Gender in French: inflection or flexibility

Olivier Bonami\textsuperscript{1} and Gilles Boyé\textsuperscript{2}

\textsuperscript{1}Université Paris-Sorbonne  
LLF (U. Paris Diderot & CNRS)

\textsuperscript{2}Université Bordeaux Montaigne  
CLLE-ERSS (U. Toulouse-Jean Jaurès, U. Bordeaux Montaigne & CNRS)

The structure of forms, the form of structure  
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Gender in French: into the Lion’s Den

In his study of Gender in French, Lowenstamm (2012) presents an illuminating descriptive generalization (p. 388):

No examples such as are illustrated in (37) can be found[…]

(37) a. (lə) pənard  
    (lə) bordürez  
    (lə) rulãžer  

b. (la) pənar  
   (la) bordüre  
   (la) rulâžê

Masculine nouns exhibiting endings such as in (37a) are plentiful, so are feminine nouns ending as in (37b). What is not found is masculine/feminine pairs of the type exemplified in (37).

2 seems to make a familiar assumption:

▶ All nouns are lexically specified for gender.

Our goal: account for 1 while not having to assume the problematic 2.

Disclaimer: Grammatical gender is a highly parochial issue. We make no claims as to what happens in other languages.
The empirical issue
Personal Nouns and Gender

- Personal nouns tend to occur in both genders
  - some don’t
    - sex-specific meaning
    - masculine: homme, père, frère, …
    - feminine: femme, mère, sœur, …
  - others
    - masculine: possesseur, tendron, valet, …
    - feminine: sentinelle, star, estafette, vigie, …
- but most novel nouns do
  - same: BoBo, bolosse, câbliste, motivologue, sans-papiers
  - different: relookeur/relookeuse, décontaminateur/décontaminatrice
- and many nouns shift from gender-specific usage to generalized usage
  - same: architecte, cadre, ingénieur, mannequin, docteur, professeur, témoin
  - different: avocat/avocate, camionneur/camionneuse, conjoint/conjointe, recteur/rectrice
Some definitions

- A **gender-iconic noun** (GIN) is a noun denoting a sexed entity and whose gender matches the sex of its referent.

  - Some GINs:
    - *homme* ‘man’: ♂ ⇔ M
    - *avocate* ‘female lawyer’: ♀ ⇔ F

  - Some non-GINs:
    - *personne* ‘person’: ♂/♀ ⇔ F
    - *table* ‘table’: ⊗ ⇔ F

- A **gender-iconic pair** (GIP) is a pair of morphologically related GINs whose meaning differs only with respect to sex.

  - Some GIPs:
    - ⟨*avocat*, *avocate*⟩ ‘lawyer’
    - ⟨*artiste*ₘ, *artiste*ₕ⟩ ‘artist’

  - Some non-GIPs:
    - ⟨*homme*, *femme*⟩
    - *personne*: ♂/♀ ⇔ F
    - *après-midi* ‘afternoon’: ⊗ ⇔ M/F
Hypernyms, Hyponyms and Gender

Animate nouns usually possess a sex neutral hypernym which can be homophonous to the noun denoting the male or the female, or another noun altogether:

- **male**  *avocat, poissonnier, lapin*
- **female**  *sage-femme, vache, poule*
- **other**  *personne, mouton*

These sex neutral terms can appear in predicative constructions without gender agreement:

- *Mon avocat/avocate est une grande femme. Cette grande femme est avocat/avocate.*
- *Ce mouton est une brebis. Cette brebis est aussi un mouton.*

In the following, we concentrate not on the sex neutral hypernyms and their place in the lexicon but rather on GIPs.
Lexical Alternations

A few underived nouns qualify as GIPs:

- *cousin, cousine*
- *chien, chienne*
- *héros, héroïne*
- *lion, lionne*

The overall type frequency of such nouns is surprisingly low. Since what interests us is the productive strategies used for lexical extension, we pay little attention to such examples.
For many personal nouns denoting professional activities, the issue of deciding on a feminine form arose recently.

