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Gender Mismatches in Spanish and French $N_1/A \text{ de } N_2$ Affective Constructions: Index agreement vs. Morphosyntactic Concord

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1.1 Introduction

I examine Spanish and French agreement in sentences with “affective” $N/A \text{ de } N$ constructions, in terms of an agreement theory growing out of Pollard and Sag (1994, §2) and Kathol (1999), with a distinction between two kinds of agreement relations: index agreement and morphosyntactic concord. The application of this theory to hybrid nouns (Wechsler and Zlatić, 2000) extends straightforwardly to affective constructions. Furthermore, Kathol’s characterization of the difference between hybrid nouns in Spanish and French, which I pair with an interpretation in terms of the default unification mechanism of Lascarides and Copestake (1999), turns out to make correct predictions about subtle differences in predicate agreement with affective constructions in the two languages.

(1) Esa mierda de libro es aburrido/*aburrida.

‘That shitty book is boring.’ (Casillas Martínez, 2001b)\footnote{As per the distinction discussed in Section 1.2, I gloss the inherent gender of an agreement source with ‘M’ or ‘F’ in square brackets, and inflectional gender of an agreement target with a period followed by a letter.}

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The sentences I work with are of the general type exemplified by examples (1) and (2). The subject NP is of the form \(N_1/A_1 \text{ de } N_2\), which is in a sense “backwards”; the apparent structural head denotes some kind of affective evaluation of the NP’s referent, and it is \(N_2\), which looks very much like a prepositional object, properly designates the referent.\(^2\) The determiner agrees with the first item, while the predicate adjective agrees with the second one.

### 1.2 Inherent gender vs. inflectional gender

An important distinction that I must make before delving into these constructions at depth is that between *inherent gender classification* and *gender inflection*.

- An *inherently gendered lexeme* comes from the lexicon with a fixed gender value. Most inanimate common nouns in Spanish and French are of this kind—but there are exceptions.
- An *inherently ungendered lexeme* does not have lexical gender. It may be *inflecting*, with a form for each gender, or *noninflecting*, with a unique, gender-unselective form. Many animate nouns are not inherently gendered, and show distinct inflectional forms; e.g. Sp. *amigo, amiga* ‘friend (.M, .F)’. Some ungendered adjectives and nouns don’t inflect (e.g. Fr. *imbécile* and *idiote*).

Müller (1978), the classic treatment of constructions of this sort in French, misses this distinction, and goes wrong with examples like *ton vache de frére* (literally ‘your.M cow of brother[M]’). On the supposed grounds that *vache* is feminine, he sees the article as agreeing with \(N_2\). Thus he mistakenly concludes that the article sometimes agrees with \(N_1\) as in (2), and other times with \(N_2\) as in the *vache* example.

I take the correct analysis to be the one suggested by Noailly-Le Bihan (1983) in her criticism of Müller. In the majority of examples the determiner shows a form corresponding to \(N_1\); exceptions occur with specific words like *vache* ‘cow [F]’, *saloperie* ‘filth, rubbish [F]’ *canaille* ‘scoundrel [F]’ and *diable* ‘devil [M]’, whose meaning in this construction is not necessarily predictable from their meaning when used as

\(^2\)This should not be read as a claim about the syntactic structure of these NPs. This paper remains agnostic about questions such as whether one should call one or another element the “head” of the NP; the only structural assumption that I make is that both are potential agreement sources.
fully referential nouns.\(^3\) The simplest grammar is thus one where the
determiner always agrees with \(N_1\), and the apparent counterexamples
are listed as exceptional, not inherently gendered, zero-derived lex-
emes, along with their special meaning in this construction.\(^4\) Gérard
(1978) has a similar analysis for a comparable construction in Quebec
French, which posits two identical versions, masculine and feminine
respectively, of a class of invariable \(N_1\) words in that dialect. As Gérard
points out, this should be no more problematic than the uncontroversial
fact that Fr. *imbécil* ‘imbecil’ has only one form for both genders.

