

Pronominal subjects at the interfaces:

evidence from American English learners of Spanish in the CEDEL2 corpus.

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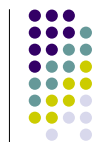
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THE PHENOMENON: Pronominal subjects in L1 English - L2 Spanish



• Early findings (1980s)

- Licensing mechanisms: acquired early
 - Learners of L2 Spanish know from early stages that overt and null prn subjects can alternate.

• Recent findings (late 1990s, 2000s):

- Discursive properties acquired late and persistently problematic
 - Distribution of overt and null pronouns constrained by discourse
 - Deficits at syntax-discourse interface

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Previous studies: SLA

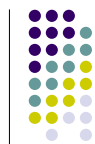


- **Formal features:** Learners omit (=license) pronominal subjects from early stages of acquisition
 - Licerias 1989, Phinney 1987, Lozano 2002b
Él / Ø come pasta
'He / Ø eats pasta'
- **Discursive features:** Learners acquire the discursive constraints (topic, topic-shift) late: **persistently problematic** → **overproduction in topic contexts**
 - Perez-Leorux et al 1999, Perez-Leroux & Glass 1997, 1999, Al-Kasey & Perez-Leroux 1998, Lozano 2002a, 2003, 2006, Montrul & Rodríguez-Louro 2006.
La abuela piensa que #ella regará las plantas
Grandma thinks that she will water the plants
- **Unidirectionality:**
 - Most studies have found **overproduction** of overt subjects in topic contexts
 - But some bidirectionality attested as well (Montrul & Rodríguez-Louro 2006)

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- "Morphosyntactic aspects are learned before discourse-pragmatic properties of the distribution of null/overt subjects" (Montrul & Rodríguez-Louro 2006)
 - "Knowledge of the marking of the topic/focus distinction is acquired over time and experience" (Perez-Leroux & Glass 1999:242)
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Previous studies: Attrition



- e.g., Toribio 2000, Satterfield 2003
 - Overproduction of overt subjects in topic contexts:

Yo no lo vi, #él estaba en Massachussets ... #él estaba en Nueva York ... #Él estaba donde Eugenia ...

'I didn't see him, he was in Massachussets ... he was in New York ... He was at Eugenia's place ...'

Cuando #ellos vienen aquí, #ellos lo pierden

'When they arrive here, they lose it (i.e., they lose their mother tongue Spanish)

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The wider context: Syntax before discourse



- The “**syntax-before-discourse**” phenomenon
 - Observed in 2 properties of **pro-drop parameter**
- Observed in other acquisition contexts:
 - L2 acquisition of pronominals (other than L2 Spa):
 - L1 SPANISH – L2 GREEK: Lozano (2003)
 - L1 ENGLISH - L2 ITALIAN: Sorace & Filiaci (2006)
 - L1 ITALIAN – L2 SPANISH: Bini (1993)
 - L1 CROATIAN – L2 ITALIAN: Kras (2006)
 - L1 JAPANESE – L2 ENGLISH: Polio (1995)
 - L2 acquisition of SV inversion
 - Lozano (2006a, 2006b), Belletti & Leonini (2004), Camacho (1999)
 - L1 bilingualism of pronominals
 - Serratrice (2004), Serratrice & al (2004), Tsimpli et al (2004), Pinto (2006), Paradis & Navarro (2003)
 - L1 attrition of pronominals and SV inversion:
 - Montrul (2004), Satterfield (2003), Tsimpli et al (2004), Helland (2004)
 - L1 acquisition of pronominals
 - Grisntead (2004), Chien & Wexler (1990), Grodzinsky & Reinhart (1993)
- See Sorace (2004) for overview:
 - “**interfaces**, because they are more complex than narrow syntax, are inherently more difficult to acquire” (p. 144)⁵

