

## Resumption and Code-switching in the Relative Clauses from Heritage Speakers of Spanish: A Variationist Approach

Previous research on relative clause (RC) accessibility, the mental resources required to process and produce RCs (Lau & Tanaka 2021), is widely documented across many varieties of Spanish (Lope Blanch, 1988; Silva-Corvalán, 1999; Bentivoglio, 2003; Betancourt et al., 2009; Ezeizabarrena, 2012; del Río et al., 2012; Cerrón-Palomino, 2018; Checa-García, 2019; Lau & Tanaka 2021). In the case of heritage Spanish, eye-processing research shows that subject RCs (SRCs) are more accessible than (direct) object RCs (ORCs) (Madsen 2018). Although there are no production studies that attempt to examine whether this accessibility hierarchy holds for production, the use of resumptive pronouns offers an insight into potential difficulties in RC accessibility (McCloskey, 2006). In this pilot study, I analyze the usage resumptive pronouns in corpus data, to examine whether the occurrence of resumption mirrors processing difficulties in RC comprehension. A total of 409 tokens were extracted from 29 speakers, 8 from the *Corpus del Español en el Sur de Arizona* [Corpus of Spanish in Southern Arizona] (CESA) (Carvalho, 2012) and 21 from *Bangor-Miami Corpus* (Bangor-Miami) (Deuchar et al., 2014). As an initial study, a wide range of linguistic and extralinguistic factors were considered based on their significance in previous research on Spanish, along with code-switching within and around the RC. Results from a multivariate regression with mixed effects showed that subject expression, syntactic function, restrictivity, head noun phrase language, and clause language were factors that significantly condition the occurrence of resumption. The direction of the effect indicates that SRCs favor resumption more than ORCs, which is in direct opposition to results of RC comprehension (Madsen, 2018). Furthermore, the RCs showed that code-switching variables significantly condition the usage of resumptive elements, but that language ideologies around code-switching may potentially interfere with its usage. These results outline resumption in RCs as a topic for discussing syntactic variability in the heritage language classroom, especially in the face of negative ideologies surrounding code-switching.

### Examples

RC with resumptive element

(1) “esa gente que también **ellos** también están sufriendo no nomás son como... (Carvalho 2012)”

RC without resumptive element

(2) “pero es algo que ∅ voy a probar algún día (.) porque es algo diferente (Deuchar et al. 2014)”

RC with code-switching

(3) “Había muchas-- **muchos hispanos** que no eran muy-- they weren't very fluent in Spanish (EI) (Carvalho 2012)”

RC with negative attitude towards code-switching

(4) “Sí, al- uh, mi: no sé cómo se dice en español pero mi “pet peeve” (EI) sería cuando la gente mezcla dos idiomas en- en plena oración. Eso es **una de las cosas que me chocan** de veras que (...) (Carvalho 2012)”

**Tables**

<b>Subject Expression</b>				
<i>factor</i>	<i>logodds</i>	<i>tokens</i>	<i>Y/Y+N</i>	<i>factor weight</i>
Expressed	3.545	65	0.154	0.972
Not expressed	-3.545	344	0.006	0.028
<b>Syntactic function</b>				
<i>factor</i>	<i>logodds</i>	<i>tokens</i>	<i>Y/Y+N</i>	<i>factor weight</i>
SRC	2.334	290	0.031	0.912
ORC	-2.334	119	0.025	0.088
<b>Restrictivity</b>				
<i>factor</i>	<i>logodds</i>	<i>tokens</i>	<i>Y/Y+N</i>	<i>factor weight</i>
Non-restrictive	0.875	137	0.058	0.706
Restrictive	-0.875	272	0.015	0.294
BEST STEP-UP MODEL OF RESPONSE Resumption IS WITH PREDICTOR(S): Speaker [random, not tested] and Subject.Expression (1.25e-07) + RC.Type..S...O. (1.96e-07) + Level.of.restrictivity (0.0465) [p-values building from null model]				
BEST STEP-DOWN MODEL OF RESPONSE Resumption IS WITH PREDICTOR(S): Speaker [random, not tested] and Subject.Expression (2.85e-13) + RC.Type..S...O. (3.38e-06) + Level.of.restrictivity (0.0465)				

*Table #1. Multivariate regression including subject expression as an independent variable*

<b>Restrictivity</b>				
<i>factor</i>	<i>logodds</i>	<i>tokens</i>	<i>Y/Y+N</i>	<i>factor weight</i>
Non-restrictive	0.891	137	0.058	0.709
Restrictive	-0.891	272	0.015	0.291

<b>Head NP Language</b>				
<i>factor</i>	<i>logodds</i>	<i>tokens</i>	<i>Y/Y+N</i>	<i>factor weight</i>
Spanish	1.701	289	0.028	0.846
English	-1.701	120	0.033	0.154
<b>Clause Language</b>				
<i>factor</i>	<i>logodds</i>	<i>tokens</i>	<i>Y/Y+N</i>	<i>factor weight vif</i>
English	2.101	124	0.056	0.891 > 2.5
Spanish	-2.101	285	0.018	0.109 > 2.5
BEST STEP-UP MODEL OF RESPONSE Resumption IS WITH PREDICTOR(S): Speaker [random, not tested] and Level.of.restrictivity (0.0173) + Clause.Lang (0.0258) + Head.Noun.Lang (0.00123) [p-values building from null model]				
BEST STEP-DOWN MODEL OF RESPONSE Resumption IS WITH PREDICTOR(S): Speaker [random, not tested] and Clause.Lang (9.36e-05) + Head.Noun.Lang (0.00123) + Level.of.restrictivity (0.00644)				

Table #2. Multivariate regression excluding subject expression as an independent variable

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