1.3 The affective constructions
There is a range of affective constructions that fit the general mold
\(A/N_1 \text{ de } N_2\), but not all of them show real agreement mismatches. In
this section I delineate the constructions and conditions that result in
genuine mismatches, setting them apart from apparent cases.

1.3.1 Spanish adjectival construction
There are two different affective constructions in Spanish, which I call
“adjectival” and “nominal.” The adjectival construction is illustrated
in (3), and its properties defined in (4). The external syntax of the
higher word is that of an adjective; it’s possible to modify it with
*muyc* ‘very’, and it can show up as a predicate adjective on its own (i.e. there
is no need for an indefinite article to accompany it).

(3) a. el tonto del vecino
    the.M dumb.M of-the.M neighbor.M
    ‘the dumb neighbor (male)’ (Suñer Gratacos, 1999, 90a)

b. la tonta de la vecina
    the.F dumb.F of the.F neighbor.F
    ‘the dumb neighbor (female)’ (90b)

(4) **Spanish adjectival type:** \(\text{Det}_1 \ A \text{ de } (\text{Det}_2) \ N_2\)
Can only be used for animate/gendered referents. Higher item is
always adjectival; apparent counterexamples are denominal ad-
jectives. Lower determiner is possible, and usually required; com-
plex set of constraints on determiner combination, sensitive to

\(^3\)Knowing that *vache* normally means ‘cow’ doesn’t help much in knowing what
*ton vache de frère* means.

\(^4\)This point is also tied to a conjecture: words that occur frequently in the higher
position in this sort of construction may tend to lose their inherent gender. E.g., in
standard varieties of Spanish, the noun *poco* ‘bit [M]’ is masculine, and requires
a masculine determiner in measure phrases: \(\text{un poco de agua fría} \ ‘a.M \ bit[M] \ of\)\)
water[F] cold.F’. But in many colloquial varieties it inflects, and accommodates to
the gender of \(N_2\): \(\text{una poca de agua fría}\).
determiner type and the presence of a restrictive relative clause 
(Españoł-Echevarría, 1998). **No real agreement mismatches;** 
the adjective always\(^5\) has a form compatible with the gender on 
\(N_2\).

Suñer Gratacos (1999) cites some apparent exceptions to my claim 
that these sentences don’t show agreement mismatches, on the basis 
that the determiner mismatches the higher item:\(^6\)

(5)

- a. el gallina de Juan
  the.M chicken\{F\} of Juan\{M\}
  ‘Juan, that coward’
- b. el pelota de González
  the.M ball\{F\} of González
  ‘González, that suck-up’
- c. la cerebrito de tu hermana
  the.F brain\{M\}.DIM of your sibling\{F\}
  ‘Your sister, that brainy girl’

But this is a confusion similar to Milner’s as discussed in Section 1.2. 
The higher word is an ungendered, noninflecting, denominal adjective. 
Its meaning is idiosyncratic as compared to the base, and it occurs in 
adjectival contexts:

(6)

- a. el muy gallina de Juan
  the.M very chicken of Juan\{M\}
- b. Juan es bien gallina.
  Juan\{M\} is very chicken
  ‘John is very cowardly.’

Therefore, there is no reason to take these as counterexamples to the 
claim that the article agrees with the higher item. Again, the simpler 
grammar is the one where the determiner agrees with the higher item, 
and apparent exceptions arise from noninflecting lexemes.

1.3.2 Spanish nominal construction

This is the Spanish construction that can show agreement mismatches 
under the appropriate conditions:

\(^5\)I have found one striking kind of exception to this claim. In Puerto Rican 
Spanish, the adjective *loca* ‘effeminate male homosexual (literally, crazy\{F\})’ occurs 
in this construction and can trigger agreement mismatches; similar facts hold for 
semantically similar words in other Spanish varieties. These are candidates for the 
label ‘inherently gendered adjective’.

\(^6\)The gloss ‘DIM’ in (5c) stands for diminutive.
(7) Ese espanto de puerta está rota.
that.M fright[M] of door[F] is broken.F
‘That frightful door is broken.’