Explaining the causes



- Sorace (2004, 2005, 2006), Sorace & Filiaci (2006)
 - 2 main approaches:
 - **① REPRESENTATION DEFICITS**: Deficits with features at syntax-discourse interface (L2 Spa: Lozano 2002, 2003)
 - Underspecification of (interpretable) features like [Topic], [Focus], [Topic-Shift]
 - **② PROCESSING DEFICITS**: Processing deficits at syntax-discourse interface (L2 Spa: Lozano 2006c)
 - Default processing mechanism: overt pronoun

STILL MISSING IN THE LITERATURE

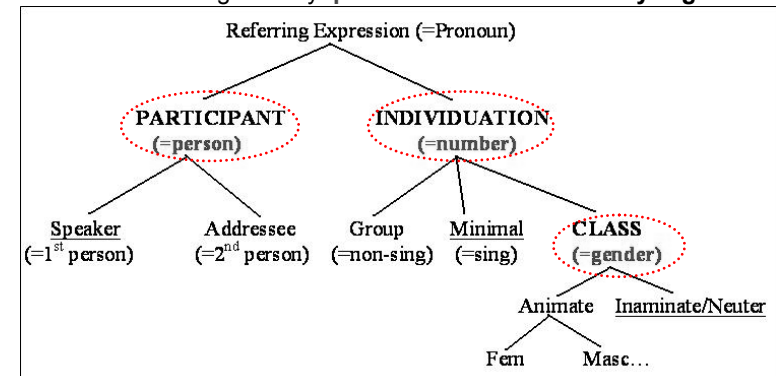


- In previous studies:
 - Most evidence comes from **3rd singular** only
 - BUT claims about the **whole** pronominal paradigm (singular: 1st, 2nd, 3rd; plural: 1st, 2nd, 3rd)
- This study:
 - Evidence from the whole paradigm
 - Deficits are selective:
 - Not all persons in the paradigm are equally vulnerable at syntax-discourse interface
 - Birectinuality:
 - Both overt and null pronouns are used apragmatically.

FEATURE GEOMETRY ANALYSIS Harley & Ritter (2002)



- Pronominal feature geometry: part of UG → hierarchically organised



- Traditional distinction (Jespersen, Bühler, Bloomfield, Benveniste, etc):
 - Speech-act participants vs. non-participants
 - Speech-act participants: Deictic use of pronouns (1st, 2nd)
 - Speech act non-participants: Anaphoric use of pronouns (3rd)

Implications for SLA

PRONOMINAL DISTRIBUTION at SYNTAX-DISCOURSE:



TOPIC

- Topic = known information
- Topic continuity is marked via **null pronoun**

- [Previous context: talking about the main character of a film]

En la película "Escondido" el protagonista tiene una familia y Ø trabaja en un programa de televisión. Un día Ø empieza a recibir videos anónimos...

[RSZ, Spa native, CEDEL2 corpus]

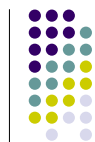
'In the film "Hidden", the main character has a family and he works in a TV program. One day he starts receiving anonymous videos...'

Theoretical basis for pronominal distrib in discourse:

Alonso-Ovalle et al 2002, Lozano 2003, Luján 1999, Rigau 1986, Picallo 1994, Alonso-Ovalle & D'Introno 2000, Fernández-Soriano 1989, 1993, 1999, Montalbetti 1984, 1986, etc, etc.

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PRONOMINAL DISTRIBUTION at SYNTAX-DISCOURSE: TOPIC-SHIFT



- Change of referent requires topic-shift: use of **overt pronoun or full NP**

- [Previous context: talking about the main characters of the film "The illusionist", a man and a woman]

OVERT PRONOUN: La última película que he visto es la de "El Ilusionista" ... Los protagonistas son dos jóvenes que se conocen y se enamoran. El es de clase baja, mientras que ella es de familia noble ... [SPH, Spa native, CEDEL2 corpus]

"The last film I saw is "The illusionist" ... The main characters are two young people who meet and fall in love. He comes from a working-class family, whereas she comes from a noble family..."

