

Phi-features across developmental and acquired disorders

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SSLI CHILDREN HAVE A TENDENCY TO USE MARKED FEATURES WHERE THEY ARE INTERPRETABLE & FOR UNMARKED WHEN THEY ARE UNINTERPRETABLE

SLI & Agrammatism

- SLI: Developmental pathology resulting in the abnormal acquisition of all or some of the following components: syntax, phonology, morphology, semantics, pragmatics
- Agrammatism: Acquired deficit associated to Broca's aphasia resulting on the omission or substitution of functional words.

Objectives:

Unravelling the patterns of deficit in handling *phi*-features in verbal agreement, clitics & articles in Spanish and Catalan syntactic-SLI & agrammatism.

Phi-features in Ibero-Romance

- Person: 1st, 2nd, 3rd.
- Number: Sg, Pl.
- Gender: M, F (no N).

	Sing Clitics	Plural Clitics
Omission Errors	44 (20)	26 (15)
Substitution Errors	56 (25)	74 (42)

$\chi^2 = 3.667, p < .05$

Error Type	Target Type			
	LO	LA	LOS	LAS
Gender error	77 (10)	75 (9)	5 (1)	5 (1)
Number error	0 (0)	0 (0)	65 (13)	68 (15)
Gender and number	0 (0)	8 (1)	30 (6)	9 (2)
Ind.object (le/les)	23 (3)	17 (2)	0 (0)	18 (4)

- Methodology: Elicited production
- Similar percentage of omission & substitution across clitic types.
- Significantly more substitution for plural clitics.
- Substitution of "one feature"

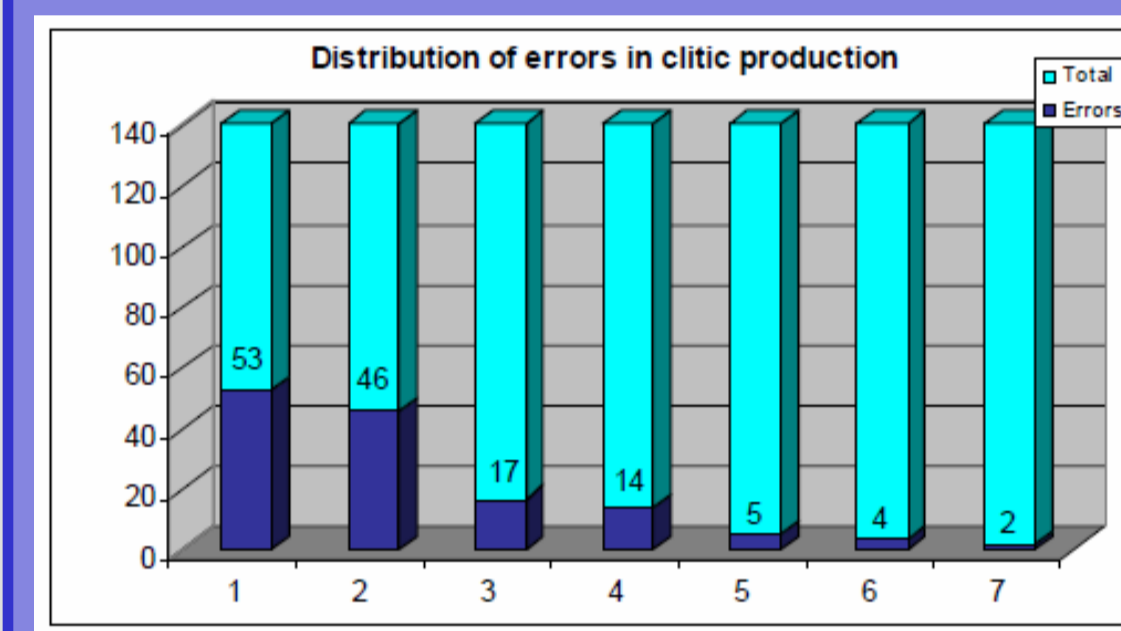
Agrammatism

- Findings on typologically different languages (Miceli *et al.* 1989; Nespoulous *et al.* 1988; Stavrakaki & Kouvara 2003) show high attested rates of clitic omission.
- Martínez-Ferreiro (2010): 15 Catalan, Galician and Spanish agrammatics

VERB AGREEMENT

Syntactic SLI (S-SLI)

- Impaired use of verb agreement (also of copular & auxiliary verbs) (for Spanish & Catalan: Bedore & Leonard 2001, Sanz-Torrent 2004, Sanz-Torrent *et al.* 2008).
- Overgeneralization of the third person singular forms (Bedore & Leonard 2001).
- Sanz-Torrent *et al.* 2008: 6 Catalan-Spanish bilingual children.



