Merge over Move and Romance Obviation Effects*

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1 Outline

• In many Romance languages, the subject of a finite embedded clause cannot be bound by the matrix subject when the embedded clause is in the subjunctive:

(1) \([\text{TP} \ldots \text{Subject}_1 \ldots [\text{TP} \text{PRO}_1 \text{T-IND} \ldots]]\]
(2) \(* [\text{TP} \ldots \text{Subject}_1 \ldots [\text{TP} \text{PRO}_1 \text{T-SUB} \ldots]]\]

• There are two main analyses of this “obviation effect” in the literature. To use the terms coined by Costantini (2005), these are:\(^1\)

  – The Domain Extension Analysis: Subjunctive clauses are transparent for binding.\(^2\) This gives rise to a Condition B effect in (2).

  – The Competition Analysis: The use of a subjunctive clause with a co-indexed subject is blocked by the availability of a control infinitive such as (3), in accord with Chomsky’s (1981) “Avoid Pronoun” principle.\(^3\)

(3) \([\text{TP} \ldots \text{Subject}_1 \ldots [\text{TP} \text{PRO}_1 \text{T-INF} \ldots]]\)

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\(^1\) There are certainly other approaches to be found in the literature besides the two listed here (see e.g. Caballero 2004), but I will not have time to examine them in this talk.

\(^2\) There are a number of attempts in the literature to give a principled explanation for this transparency. For example, Picallo (1985) relates it to the subjunctive’s lack of an independent tense (citing sequence of tense phenomena). Kempchinsky (1990) relates it to the presence of a null operator which causes T to raise to C in the embedded clause, thus extending the binding domain. A similar idea is presented in San Martin (2007).

\(^3\) See e.g. Bouchard (1982, 1983), Farkas (1992) for versions of the competition analysis.
Both the competition analysis and the domain extension analysis have difficulty explaining why the matrix (indirect) object can bind the matrix subject:

\[(4) \quad [\text{TP} \ldots \text{Subject} \ldots \text{Object}_1 \ldots [\text{TP} \quad \text{pro}_1 \quad \text{T-SUB}]]\]

I will argue that the Domain Extension analysis can account for (4) if supplemented by the “Merge over Move” condition of Chomsky (1998). Merge over Move has the advantage that it predicts “Highest DP orientation” rather than subject orientation, which turns out to be correct for Romance obviation.

To link Merge over Move to (4), it will be necessary to give up the idea that Condition B effects derive from a preference for local binding over non-local binding (see e.g. Reuland 2001, Hornstein 2001, Safir 2005).

Instead, we must take Condition B to be a primitive prohibition on local pronominal binding. The key to be making this work will be the new conception of “Rule I” in Reinhart (2000).

### 2 Obviation in Spanish

I will use Spanish to illustrate obviation phenomena. All non-English examples are Spanish unless otherwise indicated. (5a/b) correspond to (2a/b):

\[(5) \quad \begin{align*}
\text{a. } & \text{Maria}_1 \text{ ha decidido que } \text{pro}_1 \text{ va a la playa.} \\
& \text{Maria has decided that (she) go-IND to the beach.} \\
\text{b. } & \text{*Maria}_1 \text{ ha decidido que } \text{pro}_1 \text{ vaya a la playa.} \\
& \text{Maria has decided that (she) go-SUB to the beach.}
\end{align*}\]

As we saw in (4), the matrix object, in contrast to the matrix subject, is permitted to bind the pronoun:

\[(6) \quad \begin{align*}
& \text{Maria} _1 \text{ convenció a Ines}_2 \text{ de que } \text{pro}_{1/2} \text{ baile mucho.} \\
& \text{Maria persuaded Ines that (she) dance-SUB a lot.}
\end{align*}\]

Obviation appears to have nothing specifically to do with null subject pronouns. The same effect is found in Spanish with an overt subject pronoun – (7) – and in non-pro-drop languages such as French – (8):

\[(7) \quad \begin{align*}
& \text{*Maria}_1 \text{ ha decidido que ella}_1 \text{ vaya a la playa.} \\
& \text{Maria has decided that she go-SUB to the beach.}
\end{align*}\]

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4 Spanish has a present subjunctive, glossed here as sub, and an imperfect subjunctive, glossed as imperf-sub. The imperfect subjunctive has essentially the same behavior with regard to obviation as the present subjunctive, but is used when the matrix clause is in the preterite.