(8) Spanish nominal type: Det N₁ de (*Det) N₂
May be used for either class of referent (animate/inanimate). No
determiner is ever possible for N₂. The higher item is always a
noun, and the determiner always agrees with it. These can show
agreement mismatches; if N₁ is an inherently gendered noun of
a different gender than N₂, the gender of the determiner will
match N₁, while NP-external targets will match N₂. Otherwise,
N₁ has a form compatible with the gender on N₂ (e.g. if N₁ is an
ungendered noun).

The crucial factor behind true gender mismatches is having an N₁
and N₂, both inherently gendered, but with different genders. If N₁
is ungendered, then it will always have a form compatible with N₂, which
will be chosen as its realization, and thus all conflict can be avoided.
It is only when N₁ can’t inﬂect for the gender of N₂ that we get the
mismatches.

1.3.3 French constructions

There is a large literature on the French constructions, most of which
is cited in Casillas Martínez (2001b,a). I will not classify them in this
paper, but I will offer the following observations:

• In French, no determiner is ever possible on N₂. There is no struc-
tural distinction between adjectival and nominal constructions as
clear-cut as in Spanish. The structural pattern in French is A/N₁
de/â N₂.⁷

• Inherently gendered items play the same role in mismatches as they
do in Spanish; only if N₁ is inherently gendered can a mismatch
occur.

1.4 The agreement theory

The agreement theory I apply to the mismatches is based on the anal-
Hybrid nouns (Corbett, 1991, §8) trigger different agreement on differ-
et targets within the same clause, e.g. the classic “majesty” nouns in

⁷To the best of my knowledge constructions with the preposition â are found
only in Quebec French, specially with proper names as N₂: l’idiot â Jean ‘Jean,
that idiot’.
The theories posit two sets of agreement features: concord features (under an AGR(EMENT) or CONC(ORD) feature inside SYN) and index features (under INDEX). Agreement constructions subdivide into morphosyntactic agreement (which unifies AGR features) and index agreement (unification of the target AGR with the source INDEX features). In (9a), NP-internal agreement is morphosyntactic, and subject-predicate agreement is index-based. Majestad is [AGR fem] but [INDEX masc], thus the split; the attributive adjective unifies AGR with Majestad’s [AGR fem], but the predicate adjective unifies it’s AGR with the NP’s [INDEX masc].

For law-abiding, shoelaces-tied, shirt-tucked-in nouns, AGR|GEND and INDEX|GEND are lexically identified by an Index to Concord constraint, and the INDEX|GEND is contextually anchored by Index to Semantics constraints to appropriate conditions in context, so all agreement domains match with each other, and with the natural gender of the referent if it has one. Hybrid nouns are nouns where this identification is exceptionally broken; Spanish Majestad, for instance, has AGR|GEND fem, INDEX|GEND masc, and CONTEXT specifies that its referent is masculine. French has fem for both agreement features, but CONTEXT still indicates a masculine referent.

1.5 My analysis

I adapt the Kathol and W&Z hybrid noun analyses to my affective constructions; N₁ and N₂ are part of separate concord domains (sets of words that structure-share AGR), but share one and the same INDEX. The gender value of the index is constrained by default to be identical to both nouns, and to stand in the appropriate relation to the natural gender of the referent. Mismatches arise in the N₁ de N₂ constructions because of the nouns provide conflicting default specifications on the value of INDEX|GEND. The idea is illustrated in Figure 1 on the facing page. This model, with two agreement feature sets and relations, captures two important features of the data, which we are about to
discuss:

1. the sensitivity of subject-predicate agreement to semantic gender, and in particular the fragility and variability in the mismatching inanimate $N_1 \text{ de } N_2$ cases (given that the link between the index and morphosyntactic levels is only a default);

2. the fact that determiner and attributive adjective agreement exhibit no such behavior (given that they are in the same concord domain as their controller, and directly unify their AGR values with it).

1.6 The difference between Spanish and French

This model allows us to state a difference between Spanish and French that will not only account for the behavior of nouns like Majestad/Majesté, but which will account for very subtle differences in the agreement in affective constructions:

(10) **The big difference between Spanish and French**
In both French in Spanish, intra-NP gender agreement is morphosyntactic, and subject-predicate gender agreement is index agreement; this is not a locus of difference. However, in the determination of the gender of an index, *morphosyntactic gender has priority in French* (with one exception), and *natural gender in Spanish*.