- Methodology: Elicited production
 - Object clitics more severely impaired than reflexive pronouns (45.1% vs. 83.9% errors).
 - Omission & substitutions by full-DPs.
1. Repetition of the given DP (53/141)
 2. Clitic omission (46/141)
 3. Wrong clitic selection (17/141)
 4. Wrong answer (14/141)
 5. Clitic doubling (5/141)
 6. Clitic reduplication (4/141)
 - Duplication of the reflexive form (3/4)
 - Reflexive se + DO clitic (1/4)
 7. Dks (2/141)

	SLI T1	SLI T2
First person	.15 (.21)	.22 (.09)
Second person	.04 (.07)	.04 (.03)
Third person	.80 (.19)	.73 (.11)
Singular	1.00 (.00)	.91 (.08)
Plural	.00 (.00)	.09 (.08)

Notes: The data are means of proportions. In brackets: standard deviation.

- Methodology: interviews
- Stage 1 (3;9) & 2 (4;9)
- High occurrence of infinitives
- Predominance of the present indicative

Agrammatism

- Though subject-verb agreement is not completely spared, tense errors more significant (Friedmann & Grodzinsky (1997, 2000); Wenzlaff & Clahsen (2004) for German).
- The use of verb agreement either unimpaired or impaired in such a way that subjects relatively randomly choose wrong features.
- Martínez-Ferreiro (2010): 15 Catalan, Galician & Spanish agrammatics

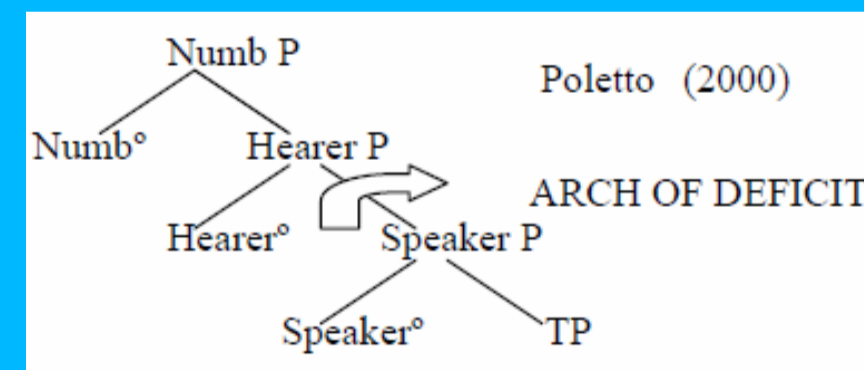
	% correct	(correct/total)
Catalan	94.35%	(117/124)
Galician	99.18%	(121/122)
Spanish	99.20%	(124/125)
Total	97.54%	(362/371)

Classification of Agreement errors according to frequency:

1. Non-finite verb forms (2/9)
2. Omissions of main verbs (2/9)
3. 1st pl. substitutes for 3rd pl. (2/9)
4. 1st sg. substitutes for 1st pl. (1/9)
5. 1st sg. substitutes for 3rd sg. (1/9)
6. 3rd pl. substitutes for 1st pl. (1/9)

However: Chinellato 2002, 2004

- Number agreement hardly ever produced and generally substituted with singular forms
- First person singular always spared
- [\pm speaker] - intact
- [\pm hearer] - underspecified
- [\pm number] - inaccessible



DETERMINERS

Syntactic SLI (S-SLI)

- Significant difficulty with articles (Anderson & Souto 2005; Bedore & Leonard 2001, 2005; Restrepo & Gutiérrez-Clellen, 2001).
- No agreement on whether omissions or substitutions are more prevalent (Anderson 1999; Anderson & Souto 2005; Bedore & Leonard 2005; Restrepo & Gutiérrez-Clellen, 2004).
- Restrepo & Gutiérrez Clellén (2001): 15 Spanish-speaking children

Error Type	EL	LA	LOS	LAS
Gender error	58 (59)	12 (41)	3 (25)	3 (27)
Number error	4 (4)	0 (0)	0 (0)	8 (73)

- Methodology: picture description, interview with the child, and story retelling.

Agrammatism

- Omissions and substitutions of articles documented for several languages (ex. Dutch & German – De Roo 1999; Ruigendijk & Bastiaanse 2002; Bastiaanse *et al.* 2003).
- Arsenijević, Martínez-Ferreiro and Rofes (2011) : 1 Catalan moderate agrammatic.

- Methodology: elicited production.

- Out of 25 items containing a singular subject DP, 8 instances of feminine singular articles with masculine singular DPs were documented.

CLITICS

Syntactic SLI (S-SLI)

- Children with SLI performed worse than MLU-matched and AGE-matched children (Bedore & Leonard 2001; Bosch & Serra 1997; Jacobson & Schwartz 2002).
- S-SLI show two types of errors with clitics: omission and replacement (Bedore & Leonard 2001; Bosch & Serra 1997; Jacobson, 2002; Simón-Cerejido & Gutiérrez-Clellen 2007).
- De la Mora Gutiérrez *et al.* (2004): 10 SLI Spanish speaking children

CONCLUSION:

- S-SLI and agrammatism two independent deficits.
- Syntactic SLI:
 - Verbal agreement: Overgeneralization of the third person singular forms. Deletion of marked features of person and number.
 - Clitics: Overuse of third person masculine. Unmarked feature values of singular & the masculine value of gender.
 - Determiners: Marked forms of gender & number. They err far less on plural. They tend to replace singular masculine with its feminine counterpart.