The following example illustrates the three main strategies:

*Le tribunal dit que le décès de l’enfant est imputable à des fautes commises par la médecin gynécologue obstétricienne.*

(Le Télégramme, 2006, July 31, T. Charpentier)

- reuse the masculine form, as in *médecin* ‘physician’, despite its masculine profile
- reuse the masculine form, as in *gynécologue* ‘gynecologist’, as it already has a feminine profile
- use a form with feminine profile related to the masculine form, as in *obstétricienne* ‘obstetrician’
Gender-specific Affixes

French has plenty of independent gender-specific affixes where non-sexed entities are concerned:

**masculine**  -age, -ment, -at, -isme, ...

**feminine**  -ion, -ité, -ure, -ance, ...

But for sexed entities, a lot of affixes are non-specific:

- -able, aire, -al(e), -iste, -ite, -logue, -mane, -morpe, -oir(e), -pathe, -phage, -phile, -vore, ...

And the specific ones actually function in pairs:

- -ain/aïne, -ais/aise, -ant/ante, -ier/ière, -eur/euse, -eur/rice, -on/onne, -et/ette, -in/ine, ...

The only exception would be -esse (91 nouns in Frantext)

- abbesse, comtesse, chasseresse, tigresse, maîtresse, ...
On the demise of \textit{-esse} nouns

- The use of nouns in \textit{-esse} is declining over the last two centuries.

Total use of female-denoting personal nouns in \textit{-esse} in the Google $n$-gram corpus

- Not even considered for new coinages: *\textit{professoress}, *\textit{médecinesse}
Non-Affixal Creations: Compounds

French V-N compounds all have masculine grammatical gender when they denote non-sexed entities:

- ouvre-boîte, presse-papier, tire-bouchon, ...

But V-N denoting sexed entities are used for both genders:

- casse-pied, casse-cou, rabat-joie, porte-parole, lèche-botte, gagne-petit, couche-tôt, pique-assiette, pisse-copie, brise-cœur, pète-sec

We observe the same phenomenon with other compounds too:

- sage-femme, sans-papiers, sans-abris, faire-valoir, ...

Examples from forum.aufeminin.com and www.madmoizelle.com

- *Ta mère est une belle casse-pieds, et ton mec réagit au quart de tour.*
- *Personnellement quand je parle d’un collègue homme, je dis le sage-femme.*
Non-Affixal Creations: Truncations

Truncations denoting sexed entities can be used in both genders.

- simple truncations: *beauf*, *démago*, *instit*, *kiné*, *ophtalmo*, *préma*,
  *post-doc*, *réac*, *quinqua*, *viet*, *chef-op*, *doc*, *indic*, *psy*, *sous-off*
- affixed truncations: *clando*, *proprio*, *angliche*, *bolcho*, ...

Examples from devantlatele.com and La Fouine (On peut pas tout avoir)

- *Telle une bonne beauf qui se respecte, je regarde les redifs des chtis a Hollywood.*
- *Elle, une bombasse mais elle parle comme une clando. Lui, il est dégueulasse mais il roule en lambo.*
Non-Affixal Creations: Acronyms

Acronyms denoting sexed entities have common gender.

- BCBG, X, SDF, CRS, V.I.P., VP, DG, CPE, ORL, RA, PR, MCF, PRAG, …


- *Imposant régulièrement l’image d’une BCBG un peu coincée, sa popularité grandit à l’orée des années 1980.*

- *Un psychologue fait une expérience avec une X et une Gadz’Arts. Il place un très joli mec nu dans un coin d’une chambre, l’X dans l’autre coin et lui dit : « vous avez le droit de réduire de moitié la distance entre vous deux toutes les 2 minutes ».*
Non-Affixal Creations: Borrowings

- babysitter, soprano, cobaye, cougar, cosaque, minus, fan, yankee, fellah, hindou, nabab, clebs, toubib

Examples from Un automne à Blue Lake (Harlequin) and Verdi, la vie, le mélodrame (M. Orcel)

- J’ai simplement l’impression que ton babysitter n’a pas compris que vous n’étiez pas mariés. Il se comporte comme si tu lui appartenais, ni plus ni moins.