FULL NP: Un día el príncipe y su prometida acuden a ver el espectáculo ... El príncipe sospecha de que su prometida le es infiel y Ø manda a uno de sus secuaces a perseguirla ... Al final, el ilusionista y la chica preparan su huida ... El príncipe termina suicidándose y, al final, el ilusionista y la chica consiguen estar juntos [SPH, Spa native, CEDEL2 corpus]

"One day, the Prince and his fiancé go to see the show ... The Prince suspects that his fiancé is cheating on him and he tells one of his henchmen to follow her ... At the end, the illusionist and the girl prepare their escape ... The Prince ends up committing suicide and, at the end, the illusionist and the girl get together".

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DATA: CEDEL2 corpus [Corpus Escrito del Español L2]



- L1 English – L2 Spanish
- Also: native Spanish subcorpus (for comparative purposes)
- All proficiency levels
- 3 online forms:
 - Learning background
 - Spanish placement test (UWPT: University of Wisconsin Placement Test)
 - Composition

 <http://www.uam.es/woslac/start.htm>

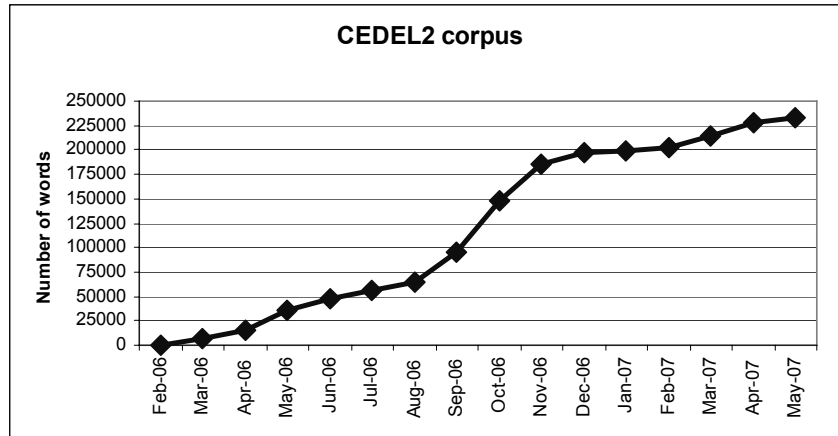
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The screenshot shows the website for the Corpus Escrito del Español L2 (CEDEL2). At the top, there is a navigation bar with 'HOME', 'CEDEL2', 'PROJECTS', 'RES. PROGRESS', 'MEMBERS', and 'DOCS'. The main heading is 'Corpus Escrito del Español L2 (CEDEL2)'. Below this, there is a section titled 'Instructions' with the text: 'Please click on step 1 and fill in the online form. Then do the same with step 2 and step 3.' A note below says: '[NOTE: You will be asked for a username & password in Step 3: if you do not have them already, please email cedel2login@yahoo.com now to receive them].'

The instructions are presented as a vertical flowchart with three steps:

- STEP 1:** Your learning background
- STEP 2:** Brief composition in Spanish
- STEP 3:** Spanish placement test

DATA: CEDEL2 corpus:



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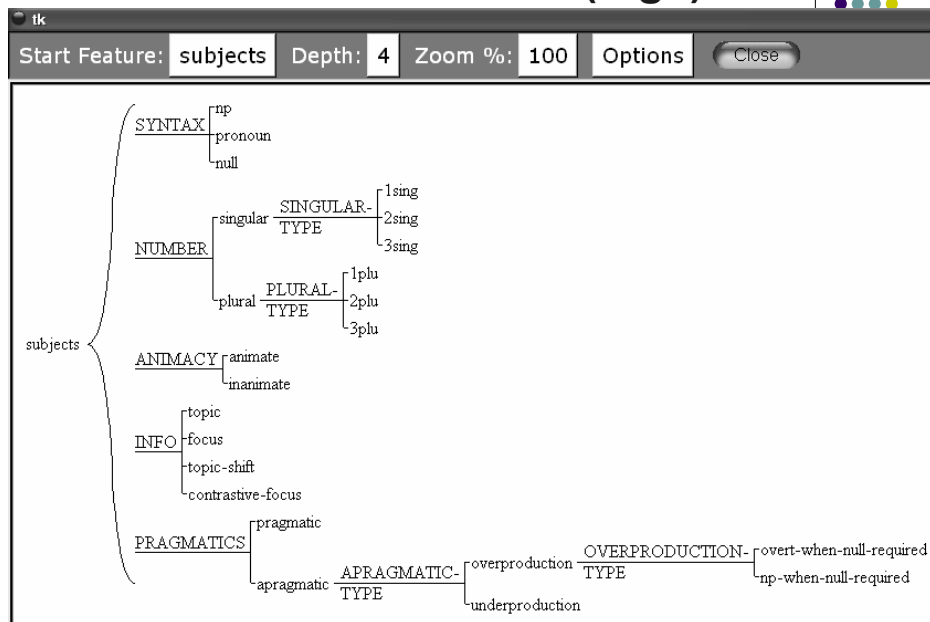
SOFTWARE: UAM Corpus Tool, v. 1.0



- FREE SOFTWARE: <http://www.wagsoft.com/CorpusTool/>
- Developed by Mick O'Donnell (Universidad Autonoma de Madrid)
- Annotates segments
 - A segment can be any linguistic unit:
 - Morpheme
 - Word
 - Phrase
 - Sentence
 - Text
- Each annotation is a tag.
- XML-compatible.

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ANNOTATION SCHEME (tags)



SOFTWARE: TAGGING



intento suicidarse a causa de problemas laborales y amorosos. La familia debe desplazarse al completo, por sorpresa, a un concurso de talentos infantiles en el que debe participar la niña a más de 1000 km. de distancia (desde Albuquerque a California). En el viaje han de lidiar con problemas personales muy importantes, aquellos que han marcado su vida hasta el momento: el tío se encuentra con el amante que lo traicionó, el padre se da cuenta de que su socio lo ha engañado y lo ha dejado en la bancarrota, el hijo mayor descubre que es daltónico y ello le impedirá ser piloto, su sueño, y el abuelo, el peor parado de la historia, muere por sobredosis de cocaína cuando era lo único que lo hacía salir de una vida "anodina"... Curiosamente, las únicas personas que no sufren un gran choque emocional por lo que les ocurre son las mujeres: la madre y la niña (aunque ésta no gana el concurso).

Assigned: subjects, null, singular, 1sing, animate, topic, pragmatic

Gloss: (empty)

Comment: (empty)

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HYPOTHESES



• 2 HYPOTHESES

- Based on previous research and the Feature Geometry:
- H1: Deficits at syntax-discourse interface are **selective**:
 - Robustness and native-like knowledge:
 - speech-act participants: **1st and 2nd**
 - **3rd neutral**
 - Vulnerability: **3rd animate**
- H2: **Bidirectionality**
 - Overuse of overt pronouns in topic contexts
 - Underuse of null pronouns if topic-shift contexts

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SUBJECTS



- 2 learner groups (**L1 AmEng – L2 Spa**): Students of L2 Spa at American Universities, placement program in Spa-speaking country.
 - **Upper Advanced**: 98%-100% proficiency
 - **Lower Advanced**: 91%-95% proficiency
- 1 Spanish native **control group**
- Proficiency measure: UWPT (*University of Wisconsin Placement Test, 1998*)
- Written compositions:
 - For this study, mostly:
 - 1. Talk about one of your recent travels. [→1st person]
 - 2. Summarise a film you have seen recently. [→Topic, Topic-Shift, 3rd person]
 - 3. Talk about your last holidays. [→1st person, 3rd person, Topic, Topic-shift]

