Gender in French: Stems and Morphosyntax

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Stems — Bonami and Boyé 2006:

'both masculine singular and feminine singular have a null exponent in French; all the action occurs in stem selection rather than in exponence.'

fn 7: 'By contrast, plural number has a uniform exponent, the latent consonant /z/.'

Morphosyntax — Lowenstamm 2012:

[CV] root extension is a level-1 suffix; root, [CV], and gender have distinct syntactic loci

Why we need both:

to capture differences between the paradigms of N/Adj and some Dets/ pronouns and those of most Dets/pronouns;

to understand why plural <z> is special;

to 'explain' (more or less) why Adj and N differ in Liaison

What is claimed:

syntactic projections are not headed by the 'pieces' of morphology (Adger 2013); gender and CV morphemes have distinct loci (Lowenstamm 2012, Faust 2013);

lexical categories *are* distinct extended projections (N \neq Adj);

one root for syntactic purposes may be a complex morphological object, constrained by *morphological* selection (not Agree); syntactic root ≠ morphological root (Acquaviva in press);

the stems underlying the exponence of French N/Adj (Bonami and Boyé 2005) — and not that of most Dets — are the shapes taken by roots in morphosyntactic context (mostly keyed to gender); they involve CV templatic morphemes at root level (Lowenstamm in press, 2012);

the special forms of Adj in Liaison ('FMSL') are due to a contextually conditioned CV morpheme linked to adjectival agreement; a 'word marker' imposing a final C] and sometimes specifying the content of <C> ('phonological appendix'; Bonami, Boyé, and Tseng 2006);

plural <z>, spellout of Number features, realizes <C> independently; we *predict* a different distribution from that of special stem forms;

1 Cut the s

1 Plural -s is special

a it is uniform across nominal categories, realized as 'appendix' <z> (Bonami, Boyé, and Tseng 2005) across Dets (*les, mes*), pronouns (*ils, elles*), Adj (*beaux, grands*), Ns (*des collègue*<*z*> *et des amis*); even in *comme*<*z*> *affaires, quatre*<*z*> *arbres*, (Durand and Lyche 2008), *chemins de fer*<*z*> *anglais* (Côté, to appear)

by contrast, Dets/prons. but not N/Adj, have special plural root forms (*mes* vs. *mon*, *ma*; *vos*, *ces* vs. *votre*, *cet*); N/Adj ending in suffixal -*al* have a plural in -*aux*

b it is the only Liaison form for Ns

N otherwise never trigger Liaison (*pot-au-feu*: no real exception, just a lexicalized compound), only Adj have special Liaison forms (*gran<t>ami*, *bo<n>ami*)

- c it co-occurs with other plural exponents: de<z>amis, vo<z>amis, principau<z>amis
- d it takes precedence over other possible Liaison consonants (*grand*<*z*>*amis*, **gran*<*t*>*amis*; cf. however *beaucoup de peti*<*t*>*hotels* Durand and Lyche 2008)
- 2 Digression: plural -s is one of two patterns in Romance plural exponence
 - a paradigmatic oppositions between stem endings

(It. casa - case 'house', belga - belgi [-dʒi] 'Belgian', but also Rom. masă -mese 'table', lună -luni 'month', Friul. an - an 'year', Maiden 2011:165-166; also French os - os [o:] 'bone')

b or segmentable plural morphemes

(descendants of Latin -s, but also of -ora; also Old Tuscan le nonane 'the nuns', Mesolcina la gamb-en 'the legs, Milanese tosa-n 'girls'; cf. Rohlfs 1968, 371a)

Det and N (and Adj) can instantiate different patterns in the same variety; for Galloromance, cf. Occitan (Sauzet 2012)

* see appendix 1 *

- 3 If pl. -s is 'different', certain generalizations stand out more clearly:
 - a the paradigms of N/Adj follow a different organization from those of (most) Dets
 - b *morphologically*, masculine is the marked value for N/Adj
 - c there is no specifically feminine plural form