- Participant activement à la machinerie du destin qui conduit son propre maître vers la mort, le petit soprano apparaît presque comme le guide, le « Psychopompe », du ténor.
Non-Affixal Creations: Names and Surnames

In French, last names can be used with both gender and some first names appear with both genders:
- *Dominique, Claude, Alex, Lou, Doris, Camille, Sacha, Yannick, …*

Examples from *Les Misérables* (Hugo) and www.prenoms.com
- *Le Thénardier était pour la Thénardier sans qu’elle s’en rendît trop compte, une espèce d’être particulier et souverain.*
- *Filles ou garçons, les Camille sont connus pour leur charme.*
Gender and Forms

The prevalence of these lexical extension strategies leads to a situation where:

- A sizeable subset (30%) of personal nouns function as GIPs
- The vast majority (85%) of cases of morphologically related quasi-synonymous pairs of nouns are GIPs

Proportions of pairs of nouns occurring in both genders with the same meaning

(Variable animate noun counts from Morphalou (Romary, Salmont-Alt, and Francopoulo, 2004); variable inanimate noun counts from Grevisse and Goosse (2011); proportion of personal names estimated by sampling in Morphalou)
Simplistic Generalizations about Sex and Gender

- Sexed entities are typically denoted by GIPs
- Nouns with lexical gender generally denote non-sexed entities.
The theoretical issue
Theoretical issue

Outlook

- Standard assumption (e.g. Nyrop, 1936; Zwanenburg, 1988; Matthews, 1991):
  - All nouns are lexically specified for gender.
  - GIPs are related by derivational morphology.
- This goes against the wisdom of lexicographers, who uniformly assume that GIPs are instances of a single lexeme.
- Little discussion in the literature, e.g.:
  - In his book-long discussion of gender variation in French, Roché (1997) dismisses the issue in one paragraph (p. 3)
- We aim to defend the traditional view, and discuss its theoretical implications.
Problems with uniform gender specificity

- Two obvious motivations:
  1. We’d like all members of a category to have the same paradigm shape
  2. As gender is defined in terms of noun classification, odd to have unclassified nouns

- Two immediate concerns:
  1. Uneconomical: many GIPs with homophonous masculine and feminine forms, for which simple underspecification for gender is obviously the most economical analysis.
     - About 2500 such nouns, amounting to about 6% of the nominal lexicon.
     - Duplicate entries could be avoided by using zero gender suffixes, but these are unmotivated, given the shape of the rest of the system.
  2. Productive derivation of GIPs
     - agencier/agencièreme, télédéclarant/télédéclarante, supporter/supportrice,
       blogueur/blogueuse, cybernéticien/cybernéticienne,...
     - If masculine and feminine personal nouns are derived independently, it is unclear why parallel suffixes are (almost) always used.
       - pompier ≠ pompeuse, copiste ≠ copieuse, sauveur ≠ salvatrice, ...
       - Pairs like serviteur/servante are exceptional, contrary to expectations.
A failed solution

- Bonami and Boyé, 2005 discuss the relationship between homophonous nouns and adjectives in French:
  - *le directeur, la directrice, un schéma directeur, une idée directrice*

- Bonami & Boyé’s suggestion: nouns are derived from adjectives by conversion (a.k.a. zero derivation)

- While this solved the problem in this particular instance, the solution does not scale up: there are productive uses of suffixes where no intervening adjective can be postulated, e.g.
  - *basketteur/basketteuse, free-rideur/free-rideuse,* etc.
The theoretical issue

Unavoidable conclusion

- Paradigm uniformity of nouns cannot be maintained.
  - Some nouns (mostly GIPs) have both genders.
  - Some nouns (mostly inanimates) have a single gender.
Paradigm diversity I

- Should we be worried about the lack of paradigm uniformity?
- We know independently that paradigm uniformity is not universal.
  - In Tundra Nenets, three conjugations: subjective, objective and reflexive
  - The subjective and reflexive conjugations index just one argument
  - The objective conjugation:
    - is used for transitive verbs with a topical third person objects
    - indexes subject person and number and object number

What happened?

xasawa ti-m xada°
man reindeer-ACC kill[subj.3sg]
‘A man killed a reindeer.’

What did the man do to the reindeer?

xasawa ti-m xada°-da
man reindeer-ACC kill-obj.sg.3sg
‘The man killed the reindeer.’

(Dalrymple & Nikolaeva 2011: 128)
Paradigm diversity II

- Thus, in Tundra Nenets, transitive verbs have many more paradigm cells than intransitive verbs (see Ackerman and Bonami, in press).

Intransitive verb

<table>
<thead>
<tr>
<th>SUBJECTIVE</th>
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<tbody>
<tr>
<td>PRS</td>
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</table>
PST         

... ... ...

Transitive verb

<table>
<thead>
<tr>
<th>SUBJECTIVE</th>
<th>OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRS</td>
<td></td>
</tr>
</tbody>
</table>
PST         

... ... ...

