Syntactic L1-Attrition and Re-Exposure

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1 - Attachment Biases and (Pseudo-)Relative Clauses

– Given an ambiguous string as in (1), there is crosslinguistic variation in the preferred interpretation of the relative clause (RC; Cuetos & Mitchell, 1988)

(1) a. Spanish "High Attachmen" (HA) Bias
    Alguien disparó contra la criada$_i$ de la actriz$_j$ que$_i$ estaba en el balcón.

  b. English "Low Attachment" (LA) Bias
    Someone shot the maid$_i$ of the actress$_j$ that$_j$ was standing on the balcony.

(2) a. Low Attachment   b. High Attachment
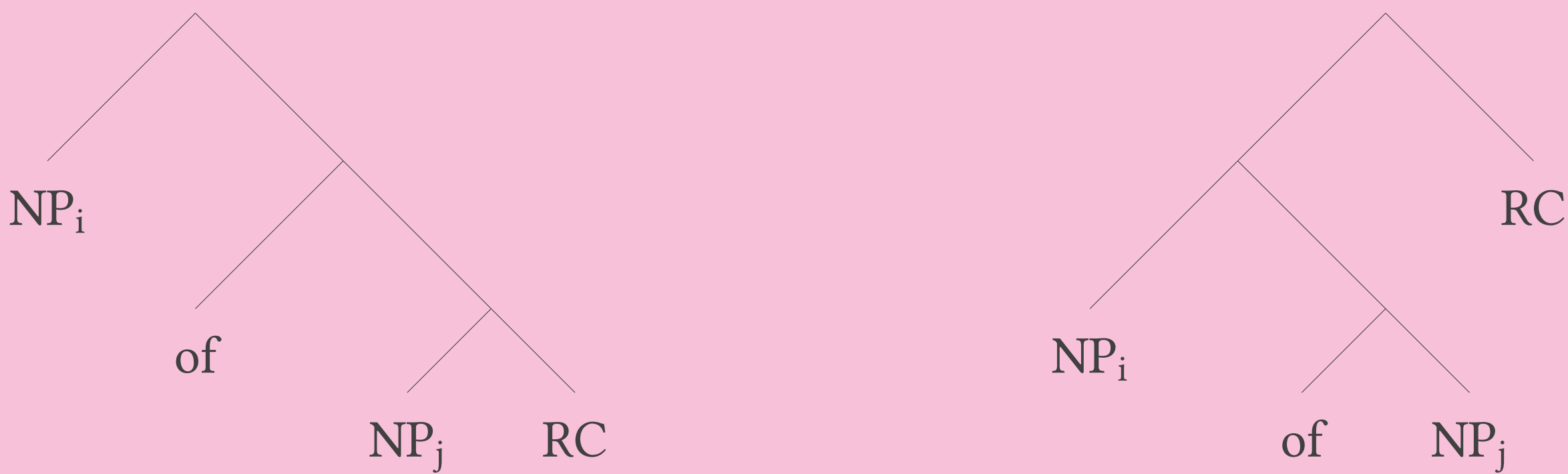
– In HA languages like Spanish or Italian, strings that have been assumed to be RCs may also admit Pseudo-Relatives (PRs), which are not available in English.

– PRs are string identical to RCs, but structurally and interpretively different as shown with a proper name in (3).

(3) a. Ho visto [$_{PR}$ Gianni che correva].   [Italian]
    'I saw John running.'

  b. *I saw John that was running.

– When PRs occur with complex NP contexts as in (1), they **must** be interpreted as attaching to the higher NP.

– The Pseudo-Relative First Hypothesis: When available, PR parsings are universally preferred to RC parsings *ceteris paribus* (Grillo & Costa, 2014).

2 - Attachment Biases and L1-Attrition

– Attachment biases in a native language (L1) may be affected by immersion in a second language (L2) i.e. they may attrite.

– Using a sentence interpretation task, Dussias (2003) found that while monolingual Spanish speakers exhibited a HA bias, bilinguals exhibited an English-like LA bias in their L1 Spanish.

Table 1: Spanish Results from Dussias (2003)		
	Monolinguals	Bilinguals
%HA	74%	28%

– This attrition affects extensively immersed bilinguals but not recent migrants of similar L2 proficiency (Dussias & Sagarra, 2007).

3 - Research Question

(α) Are the previously reported L1-Attrition effects with relative clause attachment biases due to a change in pseudo-relative parsing?

4 - A Sentence Interpretation Task

– To tap attachment biases, an online sentence interpretation task was conducted in Italian.

– To explore the role of PRs, the critical items (N=24) were borrowed from Grillo and Costa (2014).

  ○ PR/RC condition items contain verbs of perception (e.g. to see) which are compatible with PRs.

  ○ RC-only items contain stative verbs (e.g. to live with) which are **incompatible** with PRs.

(4) Conditions

  a. PR/RC Condition
    Gianni ha visto il figlio del medico che correva.   ⟵ PR ✓; RC ✓
    'Gianni saw the son of the doctor (that was) running.'

  b. RC-Only Condition
    Gianni vive con il figlio del medico che correva.   ⟵ PR ✗; RC ✓
    'Gianni lives with the son of the doctor that was running.'

– Each item was presented alone and was followed by an interpretation question (e.g. *Chi correva? Il figlio / il medico* - 'Who was running? The son / the doctor')

– Pronominal distractor items (N = 20) taken from Tsimpli, Sorace, Heycock, and Filiaci (2004) and filler items (N = 26) were included.

5 - Participants

– Participants were native Italian speakers divided into two groups: a control group (living in Italy) and an experimental group (living in an English-speaking country)

Table 2: Overview of Participants		
	Experimental Group	Control Group
Number	32	25
Average Age	30.69	31.04
Mean Length of Residency in Years	>5.45*	-
Mean Self-Rated L2 Proficiency	8.69 / 10	-
Mean Daily English Use in Hours	8.00	-
L1 Re-Exposure in the Prior 3 Months	25 (78.13%)	-

*Some participants responded with "more than 10 years." The mean presented here is therefore a lower bound.

6 - Results

Table 3: % HA Responses		
	Control Group	Experimental Group
PR/RC	77.67%	70.05 %
RC-Only	25.67%	17.72%

– Responses in the critical condition coded as $\pm$ HA and entered in a mixed effect logistic regression as the dependent variable with *condition* and *group* as predictors.

– The model only indicated a significant effect of condition.

Table 4: Regression Output				
	Estimate	Std. Error	z-value	p-value
Intercept	1.53	0.36	-4.29	**<0.01**
PR/RC	3.30	0.26	12.51	**<0.01**
Group	-0.54	0.45	-1.21	0.23
PR/RC:Group	-0.16	0.33	-0.48	0.63

7 - Discussion and Next Steps

– Results replicate the findings of Grillo and Costa (2014) regarding PR/RC and attachment biases.

– Results do not indicate any attrition however, and do not replicate the findings of Dussias (2003) or Dussias and Sagarra (2007).

– As such, the role of PRs in the attrition of attachment biases remains unclear.

– **A Likely Interpretation**: Attrition effects are fragile and may have been obfuscated by re-exposure in the present sample.

  ○ This ties in with Dussias and Sagarra's (2007) observation that attrition is modulated by exposure.

  ○ This has been previously argued for attrition in pronominal reference (Chamorro, Sorace, & Sturt, 2015).

– **Next Step**: To explore this re-exposure interpretation, data collection is ongoing to create 2 experimental groups: re-exposees and non-re-exposees.

References

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