2 Two different patterns

Pattern 1: basic number opposition, additional gender differentiation in SG

4 notre - nos

MASC SG	MASC PL
FEM SG	FEM PL

notr	no

(ce - cette - ces falls into this pattern when masc sg ce has the Liaison form cet)

5 le, ce, mon - les, ces, mes

MASC SG	MASC PL
FEM SG	FEM PL

lə, sə, mõ	
la, sɛt, ma	le, se, me

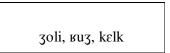
6 in phonologically conditioned contexts, the forms in -a of possessive FEM SG default to MASC SG (ma > mon amie)

(fem. ending -a is restricted to (some) pronouns and Dets; only instance of formal number opposition with fem.; still no specific fem. pl. form

Pattern 2: no opposition, or basic gender opposition, additional number differentiation in PL (N/Adj, il(s) - elle(s): forms **not** expressing gender through an inflectional ending) (the cut is not 'lexical' vs. 'functional'; it's morphological, not syntactic)

7 joli, quelque - joli<z>, quelque<z> (ami/amie)

MASC SG	MASC PL
FEM SG	FEM PL



8 plein, écrit, il/elle - plein<z>, écrit<z>, il<z>/elle<z> (fils/fille)

MASC SG	MASC PL
FEM SG	FEM PL

plæ̃, ekві, il
plεn, ekʁit, εl,

also *vieux*, beau(x) in their non-Liaison forms

9 principal, nouvel - principaux, nouveaux

MASC SG	MASC PL
FEM SG	FEM PL

	brgsibo, un no
br£sibal'unnsl	

vieux, *beau(x)* in their Liaison forms are identical to the 'feminine' (MASC defaults to FEM); *tout* with Liaison form [tut] in MASC SG

Is the vocalization -al/-o, restricted to suffixal -AL, really only MASC? yes: it surfaces in the FEM forms peau_- pelade (Lowenstamm 2012), but these are not inflectional forms of the same lexeme. Given a paradigmatic alternation -al/-o, the latter never realizes a FEM value as distinct from MASC

10 tout - tous (with [-s] in plural); 'irregular' MASC SG Liaison forms for Adj, gran[t]ami, bo[n]ami

MASC SG	MASC PL
FEM SG	FEM PL

tu, grã[t], bo[n]	tus, grã, bõ
tut, grãd, bon	

3 Feature spellout vs. stem selection

syntactic decomposition, by itself, does not imply that all morphology is Item-and-Arrangement (contrast classical Distributed Morphology)

'I will assume that the best way to view (most of) inflection is not as morphemic in nature, but rather as *amorphous*, in the sense of Anderson (1992)' (Borer 2005:23)

'I propose that bound morphemes are just pronunciations of functional categories attached to roots via extended projections' (Adger 2013:3)

'There are no functional categories qua lexical items' (Adger 2013:20)

direct spellout of features (distributed by Agree) results in forms that always carry their featural content

(given the derivational use of 'FEM' in e.g. *aucunement*, *nullement*, not all Dets/pronouns are directly spelled out like that)

12 Det: [+POSS, +SPEAKER, -SG]
$$\leftrightarrow$$
 me (mes)
[+POSS, + SPEAKER, +SG] \leftrightarrow mõ (mon)
[+POSS, + SPEAKER, +SG, +FEM] \leftrightarrow ma (ma)

$$[\pm FEM] \rightarrow \emptyset /$$
 [V-

Impoverishment of gender features in sandhi (probably not the whole story)

Motivated by phonological principles but not *consisting* in them; morphological, not phonological rule.

