



Determining Obligatory Inversion in Spanish WH-Extraction

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1. The Puzzle

1. Yes/No questions

SV Juan quiere salir?
Juan wants leave.INF
VS Quiere Juan salir?
Wants Juan leave.INF
Juan wants to leave?

2. WH Question (what)

VS Qué quiere Juan?
What wants Juan
SV *Qué Juan quiere?
What Juan wants
What does Juan want?

3. WH Question (why)

VS Por qué quiere salir Juan?
Why wants leave.INF Juan
SV ? Por qué Juan quiere salir?
Why Juan wants leave.INF
Why does Juan want to leave?

2. The Explanations

Theoretical Explanation

Adjunct/Argument Asymmetry (Torrego 1984)
PP/NP Asymmetry (Gallego 2006)

Processing Explanation

Similarity in Type: fillers “what,” “who” are more similar in category to subject; subject causes greater interference (Goodall 2010)

4. SV *Qué Juan quiere?

What Juan wants

5. SV ?Por qué Juan quiere salir?

Why Juan wants leave.INF

Additional processing constraints (Goodall 2008):
Judgments deteriorate when subject is D-linked.
Judgments improve when WH phrase is D-linked.

Experiment 1:

Supports a judgment asymmetry that falls along argument and adjunct lines.

Experiment 2:

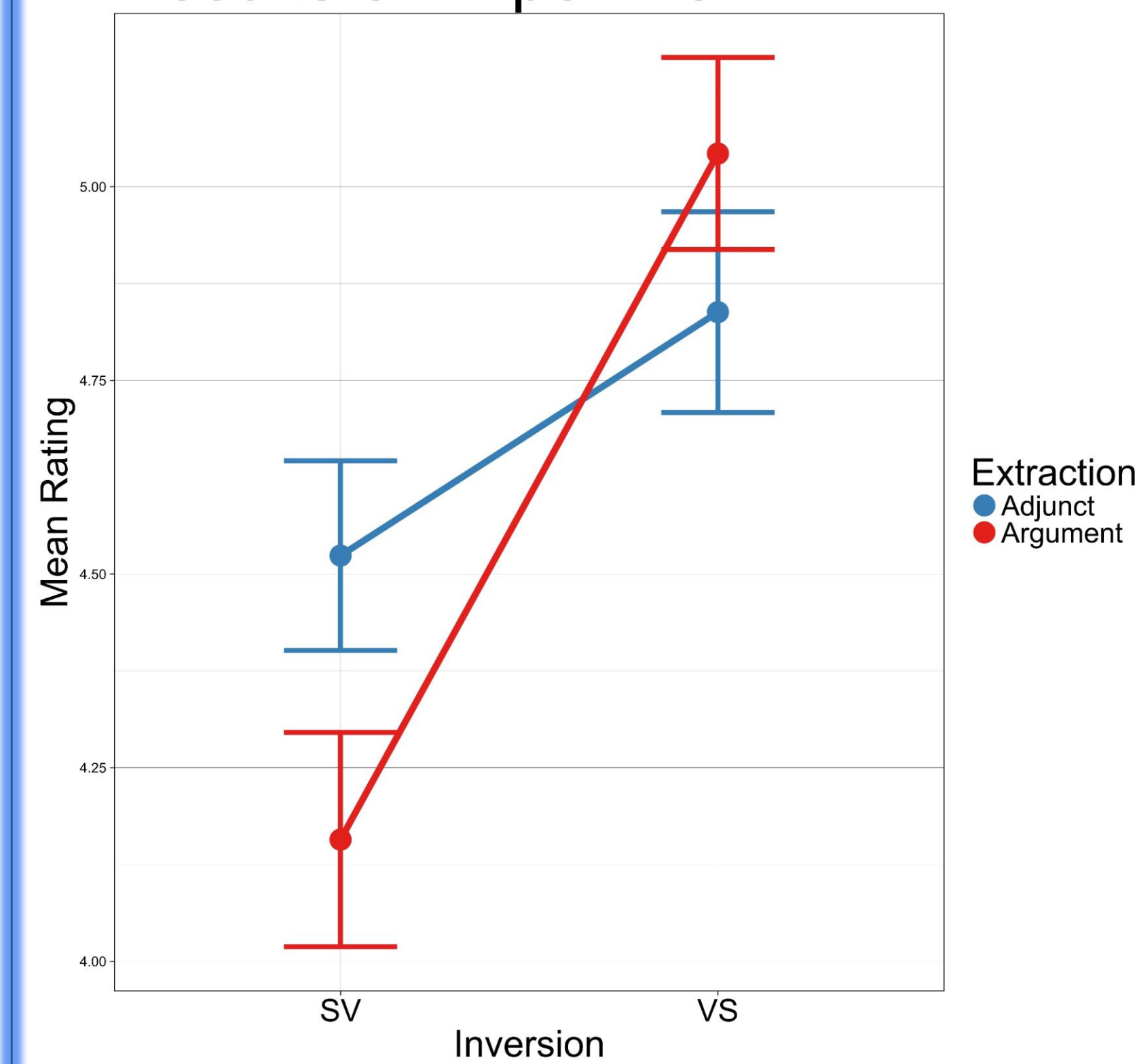
Fails to support grammatical constraints as the root of the asymmetry.