- We propose that the situation for nouns in French is similar to that for verbs in Tundra Nenets (and other languages with comparable conjugation systems): there are two main paradigm shapes.
One remaining issue

- The very same derivational strategies give rise to both gender-specified and gender-underspecified nouns.
  - *mangue* > *manguier* ‘mango tree’, *sel* > *salière* ‘saltcellar’, *épice* > *épicier, épicière* ‘grocer’
  - *calmer* > *calmant* ‘tranquillizer’, *imprimer* > *imprimante* ‘printer’, *figurer* > *figurant/figurante* ‘extra’
  - *réagir* > *réacteur* ‘reactor’, *commuter* > *commutatrice* ‘rotary converter’, *naviguer* > *navigateur/navigatrice* ‘seafarer’
  - *battre* > *batteur* ‘mixer’, *batteuse* ‘threshing machine’, *batteur/batteuse* ‘drummer’

- At first sight, this seems at odds with the view that gender-specified and gender-underspecified nouns have the same paradigm shape.

- Proposed solution: CONTENT vs. FORM paradigms
The theoretical issue

**CONTENT and FORM paradigms I**

- Stump (2006): two notions of paradigm:
  1. The CONTENT paradigm is in direct relation with syntax and semantics
  2. The FORM paradigm is in direct relation with morphophonology

- Normally the two notions of paradigm match; however mismatches correspond to familiar situations of morphosyntactic opacity.

- One example from Nepali (Bonami and Boyé, 2010): systematic syncretism over arbitrary sets of paradigm cells.

<table>
<thead>
<tr>
<th></th>
<th>M.SG</th>
<th>F.SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>birsādinā</td>
<td>birsādinā</td>
<td>birsādajnau</td>
</tr>
<tr>
<td>2.LOW</td>
<td>birsādajnas</td>
<td>birsādinas</td>
<td>birsādajnau</td>
</tr>
<tr>
<td>2.MID</td>
<td>birsādajnau</td>
<td>birsādinau</td>
<td>birsādajnau</td>
</tr>
<tr>
<td>3.LOW</td>
<td>birsādajna</td>
<td>birsādina</td>
<td>birsādajnan</td>
</tr>
<tr>
<td>3.MID</td>
<td>birsādajnan</td>
<td>birsādinan</td>
<td>birsādajnan</td>
</tr>
</tbody>
</table>

The long present negative of the Nepali verb *birsanu* ‘forget’ (Boyé, 1996)
CONTENT and FORM paradigms II

- Analysis: the three-dimensional CONTENT paradigm is mapped onto a two-dimensional FORM paradigm.

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>M.SG</th>
<th>F.SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>birsādinā</td>
<td>birsādinā</td>
<td>birsādajnaũ</td>
</tr>
<tr>
<td>2.LOW</td>
<td>birsādajnas</td>
<td>birsādinas</td>
<td>birsādajnau</td>
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<tr>
<td>2.MID</td>
<td>birsādajnau</td>
<td>birsādinau</td>
<td>birsādajnau</td>
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<tr>
<td>3.LOW</td>
<td>birsādajna</td>
<td>birsādina</td>
<td>birsādajnan</td>
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<tr>
<td>3.MID</td>
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<td>birsādinan</td>
<td>birsādajnan</td>
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<table>
<thead>
<tr>
<th>FORM</th>
<th>1.α</th>
<th>—</th>
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<tbody>
<tr>
<td>1.β</td>
<td>—</td>
<td>birsād-ajn-aũ</td>
</tr>
<tr>
<td>2.α</td>
<td>birsād-in-as</td>
<td>birsād-ajn-as</td>
</tr>
<tr>
<td>2.β</td>
<td>birsād-in-au</td>
<td>birsād-ajn-au</td>
</tr>
<tr>
<td>3.α</td>
<td>birsād-in-a</td>
<td>birsād-ajn-a</td>
</tr>
<tr>
<td>3.β</td>
<td>birsād-in-an</td>
<td>birsād-ajn-an</td>
</tr>
</tbody>
</table>
Paradigmatic mismatches in French nouns

- Our proposal:
  - The FORM paradigm of every French noun has 4 cells.
  - The CONTENT paradigm of French nouns has 2 or 4 cells, depending on whether the noun is gender-specified (default for inanimates) or gender-underspecified (default for personal nouns).