This is a proposal from Kathol (1999, §4.1):
From this perspective, the difference among various languages is a function of which of the two determining factors wins out for what kinds of cases. In Spanish, the generalization seems to be that INDEX information is determined in terms of what is encoded in AGR unless there is a personal referent, in which case the general constraint that “natural gender/number determines grammatical gender/number” takes precedence. In French, on the other hand, this rule only appears to apply for polite pronominals.

This is different from the usual proposal, e.g. Corbett (1991), that subject-predicate agreement is “semantic” in Spanish but “formal” in French. In Kathol’s analysis, the same agreement relation holds in the predicative constructions in both languages. French predicate agreement is neither strictly formal (i.e. morphosyntactic) nor strictly semantic/pragmatic, but rather based on indices, which interface morphosyntax with semantics.

The crucial fact that I add in support of Kathol’s account is the following:

(11) **French reverts to semantic subject-predicate agreement**
In French, if $N_1$ has inherent gender, and it mismatches that of $N_2$, the language reverts to semantic agreement. Agreement is formal in all other cases. (Hulk and Tellier, 1999, 2000)

In the default-based setup of Casillas Martínez (2001b), Kathol’s proposal extends to the $N_1 de N_2$ constructions, and makes the following predictions, which are correct for the two languages:

1. NP-internal agreement will always be formal in both languages, given that it’s morphosyntactic agreement.
2. With regular NPs (i.e. not $N_1 de N_2$), Spanish will show semantic subject-predicate agreement. French will show apparent formal agreement, since the the subject head noun’s morphosyntactic gender will take precedence in determining the index. This accords with what has been observed about the two languages (see e.g. Corbett (1991, §8)).
3. In the $N_1 de N_2$ cases, if $N_1$ and $N_2$ are the same gender, the languages will behave exactly the same as in the simple NP case; Spanish will show semantic agreement, French formal.
4. However, if $N_1$ and $N_2$ mismatch, both languages will show semantic agreement at least for naturally gendered referents. In Spanish this follows straightforwardly. In French it follows because the gender clash between $N_1$ and $N_2$ will prevent either from determining the gender on the index, which will allow semantic gender to take over. Thus despite showing predominantly formal agree-
ment, French will revert to semantic agreement when there is a gender conflict within the subject NP.

1.7 My analysis, illustrated

1.7.1 The hybrid noun case

First I illustrate in Figure 2, as a simple example, the case of hybrid nouns like Sp. *Majestad* and Fr. *Majesté* ‘Majesty’, with the sentences in (9) from p. 6.

<table>
<thead>
<tr>
<th>Morphosyntactic Concord</th>
<th>Spanish</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majestad</td>
<td>fem</td>
<td>N1</td>
</tr>
<tr>
<td>contento/a</td>
<td>Pred</td>
<td>Pred</td>
</tr>
</tbody>
</table>

**Referential Index**

<table>
<thead>
<tr>
<th></th>
<th>Spanish</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majestad</td>
<td>fem</td>
<td>N1</td>
</tr>
<tr>
<td>contento/a</td>
<td>Pred</td>
<td>Pred</td>
</tr>
</tbody>
</table>

**Natural Gender Of Referent**

<table>
<thead>
<tr>
<th></th>
<th>Spanish</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td>Male</td>
</tr>
</tbody>
</table>

**FIGURE 2 The case of hybrid nouns.**

The way we interpret Figure 2 is by seeing default identification arrows (the broken lines) as partially ordered by “importance” or priority, and proceeding by “rounds” where compatible information is kept, but incompatible information discarded. In the case of French, the two Index-to-Concord (a) arrow has higher priority than the Index-to-Semantics (c) arrow. The “first round” of default unification attempts to identify the undetermined index gender with the concord value *fem* of *Majesté*, and succeeds. The second round tries to identify the index gender with the semantic gender *Male*; this information is incompatible with that established in the previous round, and is discarded. Since the predicate’s morphosyntactic gender is identified indefeasibly with the index, we see the feminine form *contente*. In Spanish however the (c) arrow has priority over the (a) arrow. The first round determines the value of the index on semantic grounds, and the second round discards...
the morphosyntactic information.