5 Some Spanish examples on this handout are taken from Costantini (2005) and Caballero (2004)
3 Previous attempts to explain the subject-orientation of obviation

3.1 Picallo (1985)

Picallo (1985) argues that the matrix object is able to bind the embedded subject in (6) because subjunctive clauses extrapose to a higher right-adjoined position. However, in ordinary cases of clausal extraposition over an adverb – (9) – there is no amelioration of Condition C.

(9) * Ella$_1$ convenció a él$_2$ t$_{CP}$ ayer [CP de que Juan$_2$ baile mucho].
She$_1$ persuaded him$_2$ yesterday that Juan$_2$ dance-$SUB$ a lot

Moreover, as noted by Kempchinsky (2009, 1791), a bound variable reading is permitted in cases such as (10), where the matrix object binds the subject of the embedded clause:

(10) No animé a nadie a que pro estudiara en el extranjero.
NEG encourage to no-one to that pro study-$PST$-$SUB$ abroad
*I didn’t encourage anyone to study abroad.’

Similarly, there is no amelioration of Condition C in cases such as (11):

(11) * (A él) Le$_1$ gusta siempre que pro visite a Juan$_1$.
(To him) 3PS-$DAT$-$PRN$ is-pleasing always that (s/he) visit-$SUB$ John.
‘* He$_1$ always likes it that s/he visits John$_1$.’

It is unclear why extraposition should not be able to take the clause out of the c-command domain of the indirect object a él or its clitic double le.\(^6\)

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\(^6\) It has occasionally been claimed that a él in such examples is a subject with quirky dative case. However, Gutiérrez-Bravo (2006) points out that these PPs have virtually none of the properties typically associated with quirky subjects. If it were the case that a él resided in [Spec,TP], Picallo’s account would have no difficulty explaining the deviance of (11) when a él is present, since by assumption the clause cannot extrapose higher than [Spec,TP]. However, a él is optional, and when only the indirect object clitic is present, it is unclear why the clause should not be able to extrapose above it. In this connection, it should be noted that in (6), adding the indirect object clitic le has no effect on the obviation judgment – there is still no obviation with the matrix object. This suggests that at least “ordinary” indirect object clitics are in a position low enough for the clause to extrapose above them. It is in principle possible that the indirect object clitic in (11) sits in a higher position, but I know of no evidence for this.
3.2 Avrutin & Babyonyshev (1997)

Avrutin & Babyonyshev (1997) propose a different explanation for subject-orientation. (Their examples are Russian, but the theory could carry over to Romance without significant modification.) They propose that the matrix and embedded clause are closely related, in that a single event operator binds the event in each clause (thus encoding a temporal dependency). Syntactically, this is expressed by raising of the embedded C to the matrix C. Since A&B assume universal V-to-T-to-C movement, the end result is that the entire spine of the embedded clause ends up as a complex head in matrix C. On the assumption that AgrS is pronominal and subject to Condition B, a Condition B violation will then obtain between the complex in matrix C (bearing the index of embedded AgrS, and hence of the embedded subject) and the matrix subject/AgrS.

The problem with this proposal, as we will see shortly, is that obviation in Romance is not always with respect to the matrix subject.

4 Merge over Move and subject orientation

The Merge-over-Move condition was first proposed by Chomsky (1998) in his analysis of *there*-insertion in existential constructions. It requires Merge to be used in preference to Move wherever possible.

Hornstein (2001) exploits Merge over Move to explain why English adjunct control is subject-oriented:

(12) John\textsubscript{1} criticized Bill\textsubscript{2} [without PRO\textsubscript{1/2} being rude].