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Group	Initials	Proficie	Age	Age Exp	VarietyEng	Yrs instruct	Stay (yrs;mts)	# words	# tags	% subjects
UppAdv	ELS	100%	25	15	AmEng	5	18	647	40	6.2%
	JSD	100%	20	12	AmEng	9	13	819	41	5.0%
	KEM	100%	28	20	AmEng	8	10	1032	65	6.3%
	KEM2	100%	28	20	AmEng	8	10	866	50	5.8%
	OPE	98%	48	15	AmEng	11	17	798	43	5.4%
	CPB	98%	21	11	AmEng	11	3	1010	45	4.5%
	MEA	98%	52	3	AmEng	?	204	865	38	4.4%
	JGP	98%	58	13	AmEng	7	6	554	27	4.9%
	LP	98%	51	16	AmEng	6	4	781	46	5.9%
	JEL	98%	20	13	AmEng	8	7	816	58	7.1%
								8188	453	5.5%

Group	Initials	Proficie	Age	Age Exp	VarietyEng	Yrs instruct	Stay (yrs;mts)	# words	# tags	% subjects
LowAdv	ARGL	95%	49	16	AmEng	?	9	981	63	6.4%
	SAR	95%	58	20	AmEng	3	12	858	46	5.4%
	DKH	95%	28	6	AmEng	15	3	870	65	7.5%
	AK	95%	23	13	AmEng	10	1	907	63	6.9%
	SMG	93%	19	16	AmEng	3	1	840	65	7.7%
	KMH	93%	21	10	AmEng	11	4	834	47	5.6%
	CCO	93%	20	14	AmEng	5	0	849	44	5.2%
	SMM	91%	18	13	AmEng	6	0	705	50	7.1%
	CN	91%	55	26	AmEng	3	228	871	42	4.8%
	ACC	91%	25	12	BrEng	2	7	806	43	5.3%
								8521	528	6.2%

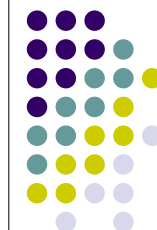
Group	Initials	Age	# words	# tags	% subjects
SpaNats	MSCL	33	642	17	2.6%
	GDC	51	392	15	3.8%
	CAC	33	377	17	4.5%
	MCL	40	667	38	5.7%
	AHN	33	470	30	6.4%
	ENB	39	442	21	4.8%
	MHMR	56	335	17	5.1%
	CLB	32	456	17	3.7%
	RSZ	26	538	27	5.0%
	MDD	32	422	28	6.6%
	SPH	30	372	32	8.6%
	CMM	33	841	40	4.8%
		5954	299	5.1%	

SUBJECTS (cont'd)

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RESULTS

PERSON and NUMBER

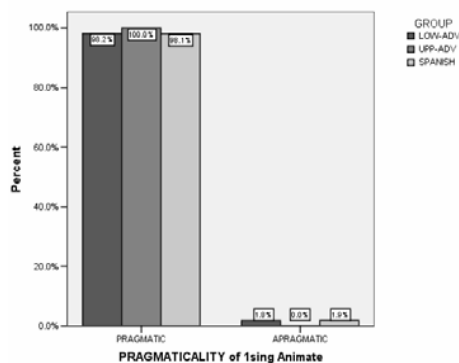


DATA ANALYSIS:
analysis of frequencies
 χ^2 inferential stats to check significance

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RESULTS: 1sing Animate

yo/Ø 'I'

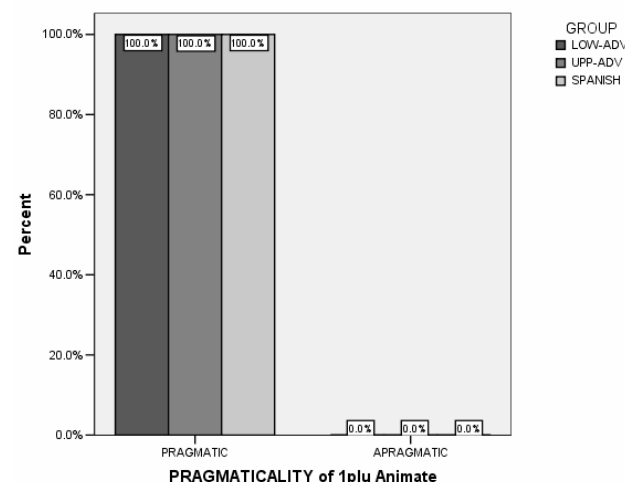
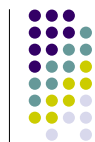


