Grammatical versus semantic gender agreement and the representation of nouns in the mental lexicon: superlative partitives in French

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Outline of the presentation:

1. Introduction
2. Previous study
3. Methodology & results
4. Theoretical analysis
5. Conclusion & outlook
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1. Introduction

• In French, all nouns marked for grammatical gender, in general grammatical gender agreement.
• With animate nouns, grammatical gender usually – though not always – corresponds to the sex of the referent.

(1a) Françoise Hardy est une chanteuse fameuse.
    Françoise Hardy is a.F singer.F famous.F
    ‘Françoise Hardy is a famous singer.’

(1b) Julien Clerc est un chanteur fameux.
    Julien Clerc is a.M singer.M famous.M
    ‘Julien Clerc is a famous singer.’

The partitive puzzle:
⇒ Can we have a gender mismatch in superlative partitives in French?

(2a) ?Le plus jeune des nouveaux étudiants s’appelle Marie.
    the.M most young of.the new.M.PL student.M.PL REFL.call.3SG Marie

(2b) ??La plus jeune des nouveaux étudiants s’appelle Marie.
    the.F most young of.the new.M.PL student.M.PL REFL.call.3SG Marie
    ‘The youngest of the new students is called Marie.’

General question: Can grammatical gender be overridden in superlative partitives?
⇒ How can we account for grammatical and semantic agreement?
⇒ If there is variation, how can we account for it?
2. Previous study

Sleeman & Ihsane (2016)

Acceptance of mismatch depends on type of animate noun.

(3) \textit{La plus grande/*Le plus grand de ces sentinelles}
the.F most tall.F the.M most tall.M of these guard.F.PL
‘The tallest of these guards’

(4) \textit{La plus intelligente de mes anciens élèves}
‘The most intelligent of my former students’

(5) *?\textit{La plus intelligente de mes anciens étudiants}
‘The most intelligent of my former students’

Classification of French animate nouns:

\textit{Table 1 – Noun classification of Sleeman & Ihsane (2016)}

<table>
<thead>
<tr>
<th>Noun class</th>
<th>Examples</th>
<th>Mismatch in partitives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>Suppletive forms: \textit{le frère} ‘the brother’ \textit{la soeur} ‘the sister’</td>
<td>No (not tested)</td>
</tr>
<tr>
<td>Class C</td>
<td>Determiner change: \textit{le ministre} the.M minister’ \textit{la ministre} ‘the.F minister’</td>
<td>Accepted by informants</td>
</tr>
<tr>
<td>Class D</td>
<td>Fixed-gender forms: \textit{la sentinelle} ‘the.F guard’ \textit{le génie} ‘the.M genius’</td>
<td>No (not tested)</td>
</tr>
</tbody>
</table>

- Judgements based on a limited number of (Swiss) French informants.
- Only limited number of nouns (classes B & C) checked.
- More systematic investigation needed: does the theoretical analysis still hold?
3. Methodology & results

Methodology: Grammaticality Judgement Task.
- Online task, submitted to 70 native speakers of French (from France).
- 80 sentences judged on a 5-point scale \((5 = \text{grammatical})\).
- 41 superlative partitives; 13 different animate nouns of classes B, C and D.
- Sentence pairs with/without gender mismatch \((13/13)\) and control sentences \((15)\), presented in random order.

Results:
Average judgements for sentence pairs with semantic and grammatical agreement for each of the noun classes (figure 1):
- Class D: sentences without mismatch judged significantly better than sentences with mismatch.
- Class C: sentences with mismatch judged significantly better than sentences without mismatch.
- Class B: no significant difference between sentences with and without mismatch, although sentences with mismatch judged slightly better.
⇒ Corresponds to agreement patterns reported by Sleeman & Ihsane (2016).
However, the results also exhibit a lot of variation (figure 2-4):

- Variation between individual nouns within a noun class.
- Variation between participants.

We calculated for each sentence pair how many participants accepted (judged as 4 or 5) or rejected (judged as 1, 2 or 3) the sentence:

**Noun class internal variation:**

Class B nouns (especially *chanteur* and *policier*): relatively high percentage of participants do not accept either one of the sentences (with or without mismatch).

Participants prefer the use of a feminine set noun (6), even though in this case the set noun does not refer to the entire group of females and males (only to the females).

(6) *La plus jeune des chanteuses présentes est F. Hardy.*

‘The youngest of the singers present is Françoise Hardy.’

**4. Theoretical analysis**

Apparently, in some cases grammatical gender can be overridden in the outer DP of a superlative partitive, but:

- Variation between speakers.
- Variation between noun classes.
- Variation within noun classes.

Can we provide a theoretical analysis that covers both the general patterns and the variation?

⇒ The solution could lie in the mental lexicon.

⇒ Differences in encoding of grammatical gender.

The structure of superlative partitives: two-noun analysis.