If Merge is preferred to Move, then the DP in the adjunct cannot move to object position in (12), since at the relevant point in the derivation – shown in (13) – the DP remaining in the numeration can be merged as the object instead:

(13)

[without Bill being rude] \hspace{1cm} (\textit{Workspace 1})

\begin{align*}
\text{criticize} & \hspace{1cm} (\textit{Workspace 2}) \\
\{..., \text{John, ...}\} & \hspace{1cm} (\text{Items remaining in numeration})
\end{align*}

\Rightarrow Bill can’t move to become the object of \textit{criticize} because \textit{John} remains in the numeration and could be merged instead.
4.1 “Highest-DP orientation”

Merge over Move does not predict subject-orientation as such. Rather, it predicts “highest DP orientation.” In (12), object control is blocked not because the controller must be the subject, but because the controller must be the highest DP in the clause containing the adjunct. In principle, therefore, a non-subject may control if it is in a higher position in the clause than the subject.

In fact, as noted by Costantini (2005), we seem to find examples of this effect with obviation. When the highest DP is a non-subject, obviation occurs with respect to this DP:

(14) * A mí₁ se me antoja [ que pro₁ vaya a echar un ojito a la pintura ].
    To me I’d-like [ that (I) go-sub to take a glance at the painting ].
    ‘I’d like to take a look at the painting.’

Thus, Merge over Move appears to correctly predict, in a principled manner, which DP will trigger obviation. This is in contrast to previous analyses, which have tended to stipulate an empirically incorrect subject/object asymmetry.

**Question:** How exactly does Merge over Move exert an influence on the binding possibilities in (6) and (14)?

Clearly, we must adopt a movement-based analysis of binding in one form or another. However, we will find that only movement-based analyses of a certain type will yield the correct predictions.

I will now examine two movement-based analyses. The first faces significant difficulties; the second appears to be more promising.

5 Approach 1 (doesn’t work)

Probably the most natural way to link Merge over Move to the Spanish data above can be summarized as follows:

- Local anaphoric binding is derived via A-movement:

(15) John likes [John].

↓

John likes himself.

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7 See Lidz & Idsardi (1998) for an early discussion of this idea. The idea that Merge over Move may explain subject orientation in certain cases of binding goes back to Motomura (2001). See Alboui, Barrie & Chiara (2004) for a detailed account of anaphoric binding in Spanish in terms of A-movement.
(16) Juan se lava [Juan] \\
\hspace{1cm} \downarrow \\
Juan se lava

- Condition B effects derive from a preference for local anaphoric binding over pronominal binding. (And then in turn, a preference for all forms of binding over coreference.\(^8\))
- Since local anaphoric binding is derived via A-movement, it is restricted by Merge over Move.
- Hence, Condition B effects will be highest-DP-oriented, since only when the binder is the highest DP in the clause will there be a licit derivation of local anaphoric binding to block the possibility of pronominal binding.

Under this approach, the Condition B effect in in (5b) (repeated in 17) results from the availability of the hypothetically licit derivation in (18):

\begin{align*}
(17) & \quad * \text{Maria}_1 \text{ has decided} \text{ that } \text{pro}_1 \text{ go-sub to the beach.} \\
(18) & \quad \text{Maria}_1 \text{ has decided} \text{ that } \text{Maria}_1 \text{ go-sub to the beach.}
\end{align*}

**Problem 1**

There is no spellout of (18) which is an acceptable sentence in Spanish:

- The addition of a reflexive se clitic in either the matrix or embedded clause is scarcely conceivable as a means of expressing the intended meaning.
- The use of the emphatic anaphor si mismo/a, as shown in (19), is roughly as unacceptable as English (20):\(^9\)

\begin{align*}
(19) & \quad * \text{Maria}_1 \text{ has decided} \text{ that } \text{si mismo}_1 \text{ go-sub to the beach.} \\
(20) & \quad * \text{John decided} \text{ that himself will go to the beach.}
\end{align*}