(note $m\tilde{o}ami$, unlike bonami (Bonami and Boyé 2005 note 11 : different from the choice of a special Liaison stem; but usage varies, and aucun can also be $ok\tilde{\alpha}$ in pre-V Liaison, contrast 11 above, end)

Common systematic syncretism of gender in plural; Impoverishment of gender in the context of the 'marked' number value (cf. Nevins 2011)

- Plural ([–SG]) is spelled out on the heads so marked as <z>: Bonami, Boyé, and Tseng's (2005) 'appendix' (language-particular contextual allomorphy); possibly reanalyzed as one morpheme enclitic to the first word of the DP, cf. *comme*<*z*>*études*
- 14 Stem-based exponence is different (Bonami and Boyé 2005, Bonami, Boyé, and Tseng 2006):
 - a (some) forms have independent 'morphomic' existence (bell-âtre, séch-eresse, ...)
 - b stem selection is *triggered by* grammatical features, but a stem is not a *sign* for them
 - c category-dependent allomorphy (un savant anglais, un savan[t]anglais); Ns never use a special form in Liaison even when it's available (dent-aire, soldat-esque)
 - d apparent reversal of markedness: masc. defaults to fem. (or to a special masc. form)
 - e basic opposition in gender, possibly also number *in the plural*, with some special MASC PL forms (cf. (8)-(10) above)
- following Bonami and Boyé (2005:83): morphomic stems, *related* to grammatical features but not directly *realizing* them
 - a La forme du M.SG est identique au thème 1.
 - b La forme du F.SG est identique au thème 2.
 - c La FLMS [forme de liaison masculin singulier] est identique au thème 1 si le thème 1 se termine par une consonne; sinon elle est identique au thème 2.
- 16 *but*:
 - a the N/Adj contrast in Liaison seems arbitrary (could it be the opposite?)
 - b MASC is systematically 'special': expressly referenced in <C> truncation (*prise pris*, *petite petit*), in the PL of Adj. in -*al* (noted by Bonami and Boyé 2005:92: can a theme be restricted to one cell of the inflectional paradigm, and to one suffix?)
 - c FEM is almost never referenced; only for suffixes like *-euse* and *-ice* (from *-eur*), and for the suffix *-ant/-ent* (*prudent prudente*, but in derivation *prudem-ment*)
- 17 grammatical features *are* visible; 'stems' are selected on the basis of local gender features.

4 From syntax to morphology

18 Adger (2013):

fundamental technical problems in determining the label of syntactic objects constructed by Merge can be solved if elements can *self-Merge*: $X \in \{X\}$, which can Self Merge to become $\{X\}$...

- "...the effect of iterated Self Merge is to create an extended projection of the initial root category in the absence of any further merger of heads" (p. 19)
- '... the label of a syntactic object built by Merge is dependent on (but not identical to) the label of both of its subconstituents. Rather than drawing a functional category from the lexicon and Merging it with some syntactic object, and hence labeling the result, the system capitalizes on the idea that the order of functional categories must be given anyway [...] so rather than having a functional lexicon, we simply use the antecedently given order of functional categories in a language as the source of labeling information.' (p. 22)

no need for functional morphemes to head projections, if there is no morphological / syntactic evidence for them: 'there are no functional categories qua lexical items' (p.20)

a syntactic root is an element without syntactic label, which starts an extended projection:

$$\forall \, \rightarrow \, \text{Self Merge} \, [\,\, \forall \,\,]_{\text{LABEL}\alpha} \rightarrow \, \text{Self Merge} \, [[\,\, \forall \,\,]]_{\text{LABEL}\beta}$$

[[
$$\sqrt{}$$
]] LABEL β

[$\sqrt{}$] LABEL α

|
 $\sqrt{}$

'Cl is the category that a classified noun bears [...] and Num is the category that a counted nominal has.' (p. 22)

19 Adjs and Ns define distinct projection lines (transitions between labels):

a for 'nouns':

root > inner classifier, possibly gender (Svenonius' 2007 'noun classifier', Marantz' 1997 'n') > part-structure classifier (Num, Borer's 2005 Div) > numeral/counting classifier > D

inner classifier: valued class features ('gender' in French)

digression: no important role played by feature interpretability (contrast Sorin 2012, Lowenstamm 2012); what matters is that 'lexicalized' readings emerge only when a gender value is fixed, not when it is valued by Agree: *grimpeur* (noun) 'cyclist specialized in uphill racing (Bonami and Boyé 2005)