1.7.2 The mismatched animate case

As noted by Hulk and Tellier (1999, 2000) for French, Italian and Spanish, and my own work on Spanish and French, if $N_2$ is animate\(^8\) it determines the external agreement for the NP in case of a conflict. This is shown in Figure 3 for (12).

(12) Ton phénomène de fille est bien distraite.

That character of a daughter of yours is very absent-minded.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure3.png}
\caption{The animate case: Ton phénomène de fille est bien distraite.}
\end{figure}

This is the crucial phenomenon of French reverting to semantic agreement in case of conflict, pointed out in (11). We can predict this in terms of our assumptions and the “rounds” model. In the first round, we attempt to set the value of the index to both \textit{masc} and \textit{fem}. Since this information is incompatible, it has no effect.\(^9\) In the second round, however, the Index-to-Semantics arrow succeeds in setting the gender of the index to that specified by the semantics. Thus we get a feminine predicate.

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\(^8\) Or differentiated for gender; it is hard to tease these variables apart for a language where grammatical gender is based on actual gender differentiation. I will talk of “animacy” and “gender differentiation” indistinctly.

\(^9\) In the terms of Lascarides and Copestake (1999), the result is the least upper bound of \textit{masc} and \textit{fem}, the type \textit{gender}
In the equivalent Spanish examples, the priority is different. The first round succeeds in identifying the semantic gender with the index gender. Once this happens, the conflicting morphosyntactic information can’t affect it in the second round.

It is crucial to note in the French case that the semantic agreement is the result only when the morphosyntactic information is in conflict. If \( N_1 \) and \( N_2 \) have the same morphosyntactic gender, this gender will be imposed on the index in the first round, regardless of the semantic gender. Based on the data in Hulk and Tellier (1999, 2000), this seems to be exactly right.

### 1.7.3 The mismatched inanimate case

There is a variety of (non)solutions when there is a gender conflict, but the referent does not have a natural gender classification.

#### Failure of external agreement

In French (Hulk and Tellier, 1999, 2000) there is a failure of external agreement when there is a gender conflict and an inanimate referent. This failure only happens when \( N_1 \) and \( N_2 \) conflict; otherwise they unproblematically determine the gender on the predicate. The examples are typically rather difficult for speakers to judge, and invariably, regardless of the mismatching gender combination chosen for \( N_1 \) and \( N_2 \), a masculine predicate is preferable to feminine. This gender inflection, according to H&T, doesn’t represent agreement but a default realization. This is illustrated with example (13) and Figure 4 on the next page. Neither Index to Concord constraint determines the index gender, nor does the semantics. If the issue is to be resolved at all, it must be by invoking some third default.

(13) Ce bijou de symphonie sera inscrit/*inscrite

\[ \text{that.M jewel[M] of symphony[F] will-be included.M/*.F} \]

‘This jewel of a symphony will be included.’

(Hulk and Tellier, 1999, (9a), my adaptation for length)

#### Agreement determined by \( N_2 \)

In Spanish (and Italian, according to Hulk and Tellier), a common solution is for predicate agreement to be determined by \( N_2 \):

(14) Ese horror de película es aburrida.

\[ \text{that.M horror[M] of movie[M] is boring} \]

‘That horror of a movie is boring.’

This can be crudely modeled under my account by an additional stipulation: in Spanish, a miracle occurs, and speakers learn that the Index to Concord arrow linking \( N_2 \) to the Index has priority over the
one linking the Index to N1, as illustrated in Figure 5 on the facing page. But, in France secularism reigns, and neither arrow has priority.

This, as my wording should subtly suggest, is a hack. While I have in (10) above what I think is reasonable account for the difference between Spanish and French in the animate case, I’m still looking for a similarly compelling reason for the difference in the inanimate case.