**Problem 2**

With regard to the subject-orientation of local anaphoric binding, Merge over Move and Minimality appear to pull in opposite directions. Movement of the embedded subject to

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\(^9\) In some contexts, si mismo/a must be doubled by the reflexive clitic se in Spanish. For completeness, I note here that the addition of se in either the matrix or embedded clause does nothing to improve the acceptability of (19).
the matrix subject position would cross over the matrix object, and would thus appear to violate Minimality:

\[
(21) \quad \text{Maria}_1 \text{ verb a Ines}_2 [\text{CP COMP } [\text{Maria}_1 \text{ V-sub}].
\]

(‘Maria’ moves over ‘Ines’ – Minimality violation?)

If the Movement Theory of Control is correct, then examples such as (22) provide independent reason to believe that Minimality takes precedence over Merge over Move:

\[
(22) \quad \text{John}_1 \text{ persuaded Bill}_2 [\text{TP PRO}_{+1/2} \text{ to leave}].
\]

If so, we would then expect obviation to occur with respect to the object rather than the subject – precisely the wrong result.

6 Approach 2 (more promising)

This approach is based on the assumption that certain instances of pronominal binding are derived via A’-movement:

\[
(23) \quad \text{John}_1 \text{ thinks that } [\text{CP } \text{John}_1 [\text{TP } \text{John}_1 \text{ is intelligent}]].
\]

\[
\downarrow
\]

\[
\text{John thinks that he is intelligent.}
\]

\[
(24) \quad \text{Juan}_1 \text{ cree que Juan}_1 \text{ es inteligente}.
\]

\[
\downarrow
\]

\[
\text{Juan cree que pro es inteligente.}
\]

This gives us the following hierarchy of anaphoric relations:

1. Local anaphoric binding (via A-movement).
2. Long-distance pronominal binding (via A’-movement).
3. LF binding (via introduction of lambda abstractors at LF, or some other suitable technology).
4. Coreference, E-type anaphora, etc.

The advantage of distinguishing levels 2 and 3 in this hierarchy is that it is not necessary to postulate island-violating A’ movement to account for the binding relation in examples such as (25):

\[
(25) \quad [\text{Every guest}_1 \text{ asked } [\text{CP WH-ISLAND}] \text{ what he}_1 \text{ could have for breakfast}].
\]
Condition B

I will take Condition B to be a primitive restriction on the A′ movement involved in deriving pronominal binding (following e.g. Kayne 2002). As shown in (23) and (24), pronominal binding results from the spellout of an A′ trace as a pronoun. Condition B can be stated as the constraint that only A′ traces can be spelled out in this manner:

\[(26) \text{Condition B: If pronominalization applies to } \alpha_0, \text{ then } \alpha_0 \text{ is the tail of a chain } (\alpha_n, \ldots, \alpha_0), n \geq 1, \text{ and } \alpha_1 \text{ is in an A′ position.}\]

Given these assumptions, we can implement a version of the domain-extension analysis by adopting the hypothesis that subjunctives, in contrast to indicatives, do not provide an intermediate A′ landing site in [Spec,CP]. (I will not make any serious attempt to explain why this should be so. However, as an example of the type of thing that might work, consider the following. Kempchinsky’s (1990, 2000) account of the Romance subjunctive crucially involves T-C movement in the subjunctive clause. We might suppose that movement of T to C renders [Spec,CP] (or [Spec,T-CP]) an A-position.)

Returning to (5), repeated here as (27), we see that the contrast between (27a/b) derives from that between derivations (28a) and (28b):

\[(27) \begin{align*}
\text{a. } & \text{Maria_1 ha decidido que } pro_1 \text{ va a la playa.} \\
& \text{Maria has decided that (she) go-IND to the beach.} \\
\text{b. *Maria_1 ha decidido que } pro_1 \text{ vaya a la playa.} \\
& \text{Maria has decided that (she) go-SUB to the beach.}
\end{align*}\]

\[(28) \begin{align*}
\text{a. } & \text{Maria_1 ha decidido } \[\text{CP } [\text{Maria_1 que } \text{TP } [\text{Maria_1 va a la playa}]] \]. \\
& \text{(Indicative)} \\
\text{b. } & \text{Maria_1 ha decidido } \[\text{CP *[Maria_1 que } \text{TP } [\text{Maria_1 vaya a la playa}]] \]. \\
& \text{(Subjunctive – asterisk indicates impossibility of pronominalizing copy)}
\end{align*}\]

Since [Spec,CP] is an A′ position in (28b), pronominalization of the copy of Mary in [Spec,CP] is blocked by (26).