3. Experiment One: Confirming the Argument/Adjunct Asymmetry

N =40 native Spanish speakers; 1-7 Likert Scale Acceptability Judgments
Items=24, Fillers=48

{Argument/Adjunct} {VS/SV}
Su amigo se preguntó {qué/cuándo} {cosió Antia/Antia cosió}
Her friend wondered {what/when} {sewed Antia/Antia sewed}

Results of Experiment 1



Main Effects:

VS order raises judgments.
 $\beta=.318, SE=.14, t(796.4)=-2.3, p<.05$
SV order receives an additional penalty in argument extraction.
 $\beta=-.567, SE=.2, t(803.2)=-2.89, p<.01$
Ratings are higher with argument than adjunct extraction.
 $\beta=-.386, SE=.14, t(803.2)=-2.8, p<.01$

How can we isolate either grammatical constraints or processing constraints as the root of the asymmetry?

“Where” can be either an argument or an adjunct (Goodall 2010).

Grammar Constraint Prediction: SV order should deteriorate Arg “where” more than Adj “where.”

6. Dónde Daniella puso las llaves?
Where Daniella put the keys?

7. Dónde Daniella copió las llaves?
Where Daniella copied the keys?

Similarity in Type Prediction: There should be no difference in SV deterioration between Arg “where” and Adj “where.”

4. Experiment 2: Isolating Grammar v. Processing Constraints

N =32 native Spanish speakers; 1-7 Likert Scale Acceptability Judgments
Items=24, Fillers=48

El casero se preguntó dónde...
The landlord wondered...

+Donde, +Arg {VS/SV}

...donde [puso las llaves Daniella/Daniella puso las llaves]