- All groups: Animate
- All groups: mostly pragmatically correct
 - No sig differences between groups
- **CONCLUSION:**
 - Low-Adv = Spa
 - Upp-Adv = Spa

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RESULTS: 1plu Animate

nosotros/nosotras/Ø 'we'



- All groups: Animate
- All groups: pragmatically correct
- **NO Sig differences** between learners and Spanish
- **CONCLUSION:**
 - Low-Adv = Spa
 - Upp-Adv = Spa

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RESULTS: 2sing, 2plu

tú/Ø 'you'
vosotros/vosotras/Ø 'you all'

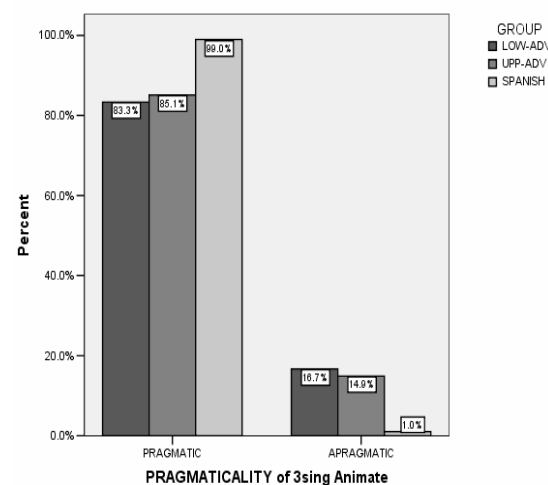


- **2nd sing: tú 'you'**
 - All groups: Animate
 - All groups: pragmatically correct
 - All groups: Extremely low freq, though:
 - Upp-Adv: N=1
 - Low-Adv: N=1
 - Spanish: N=0
- **2nd plu: vosotros / vosotras 'you all'**
 - All groups: Animate
 - All groups: pragmatically correct
 - All groups: Extremely low freq, though:
 - Upp-Adv: N=1
 - Low-Adv: N=1
 - Spanish: N=0

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RESULTS: 3sing Animate

NP/él/ella/Ø 'he/she'

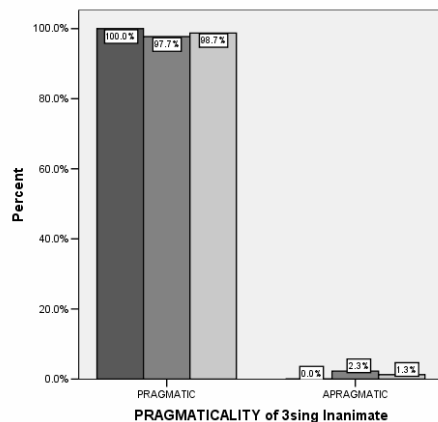


- Learners: considerable % of pragmatically incorrect (**17%, 15%**)
- Natives: pragmatically correct
- **Sig differences** between learners and Spanish
- **CONCLUSION:**
 - Low-Adv ≠ Spa
 - Upp-Adv ≠ Spa

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RESULTS: 3sing Inanimate

NP/ello/Ø 'it'

