c} \text{X} \\ \\ A _{\text{PL,F}} \end{array}$
Syntax	[N [PL [F]]]	[N [PL [F]]]	[N [PL [F]]]

As is evident in (1), F and PL are spelled out *autonomously* and *syncretically* in Carrarese (cf. 1a) and *autonomously* and *analytically* in Colonnatese (cf. 1b). In Ortonovese, conversely, F and PL are spelled out by the very same phonological exponent, namely [a] (cf. 1c).

3. The puzzle. The spell-out sequence of F and PL on Lunigiana NPs, as illustrated in (1), seems to suggest that a violation of the Mirror Principle (Baker 1985) is operative in these dialects. Indeed, while the gender exponent generally precedes the exponent expressing number in Romance (e.g. Spanish *lob*-ROOT -*o*_M -*s*_{PL} 'wolves'), in the dialects under scrutiny the phonological exponent for number occurs between the root and the exponent for gender (e.g. Colonnatese *don*-ROOT -*j*_{PL} -*a*_F 'women'). If gender is encoded in *n*, a categorizing head (cf. Marantz 2001), then gender morphemes should be overtly expressed at the right of the root, as is the case of Spanish (e.g. [$\sqrt{\text{GENDER}}$]). Number (henceforth #), by merging above *n*, should be spelled out at the right of the [$\sqrt{\text{+ GENDER}}$] complex (e.g. [# [$\sqrt{\text{+ GENDER}}$]]). As outlined above, however, this type of order is not attested for many Lunigiana dialects, amongst which Colonnatese, where a root is followed by a number morpheme which in turn precedes a gender exponent in the linear string (cf. 2).

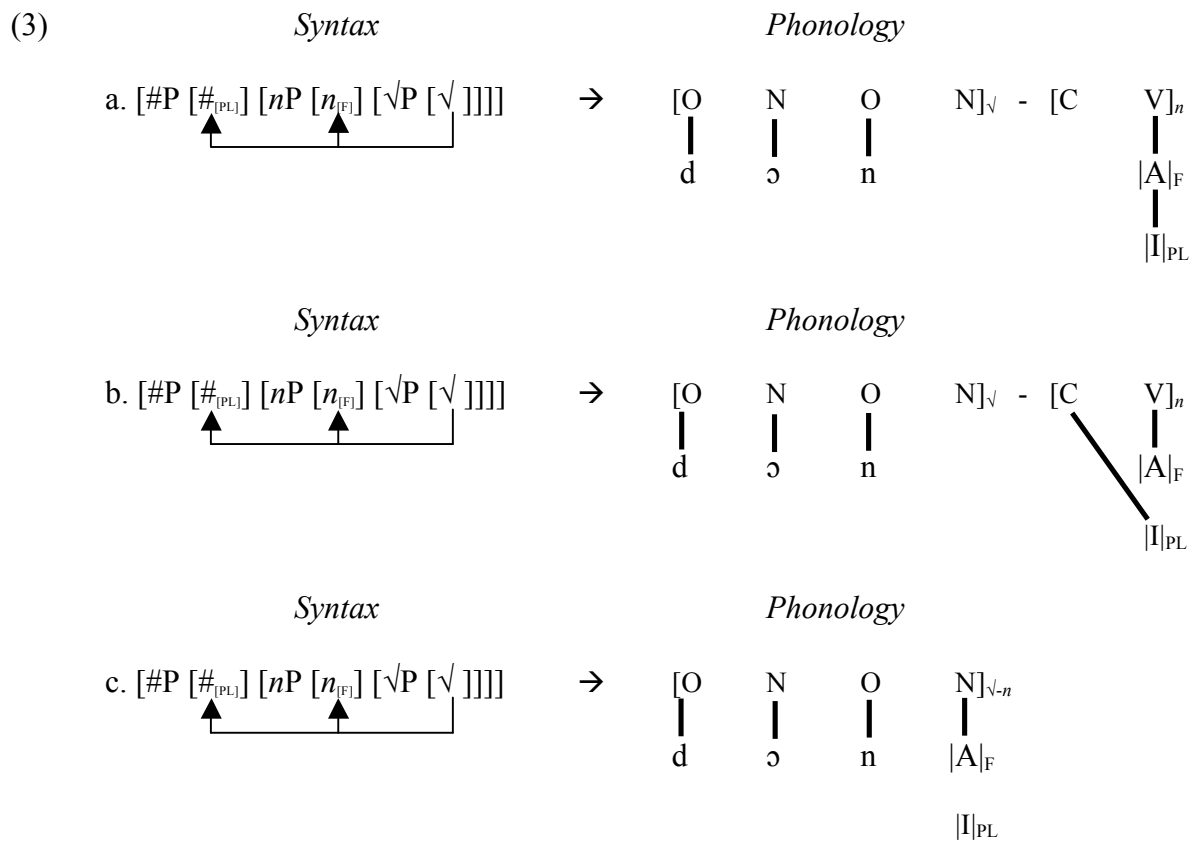
$$(2) \text{[#P [#}_{\text{PL}}] [n\text{P} [n_{\text{F}}] [\sqrt{\text{P}} [\sqrt{\text{P}}]]]} \rightarrow *don\text{-ROOT} -a_{\text{F}} -i_{\text{PL}}$$

$$\begin{array}{c} \uparrow \\ \text{---} \uparrow \end{array}$$

4. Proposal. I argue that the underlying syntactic configuration of F.PL nouns in the Lunigiana dialects in (1) corresponds to the one represented in (2), where *n* encodes gender and a number head merges above *n*. The spell-out strategies of F and PL attested for F.PL nouns in

Lunigiana dialects, which mirrors the one commonly attested in Romance, will be claimed to hinge upon post-syntactic, mainly phonological, requirements. In Carrarese, both F and PL can be phonetically expressed by means of [e] (cf. 3a). In the case of *-ja* in Colonnatese, F and PL also require to be overtly expressed. Differently from Carrarese, however, F and PL do not get fused in Colonnatese, and as a consequence they get overtly spelled out by two different segments. However, since Colonnatese is affected by the phonological phenomenon of vowel reduction, |I|_{PL} cannot be spelled-out by *n* nucleus, which is already ‘saturated’ by |A|_F. For this reason, |I|_{PL} links to the onset preceding the |A|_F nucleus (cf. 3b). Finally, in Ortonovese, |I|_{PL} does not get any phonetic interpretation. Because of this, |A|_F is the only vowel that gets overtly spelled out (cf. 3c).

This account builds on the hypothesis that |A|_F and |I|_{PL} are floating elements and that *n*, which has been suggested to encode gender, is spelled out by an empty CV structure in Carrarese and Colonnatese (cf. Lowenstamm 2008; Cavirani & van Oostendorp 2017; see also Bendjaballah 2014), whereas in Ortonovese it is spelled out by a completely empty morpheme.



The configurations in (3) aim at showing that the different spell-out strategies of F and PL attested for feminine plural nouns in Carrarese (3a), Colonnatese (3b) and Ortonovese (3c), for which proposals have been put forward that resort to exclusively morphological rules such as *Fusion* and/or *Impoverishment* (e.g. Manzini & Savoia 2005), can be given a straightforward phonological analysis grounded on independently needed assumptions concerning the (non-trivial) representation of (functional) lexical items and the (phonological) licensing strength of nuclei. The analytic spell-out version of feminine and plural in Colonnatese, for instance, is determined by the fact that [i] cannot be spelled-out in word-final position because the process of unstressed vowel deletion applies. Since PL must be overtly expressed in this dialect, [i] links to the onset preceding the nucleus spelled-out by [a].

5. Selected references.

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