**Question:** if Condition B rules out the use of A′-movement to encode the binding relation in (52), why is it not nonetheless possible to use LF binding to encode this relation?

Reinhart’s (2000, 16) “no sneaking” principle may provide an answer:11

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10 However, Kayne’s proposals differ from the present proposals in a number of respects: (i) Kayne assumes that the pronoun begins as the double of its antecedent, whereas I assume – following Hornstein (2001) – that the trace of the antecedent is spelled out as a pronoun; (ii) Kayne is not explicit regarding the A/A′ status of the movement; (iii) Kayne does not distinguish binding from coreference, and hence is forced to allow movement into deeply nested positions.

11 Note that “no sneaking” is crucially different from Reinhart’s earlier (1982) explanation for why coreference is blocked in (30). Reinhart calls the revised condition Rule I, so I have renamed it “no sneaking” to avoid confusion with the original Rule I of Reinhart & Grodzinsky (1993). I have also taken a couple of liberties with the definition: (i) Reinhart (2000) argues that the notion of coreference should be
(29) **No sneaking:** Do not use interpretative processes at LF to sneak in interpretations which are ruled out by conditions of the narrow syntax (such as Condition B).

This principle is offered by Reinhart as an explanation for why coreference is impossible between *John* and *him* in (30):

(30) John likes him.

*John* cannot bind *him* owing to Condition B. However, Condition B does not regulate coreference, so we still need to explain why *John* and *him* cannot be coreferential. This is where the no sneaking principle steps in. Using coreference to link *him* with *John* is sneaky: it is using the interpretative mechanisms available at LF to circumvent one of the restrictions imposed by the constraints of the narrow syntax.

Now let’s look at (6) again, repeated in (31):

(31) Maria₁ convenció a Ines₂ de que *pro₁/₂* baile mucho. Maria persuaded Ines that (she) dance-sub a lot.

In (28b), we were able to move from the embedded subject position to the matrix subject position, but the resulting chain was ruled out by Condition B. For the same reason, *Maria* can’t bind the embedded subject position in (31). With regard to the matrix object position, by contrast, we cannot even get as far as forming a chain. The crucial point in the derivation is the following:

(32)

\[ [\text{CP de que Ines baile mucho}] \quad (\text{Workspace 1}) \]

\[ a_P \quad (\text{Workspace 2}) \]

\[ \{..., \text{Maria,} ...\} \quad (\text{Items remaining in numeration}) \]

⇒ *Ines* can’t move to become the complement of the preposition *a* because *Maria* remains in the numeration and could be merged as its complement instead.

7 **Conclusion**

- Merge over Move offers a principled explanation for why certain relations are “Highest DP oriented.” replaced by a broader notion of “covaluation”; (ii) Reinhart’s formal statement of “no sneaking” imposes a restriction only on the use of covaluation – Reinhart does not make use of the four-level binding hierarchy outlined above.
• This makes it tempting to exploit MOM in the analysis of Romance obviation effects, since these appear to display highest-DP-oriented Condition B effects.

• There are a number of consequences for binding theory:
  – Certain instances of pronominal binding are derived via A’ movement.
  – Condition B is a primitive constraint on the formation of the A’-chains necessary for pronominal binding. (I.e., Condition B effects cannot always be accounted for in terms of economy.)
  – We need Reinhart’s “no sneaking” condition. Reinhart’s own arguments for this kind of condition are based on strict/sloppy ambiguities with multiple pronouns. The Romance obviation data potentially provide additional support.

References