<table>
<thead>
<tr>
<th>CONT</th>
<th>FORM</th>
<th>M</th>
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</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>kwafœʁ</td>
<td>kwaføz</td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>kwafœʁ(z)</td>
<td>kwaføz(z)</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>fɛz</td>
<td>fɛz(z)</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>puf</td>
<td>puf(z)</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>pœsœsœʁ</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>pœsœsœʁ(z)</td>
<td>*</td>
<td></td>
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</tbody>
</table>

'hairdresser' 'chair' 'pouffe' 'possessor'
**Paradigmatic mismatches in French nouns II**

- Derivation strategies derive simultaneously a masculine and a feminine **form**, whether or not morphosyntax will find use for both.

\[
V : X \Rightarrow N : \begin{array}{c|c}
  M & F \\
  X + \text{œə} & X + \text{øz}
\end{array}
\]

▶ Sample outputs:

<table>
<thead>
<tr>
<th>CONT</th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>kwafœʁ</td>
<td>kwaføz</td>
</tr>
<tr>
<td>PL</td>
<td>kwafœʁ(z)</td>
<td>kwaføz(z)</td>
</tr>
</tbody>
</table>

- ‘hairdresser’

<table>
<thead>
<tr>
<th>FORM</th>
<th>M</th>
<th>F</th>
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<tbody>
<tr>
<td>SG</td>
<td>kwafœʁ</td>
<td>kwaføz</td>
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<tr>
<td>PL</td>
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<td>kwaføz(z)</td>
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<th>M</th>
<th>F</th>
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<tbody>
<tr>
<td>sg</td>
<td>kwafœʁ(z)</td>
</tr>
<tr>
<td>pl</td>
<td>kwaføz(z)</td>
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</table>

- ‘stapler’

<table>
<thead>
<tr>
<th>CONT</th>
<th>M</th>
<th>F</th>
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<tbody>
<tr>
<td>SG</td>
<td>agʁafœʁ</td>
<td>agʁaføz</td>
</tr>
<tr>
<td>PL</td>
<td>agʁafœʁ(z)</td>
<td>agʁaføz(z)</td>
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<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>sg</td>
<td>agʁafœʁ(z)</td>
</tr>
<tr>
<td>pl</td>
<td>agʁaføz(z)</td>
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</tbody>
</table>

- ‘cruiser’

<table>
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<tr>
<th>FORM</th>
<th>M</th>
<th>F</th>
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<tbody>
<tr>
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<td>pl</td>
<td>kwawazøz(z)</td>
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</tbody>
</table>
Paradigmatic mismatches in French nouns III

Optimal analysis:

- No duplication of information, neither in the lexicon nor in morphological rules.
- No unwarranted stipulation is needed: gender-specified nouns have a mismatch between form and content paradigms by virtue of being specified for gender.
- Makes the correct predictions about further lexical extension
  - How do you call the godmother’s husband?

Quand Papa et Maman ont besoin de souffler un peu, c’est parfois Marraine et Marrain qui me gardent.

http://le-blog-du-petit-paul.over-blog.com/
Conclusions

- We have claimed that, in French:
  - Personal nouns overwhelmingly come in Gender-Iconic Pairs
  - The prevalent strategy is to have homophonous \( M \) and \( F \) nouns
  - This is best conceptualized by seeing iconic gender variation as inflectional

- Explaining Lowenstamm’s (2012) crucial observation: \*\langle p\̄εn\̄ard, p\̄en\̄ar\rangle
  - Gender profiles correspond to columns in contrastive FORM paradigms.
  - French has a limited number of regular strategies for marking gender alternation in FORM paradigms, shared by nouns and adjectives:
    \langle \emptyset, -C\rangle, \langle \emptyset, \emptyset\rangle, \langle \tilde{V}, V\tilde{C}\rangle
  - Thus nothing bars \langle p\̄en\̄ard, p\̄en\̄ard\rangle, or \langle p\̄en\̄ar, p\̄en\̄ar\rangle, or for that matter \( p\̄en\̄ard_M \), or \( p\̄en\̄ar_F \).
  - On the other hand, \*\langle p\̄en\̄ard, p\̄en\̄ar\rangle could not arise without a major reshaping of the inflectional system.

- Indeed, the gender profile of nouns has nothing to do with gender, although it has something to do with paradigm structure.