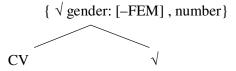
b for 'adjectives':

root > agreement morpheme (unvalued gender/number) (> degree) > classifier / D (the projection line can end at various levels in the noun's extended projection, corresponding to various attachment places for Adj: Svenonius 2007)

the [a] of Adjs (categorial head for DM, parallel to [n]) is the locus of unvalued gender/number features, unrelated to classifiers: { $\sqrt{}$ gender: __, number: __}}

(in French; other languages, eg Russian, have a special adjectival morphology, even for what is syntactically/distributionally a noun: cf. *portnoy* 'tailor')

- 20 Lowenstamm (in press, 2012), Faust (2013): root-local affixes modelled as 'roots' (heads with morphological exponence distinct from functional heads); segmental (-ic, -al), templatic (Semitic CVCVVC, French CV)
 - different assumption here: no syntactic feature 'u $\sqrt{\ }$ ' (no other function outside morphological selection, not represented on other Probes)
- 21 a stem selection = determination of (extended) root form in a given syntactic context
 - b gender is local; hence, stem selection is driven by gender (possibly also by number)
 - c masculine is special because, although a simple phonological stem-final C-truncation rule is wrong, it is generally the MASC value that requires CV constraints or suppletive alternation, not FEM (for historical reasons: many FEM in $-C_0$, MASC in -C(s) ...)
- a [-FEM] value in the Adj 'agreement head' *morphologically selects* a CV template giving rise to the 'masculine stem' form:



(the MASC stem is (i) often formally derived from the 'FEM' stem and (ii) grammatically restricted to masc. or even masc. pl. contexts — both for the same reason)

- 23 the precise content of CV depends on the choice of root (or root-local affix like -if, -eur):
 - (i) deletion of $\langle C \rangle$ (grise \rangle gris)
 - (ii) rule-governed change of $\langle C \rangle$ (bonne \rangle bon, -ive \rangle -if)

for other choices of root, alternation with listed forms ($s\`{e}che > sec$, -euse > -eur); this also covers the 'root' corresponding to the suffix -al, which becomes -o with [-FEM], [-SG]

in Liaison contexts (defined after Linearization), the CV morpheme takes a particular form (positional allomorph): obligatory C-ending for the stem (C]), either by realization of appendix <C> (phonologically regular: {z, l, r, n, t}, cf. Steriade 1999; gro[z]avion, bo[n]ami), or by selection of a stored listed form ending in C] (bel ami)

along with phonological restrictions to <C>, this *might* explain why **chau*<*d>entretien* (but not **so*<*t>ami*)

5 Conclusions

Bonami and Boyé (2005) focus on Adjs, Lowenstamm (2012) on Ns; both focus on gender, Sorin (2012) on number; the claim here is that combinatorics (word-internal and DP-internal) play a role in the paradigmatic organization of forms; syntactic decomposition of lexical items, and a principled account of the syntax-morphology interface, provide a unified framework.

This unified perspective brings out the differences between stem-based and non-stem-based exponence of gender and number.

Stems are the central part of the account — but not the whole account. A part is also played by phonology: basis for word-edge C constraint; preferences for <C>

autonomous morphology: morphomic stems; Liaison as a morphological phenomenon outside of gender/number features (quan < t > like gran < t >); idiosyncratic properties of affixes, eg sg. -al/pl. -[o], $-\tilde{a}t$ of $\acute{e}vident$ becoming -a in derivation, $\acute{e}vidamment$

syntax: definition of Ns and Adjs as distinct projection lines; different location of features on probe (Adj) and goal (N); special role of gender as closest feature for Ns

We must recognize the various components at play before making general claims about 'the French gender system'. Markedness relations are syntactically unremarkable; it's within the exponence of stems (roots in context) that masculine is the 'marked' value.

* see appendix 2 *

An articulated theory of the syntax-morphology interface can distribute the various aspects of the account across different grammar components. This avoids having to force eg morphology and syntax into a phonological explanation, as in OT constraints like GENDER (Tranel 1994: 'The force of GENDER is simply to make a determiner agree in gender with its noun').