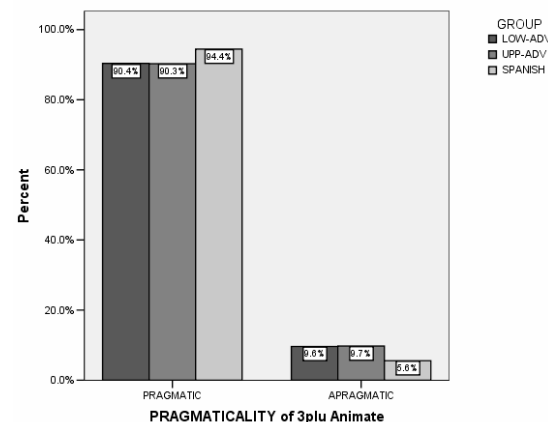


- All groups: pragmatically correct
- **NO sig differences** between learners and Spanish.
- **CONCLUSION:**
 - Low-Adv = Spa
 - Upp-Adv = Spa

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RESULTS: 3plu Animate

NP/ellos/ellas/Ø 'they'

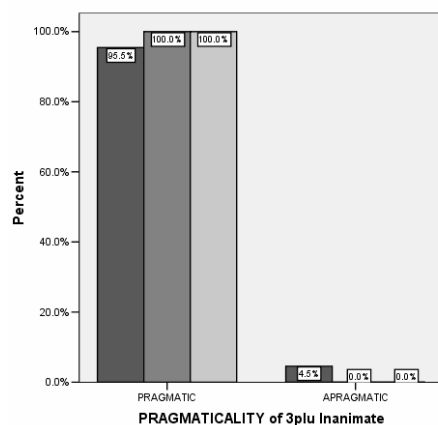


- All groups: mostly pragmatically correct
- **NO sig differences** between learners and Spanish.
 - **BUT: learners higher apragmatic** than Spanish (10%, 10%)
- **CONCLUSION:**
 - Low-Adv = Spa
 - Upp-Adv = Spa

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RESULTS: 3plu INANIMATE

NP/Ø 'they'



- All groups: pragmatically correct **(except for 4.5% in Low-Adv, which corresponds to 1 example only)**
- **NO sig differences** between learners and Spanish.
- **CONCLUSION:**
 - Low-Adv = Spa
 - Upp-Adv = Spa

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SUMMARY OF RESULTS: PERSON & NUMBER



	SINGULAR	PLURAL
1st	No problem. Learners behave statistically like Spanish.	No problem. Learners behave statistically like Spanish.
2nd	No problem. Learners behave statistically like Spanish. [BUT more research needed due to low frequencies]	No problem. Learners behave statistically like Spanish. [BUT more research needed due to low frequencies]
3rd	Problematic: Animate Learners behave differently from Spanish. No problem: Inanimate Learners behave statistically like Spanish.	No problem: Animate Learners behave statistically like Spanish. BUT learners more apragmatic than Spanish (n.s.) No problem: Inanimate Learners behave statistically like Spanish.

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RESULTS

APRAGMATICALITY (=types of errors)



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RESULTS: Apragmaticality of Topic

- Overproduction of overt pronoun in topic-continuity context:

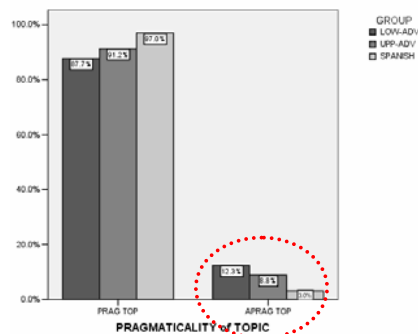
[Context: Talking about two characters in the film "Volver": the mother and Penélope Cruz]
 La madre ha vuelto para pedirle perdón a Penélope, porque #ella no sabía que Penélope había sido abusada por su propio padre... [JEL, Upp-Advanced, CEDEL2 corpus]

[Context: Talking about the main character of the film "Spanglish"]
 La madre no puede hablar inglés pero Ø es muy trabajadora. #Ella empieza a trabajar ... #Ella no puede comunicar[se] con esta familia ... [SMM, Low-Advanced, CEDEL2 corpus]

- Overproduction of full NP in topic-continuity context:

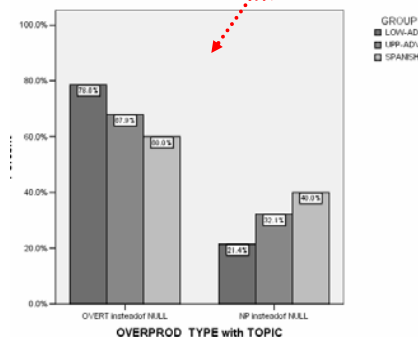
[Context: Talking about the main character in the film "Spanglish"]
 La trabajadora está muy celosa y no le gusta la situación. A pesar de la situación, #la trabajadora se queda en la casa y Ø continúa a trabajar... [SMM, Low-Advanced, CEDEL2 corpus]

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RESULTS: Apragmaticality of Topic

- Both learner groups differ significantly from Spanish (12%, 9% vs. 3%)
 - UppAdv ≠ Spa
 - LowAdv ≠ Spa
 - UppAdv = LowAdv
- BUT Learners: trend towards native norm.
- Learners significantly produce more overt material when null is required



- 2 overproduction types:
 - Overt PRN > Full NP (when null is required).
- No sig differences in overproduction rates.

- CONCLUSION**

- To mark topic continuity, learners significantly overproduce overt material when a null pronoun is required.

RESULTS: Apragmaticality of Topic-Shift

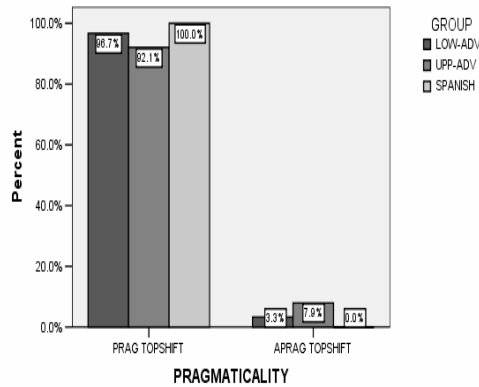
- Underproduction of overt pronoun in topic-shift contexts (=production of Ø) → ambiguity

[Context: Describing the film "Amores possíveis": they are various characters: Carlos, Julia, María, la madre (de Julia), el padre (de Carlos)]

En la tercera [película], #Ø deja su romance con Julia y #Ø regresa a su esposa, que en mi opinión #Ø sabía lo que estaba pasando con su esposo pero nunca #Ø quiso decirle nada sabiendo que #Ø tenía [que] hacer su propia decisión de volver a estar con ella.

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RESULTS: Apragmaticality of Topic-Shift



- **Learners:** very low percentages of underproduction (3%, 8%)
- **Natives:** no underproduction (0%)
- **Learners do not statistically differ from natives:**
 - Upp-Adv = Spanish
 - Low-Adv = Spanish
- **BUT** learners do commit some underproduction violations.
- **CONCLUSION**
 - Technically, learners behave like Spa natives, though they produce some underproductions.

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CONCLUSION



- Previous research:
 - Deficits when overt/null pronouns are constrained by topic and topic-shift at syntax-discourse interface
- Implication: Deficits with **Economy Principle** at syntax-discourse interface
 - Chomsky's '*Avoid Pronoun Principle*'
- This study:
 - Deficits at syntax-discourse interface are **SELECTIVE**:
 - Robust 1st and 2nd persons (sing & plu)
 - speech-act participants
 - deictic use of pronouns
 - Robust 3rd person inanimate (sing)
 - Vulnerable 3rd person animate (sing & plu)
 - Anaphoric use of pronouns
 - **BIDIRECTIONALITY**:
 - Overproduction of overt pronoun (and full NP) to mark topic-continuity
 - Mild underproduction (use of null to mark topic-shift)
- Further research:
 - Pronominal Feature Geometry (Harley & Ritter 2002) and SLA of pronominals
 - Limitations of corpus data. Experimental data needed (whole pronominal paradigm)

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THANK YOU