**Other splits**

Hulk and Tellier (1999) report that for a group of Spanish speakers they consulted, external agreement varied on two factors: (a) the choice of predicate constructions; adjectival past participle in (15) vs. passive in (16); (b) lexical choice of N2, with e.g. *tabernáculo* in (17):

(15) Ese horror de mesa es apreciado/*a ... that.M horror[M] of table[F] is appreciated.M/*F

(16) Ese horror de iglesia fue diseñada/*o ... that.M horror[M] of church[F] was designed.F/*M

(17) Esa joya de tabernáculo fue decorada/?o ... that.F jewel[F] of tabernacle[F] was decorated.F/?M

Hulk and Tellier report similar results with Italian speakers. The range of existing systems and how to model them all are still open questions.
1.7.4 “Elided” constructions

There are constructions in Spanish and French very much like the ones I have illustrated, but lacking the preposition and $N_2$ altogether. For these, speakers exist which offer different agreement possibilities in Spanish. I illustrate in (18) and (19) my judgements for animate and inanimate referents, but some speakers prefer to render both examples with the same gender as $N_1$, while others render both types of example with the gender of the elided noun. The situation is diagrammed in Figure 6 on the next page.

(18) María acaba de publicar su libro.
    ‘María has just published her book[M].’
    Pero esa mierda no hay quien la/??lo lea.
    but that.F shit.F no be who 3SG.F/??M 3SG.read
    ‘But that shit[F], nobody can read it[F/??M].’

(19) Mi vecina es maravillosa, pero se ha metido en problemas.
    ‘My neighbor (.F) is marvelous, but she’s gotten in trouble.’
    A ese amor la/*lo buscan para matarla/*lo.
    to that.M love[M] her/*him seek for kill-her/*-him
    ‘That love[M] (of a person), they’re looking for her/*him
to kill her/*him.’

My French consultants, however, report that they prefer formal agreement in the corresponding French examples, even with animate referents of semantic gender mismatching the overt noun. This is, again,
exactly what my account predicts; the morphosyntactic information wins out in the absence of a conflicting noun.

1.8 Implementation

While the discussion of the mechanics of my account has been informal, it is trivially implementable in terms of the default unification mechanism of Lascarides and Copestake (1999). This framework provides a notion of priority ordering of default information that accommodates my account. In Casillas Martínez (2001b), I show a toy grammar that implements the mechanics of my account using that constraint framework. The analysis is quite outdated relative to the present paper, but is trivially updateable to the proposal here.

This does not however exclude the possibility of implementing my account in terms of other mechanisms. I see no reason why a theory with violable constraints, such as Optimality Theory, could not provide an interpretation for my model. It is also quite easy to find oneself talking about my accounts in localist connectionist terms, thinking of the tiers as sets of nodes, and the arrows as connections with different strengths. And in fact there may be some data relevant to these constructions which such models might be more appropriate to deal with, e.g. the reversal illustrated in example (20) from Puerto Rican Spanish:

(20) a. Esa mierda de libro es aburrido/*a
    ‘That shit of a book is boring.’
b. La fucking jodia cabrona puñetera mierda aburrida
the.F fucking ADJ.F ADJ.F ADJ.F shit[F] boring.F
desa de libro de pintar redondo tuyo está tan
mierdoso/a.
shitty.M/.F
‘That (many feminine-inflected expletives deleted)
shit of a round coloring book of yours is SOOO shitty.’

The large number of feminine adjectives modifying $N_1$ makes the femi-
nine predicate as acceptable as masculine in (20b) to my native judge-
ment. This fact is beyond an unification-based interpretation of my
account, but can potentially be dealt with in a “spreading activation”
theory.

1.9 Conclusion

The Romance $N_1$ de $N_2$ constructions further motivate the notion, pro-
posed in many places in the literature (Lehmann, 1988, Corbett, 1991,
Pollard and Sag, 1994, Kathol, 1999, Wechsler and Zlatić, 2000) that
there is a distinction between two sorts of agreement relations, each sen-
sitive to different aspects of linguistic organization and serving different
functions. However, it illustrates subtleties that the simplest accounts,
based on a distinction between “formal” and “semantic” agreement,
miss. In contrast, the notion of index agreement holds up very well in
this terrain.

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