References

- Acquaviva, Paolo. In press. 'The roots of nominality, the nominality of roots'. In A. Alexiadou, H. Borer, and F. Schäfer (eds) *The Syntax of Roots and the Roots of Syntax*, Oxford: Oxford University Press.
- Adger, David. 2013. A syntax of Substance. Cambridge, MA: MIT Press.
- Bonami, Olivier, Boyé, Gilles and Tseng, James. (2005). Sur la grammaire des consonnes latentes. *Langages* 158: 89-100.
- Bonet, Eulália, Maria Rosa Lloret and Juan Mascaró (2009). 'The prenominal allomorphy syndrome. To appear in B. Tranel (ed.), *Understanding Allomorphy: Perspectives from Optimality Theory*. London: Equinox.
- Borer, Hagit (2005). The normal course of events. Oxford: Oxford University Press.
- Côté, Marie-Hélène (to appear) 'French liaison'. In M. van Oostendorp, K. Rice and E. Hume (eds), *The Blackwell Companion to Phonology*. Malden: Wiley-Blackwell.
- Cowper, Elizabeth. 2005. 'A note on number'. Linguistic Inquiry 36: 441-455.
- Dobrovie-Sorin, Carmen 2012. 'Number as a Feature'. In A. Cardinaletti, N. Munaro, G. Giusti, C. Poletto (eds), *Functional Heads*, Oxford: Oxford University Press, pp. 304-324.
- Durand, Jacques and Chantal Lyche (2008) French liaison in the light of corpus data. *Journal of French Language Studies*. 18/1: 33-66.
- Faust, Noam. (2013). 'Decomposing the feminine suffix of Modern Hebrew: a morpho-syntactic analysis'. *Morphology* 23: 409-440.
- Loporcaro, Michele (1994). 'Sull'analisi del plurale femminile *la donia* 'le donne' nei dialetti della Lunigiana. *L'Italia dialettale* 57: 35-42.
- Lowenstamm, Jean. (2012). 'Feminine and gender, or why the feminine profile of French nouns has nothing to do with gender'. In E. Cyran, H. Kardela, and B. Szymanek (eds), *Linguistic Inspirations*. *Edmund Gussmann in memoriam*, Lublin: Wydawnictwo Katolicki Uniwersytet Lubselski, pp. 371-406.
- Lowenstamm, Jean. In press. 'Derivational affixes as roots (phasal spellout meets English stress shift)'. In A. Alexiadou, H. Borer, and F. Schäfer (eds) *The Syntax of Roots and the Roots of Syntax*, Oxford: Oxford University Press.
- Maiden, Martin (2011). 'Morphological persistence'. In M. Maiden, J.S. Smith and A. Ledgeway (eds), *The Cambridge History of the Romance Languages*, *Vol 1: Structures*. Cambridge: Cambridge University Press, pp. 155-215.
- Manzini, Maria Rita and Leonardo Savoia (2005). *I dialetti italiani e romanci. Morfosintassi generativa*. Alessandria: edizioni dell'orso.
- Nevins, Andrew. 2011. Marked Triggers vs. Marked Targets and Impoverishment of the Dual. *Linguistic Inquiry* 42: 413-444
- Pomino, Natasha. (2013). Partial or complete lack of plural agreement: The role of morphology. In S. Gaglia and M-O. Hinzelin (eds), *Inflection and Word Formation in the Romance Languages*, pp. 201-230.
- Pomino, Natasha. 2013. Partial or complete lack of plural agreement: The role of morphology. In Sascha Gaglia and Marc-Olivier Hinzelin (eds), *Inflection and Word Formation in the Romance Languages*, 201-230.
- Rasom, Sabrina. 2008. Lazy Concord in the Central Ladin Feminine Plural DP: A Case Study on the Interaction between Morphosyntax and Semantics. PhD thesis, University of Padova. Available at: http://paduaresearch.cab.unipd.it/268/1/tesiSabrinaRasom.pdf
- Rohlfs, Gerhard (1968). Grammatica storica della lingua italiana e dei suoi dialetti. Vol 2: Morfologia. Turin: Einaudi.
- Sauzet, Patrick. (2012). 'Occitan plurals: A case for morpheme-based morphology'. In . In S. Gaglia and M-O. Hinzelin (eds), *Inflection and Word Formation in the Romance Languages*, pp. 179-200.