...where {put the keys Daniella/Daniella put the keys}

+Donde, -Arg {VS/SV}

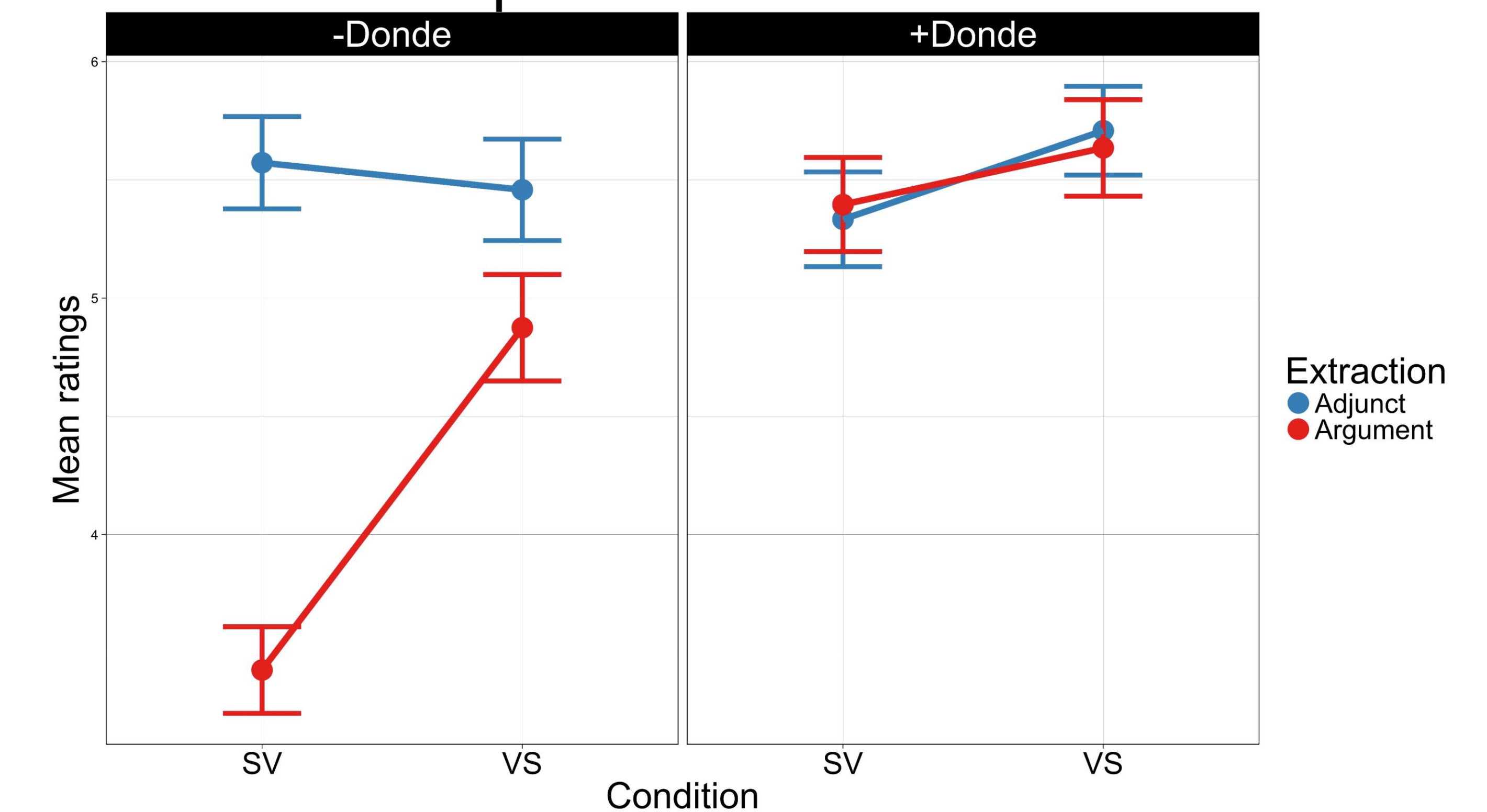
...donde {copió las llaves Daniella/Daniella copió las llaves}

...where {copied the keys Daniella/Daniella copied the keys}

“Que” (what) and “cuando” (when) used as unambiguous arguments and adjuncts in identical constructions.

No significant difference in the effect of inversion between ‘where’ as argument and ‘where’ as adjunct: ($\beta=-0.063, SE=0.17, t=-0.37, p>0.5$).

Results of Experiment 2



5. Conclusions:

Experiment 1: Judgments of wh extraction are sensitive to a distinction that typically aligns with argument/adjunct status.

Experiment 2: No evidence that grammatical adjunct/argument status, alone, lowers judgments of SV constructions.

Selected References: Gallego, Ángel J. (2006). *Phase Effects in Iberian Romance*. In Selected Proceedings of the 9th Hispanic Linguistics Symposium. • Goodall, Grant. (2008). *The Limits of Syntax in Inversion*. Proceedings of the 41st Annual Meeting of the Chicago Linguistics Society. • (2010) Experimenting with WH-Movement in Spanish. *Romance Linguistics*. • Torrego, Esther (1984). *On Inversion in Spanish and Some of its Effects*. *Linguistic Inquiry*.