⇒ Outer DP contains unpronounced copy of inner DP’s noun.

(Cf. e.g. Sleeman & Ihsane 2016; Cardinaletti & Giusti 2006; Sleeman & Kester 2002)

(7) outer DP (subset) inner DP (set)

Theoretical assumptions, building forth on Sleeman & Ihsane (2016):

- With animate nouns, distinguish grammatical and semantic gender.
- Grammatical gender is stored on the noun in the mental lexicon and is uninterpretable.
- Semantic gender is encoded on a Gender Phrase (only with animate nouns)
- Semantic gender is interpretable with class A, class B and class C nouns, but uninterpretable with class D nouns.
  - The operation Agree only deals with valuation, not with interpretability, the presence of uninterpretable features does not cause the derivation to crash (following Legate 2002).
  - Interpretability and valuation of features are two distinct things: uninterpretable features are not necessarily unvalued and vice versa (following Pesetsky & Torrego 2007).

\[
\begin{aligned}
(8) & \quad \text{DP} \\
& \quad D \quad \text{GendP} \\
& \quad \quad \text{Gend} \quad \text{NP}
\end{aligned}
\]

**Our approach:** All nouns are marked for grammatical gender in the lexicon:

⇒ Not only as masculine [u: m] or feminine [u: f]…
⇒ … but also as common masculine [u: c, m] or common feminine [u: c, f].
⇒ The latter ([u: c, m] and [u: c, f]) present less specified grammatical gender.

Based on the concept of a gender feature hierarchy (cf. Harley & Ritter 2002):

- common = underspecified gender
- masculine + feminine = specified gender

\[
\begin{aligned}
(9) & \quad \text{gender} \\
& \quad \quad \text{common} \\
& \quad \quad \quad \text{masculine} \quad \text{feminine} \\
(10) & \quad \text{gender} \\
& \quad \quad \text{common} \\
& \quad \quad \quad \text{masculine} \quad \text{feminine} \\
(11) & \quad \text{gender} \\
& \quad \quad \text{common} \\
& \quad \quad \quad \text{masculine} \quad \text{feminine}
\end{aligned}
\]

**Table 2 – Extended noun classification**

<table>
<thead>
<tr>
<th>Noun class</th>
<th>Example</th>
<th>Grammatical gender</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>frère ‘brother.M’ soeur ‘sister.F’</td>
<td>[u: m] [u: f]</td>
<td>Grammatical agreement</td>
</tr>
</tbody>
</table>
There can be variation within the noun classes (i.e. nouns belonging to the same noun class can be marked for grammatical gender differently).

The idea of having underspecified gender (next to specified masculine and feminine) for our animate nouns is supported by developments in French dictionaries (cf. Westveer, Sleeman & Aboh 2018):

- Coding of gender on nouns in different editions of the *Petit Robert*.
- Recent editions: many nouns marked as ‘noun’, no gender specification.

### Table 3 – Coding of grammatical gender

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>noun</td>
<td>coding</td>
</tr>
<tr>
<td>ministre ‘minister’</td>
<td>masculine noun</td>
</tr>
<tr>
<td>professeur ‘teacher’</td>
<td>masculine noun</td>
</tr>
<tr>
<td>sentinelle ‘guard’</td>
<td>feminine noun</td>
</tr>
</tbody>
</table>

Returning to the superlative partitives:

- Noun marked as [m] or [f] in mental lexicon…
  … grammatical agreement in partitive.
- Noun marked as [c, m] or [c, f] in mental lexicon…
  … semantic agreement in partitive.

(12) *La plus jeune des étudiants* est Marie.

(13) *La plus jeune des étudiantes* est Marie.

(14) *Le plus jeune des étudiants* est Marie.
(15) *La plus jeune des sentinelles est Jean-Luc.*
the.F most young of.the guard.F.PL is Jean-Luc

(16) *Le plus jeune des sentinelles est Jean-Luc.*
the.M most young of.the guard.F.PL is Jean-Luc

(15')

(16')
4. Conclusion & outlook

Can grammatical gender be overridden in superlative partitives?

\[ \Rightarrow \] Acceptance of gender mismatch depends on type of animate noun.

- Mismatch generally accepted with class C nouns, to a lesser extent (though not significant) also with class B nouns.
- Mismatch generally not accepted with class D nouns.
- Variation between nouns & between participants.

Proposal for theoretical explanation of the results:

\[ \Rightarrow \] Some nouns marked with underspecified grammatical gender feature \([c, m] / [c, f]\), other nouns with fully specified grammatical gender feature \([m] / [f]\) in the mental lexicon.

- If noun marked with underspecified \([c, m] / [c, f]\) feature: mismatch possible.
- If noun marked with specified \([m] / [f]\) feature: mismatch not possible.

In progress:

- Similar test on German.
- Mismatches in quantified partitives (e.g. One of the students).

5. References