- Steriade, Donca. (1999). 'Lexical conservatism in French adjectival liaison'. In J.-M. Authier, B. Bullock, and L. Reed (eds). *Formal Perspectives on Romance Linguistics. Selected Papers from the 28th LSRL*, Amsterdam: John Benjamins, pp. 243-270.
- Svenonius, P. 2007. 'The position of adjectives and other phrasal modifiers in the decomposition of DP'. Ms, CASTL, Tromsø.
- Taraldsen, K. Tarald (2009). 'Lexicalizing Number and Gender in Colonnata'. Ms. CASTL: Tromso. Available at: http://ling.auf.net/LingBuzz000884
- Tranel, Bernard. (1994). 'French liaison and elision revisited: A unified account within Optimality Theory'. In C. Parodi, C. Quicoli, M. Saltarelli, and M. L. Zubizarreta (eds), *Aspects of Romance Linguistics*. *Selected Papers from the 24th LSRL*, Amsterdam: John Benjamins, pp. 433-455.

Appendix 1: 'floating plural' in DP

segmentable plural morphemes, unlike stem-based exponence, may develop into 'floating plural': movable expression of plural on different components of the DP

- (i) Ladin 'Lazy agreement' (Rasom 2008)
 - a la picola cèse-s all 'the small houses'
 - b la cèse-s picole-s
 - c la cèsa picole-s
- (ii) North-Eastern Central Catalan (Bonet et al. 2009, cit. in Pomino 2013, Nevins 2011)
 - a el bon vin-s 'the good wines' (drop of plural pre-N -s between consonants)
 - b el-s antic-s amic-s 'the old friends'
 - c el vin-s blanc-s 'the white wines'
- (iii) Lunigiana Italoromance varieties (Loporcaro 1994, Pomino 2013 and references)
 - a la bel-**ja** skarpa 'the nice shoes' (Villafranca: Loporcaro 1994: 37) la skarp-**ja** nova 'the new shoes'
 - b tant-ja koza bela 'many nice things'
 - c do kampan-ja / kampan-a 'two bells'

NOT a single phenomenon; phonological, morphological, syntactic factors; one or several different plural exponents

what is general: morphemic, affixal exponent for plural; syntactic conditioning

hypothesis on Lunigiana 'floating' plural:

- a feminine nominal morphology has lost the number opposition (-AS, -A > -a)
- b **-ja** doesn't just spell out the features [FEM PL], but the head Div when it is [FEM PL] (unlike in neighbouring dialects where there is no floating pl: *tantja donnja* 'many women', Colonnata, Loporcaro 1994:41)

- c this realization of Div attaches to pre-nominal modifiers, if present; otherwise, to N
- d its host cannot be a clitic: *la to skarpja* 'your shoes' (Loporcaro 1994:38) (cf. also *tut la serja* 'all the evenings', where *tut* is outside the DP headed by *la*)

Appendix 2: Markedness

Nevins (2011:432) in criticizing Cowper's (2005) claim that dual is less marked than plural (because for her, if a language has both, dual is [>1] while plural is both [>1] and [>2]):

The principal flaw in Cowper's argument that plural in Zuni is "more marked" than dual lies in conflating two distinct notions: the markedness of abstract categories and the markedness of the exponents/Vocabulary items. [note] The *exponent* for the plural possessive 2nd person is "marked" (e.g., specialized) compared with the exponent used in the other [singular] forms, but this does not imply that the abstract category "plural" is marked relative to "dual."

DP-level and N-level plurals are often morphologically different—not just because pronominal inflection is different from nominal inflection.