Slide 1

Discourse before *Syntax* in non-native grammars: converging evidence

Workshop on Interfaces in L2 Acquisition
Faculdade de Ciências Sociais e Humanas
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Preliminaries

- **Shift of emphasis in linguistic theory**:

  How syntactic knowledge interacts with other types of knowledge [Chomsky's 1995 Minimalist Program]

  - Much research in recent years, within what is generally known as '**biolinguistics**', focuses on the properties which (external) interface conditions impose on the design of the language faculty [Chomsky 2005]

    [i.e. conditions imposed by the fact that the output of the computational system has to be interpreted by other cognitive systems: sensory-motor systems and conceptual-intentional systems.]

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Preliminaries

- **Shift of emphasis in L2 acquisition**:

  L2 research has moved on:
  - *from* questions related with parameter resetting and accessibility of UG.
  - *to* how syntactic knowledge interacts with other components of grammars and cognitive (sub)systems in the non-native grammars of L2 learners.

    [White 2009]
  - A number of studies have shown that linguistic phenomena at the *interfaces* are specially vulnerable in both L1 and L2 acquisition.   [work by Sorace and colleagues].

  The study of word order in non-native grammars lends itself to this type of approach: interaction of syntactic and pragmatic factors (as well as processing factors)

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Aim of the presentation

- To discuss current hypotheses in the L2 literature according to which:

  Failure to acquire a fully native-like L2 grammar can be attributed to difficulties experienced by L2 learners at integrating material at the interfaces.

  - Cross-linguistic influence (transfer) as a possible source of those difficulties:
    - Syntactic (structural) features are unproblematic
    - Syntax-discourse interface features are problematic: they present residual optionality in L2 and show permeability to cross-linguistic influence, which persists into near-native levels of proficiency

      [syntax before discourse]

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Outline

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Slide 2

1. Introduction:

1.1. The design of the Language Faculty

1.2. VS Order in English and Romance

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Slide 3

The language faculty

- Chomsky (1995)

LEXICON

H₁

COMPUTATIONAL SYSTEM
Syntax

PF   LF

H₂   **H₃**

SM systems   C-I systems

Slide 4
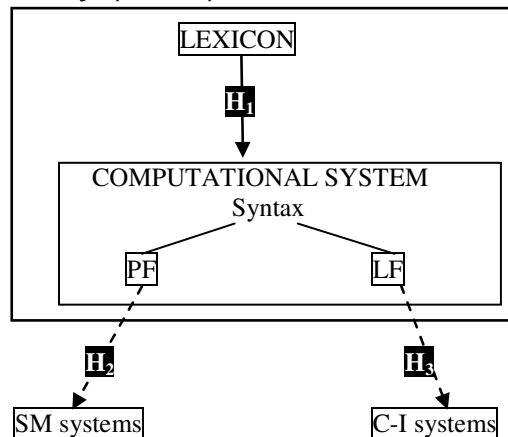
VS order in English and Romance

➡ ENGLISH and SPANISH/ITALIAN differ in devices employed for constituent ordering:

- English 'fixed' order is determined by **lexico-syntactic** properties
- Spanish/Italian 'free' order is determined by information structure: **syntax-discourse** properties (topic-focus)

An in-depth investigation into word order in the interlanguage of Spanish learners of L2 English will shed new light on issues which are very much at the centre of debate in interface studies in SLA, e.g.,

- The relative difficulty of acquiring lexicon-syntax and syntax-discourse interface properties
- Issues to do with crosslinguistic influence
- The role of input
- Processing limitations.

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VS in L1 English (1)

➡ Fixed SV(O) order- Restricted use of postverbal subjects:

(a) XP V S (Inversion structures with an opening adverbial)

(1) a. [On one long wall] hung a row of Van Goghs. [FICT]

b. [Then] came the turning point of the match. [NEWS]

c. [Within the general waste type shown in these figures] exists a wide variation. [ACAD]

[Biber *et al*. 1999: 912-3]

(b) *There*-constructions

(2) a. Somewhere deep inside [there] arose a desperate hope that he would embrace her [FICT]

b. In all such relations [there] exists a set of mutual obligations in the instrumental and economic fields [ACAD]

c. [There] came a roar of pure delight as…. [FICT]

[Biber *et al*. 1999: 945]   9

VS in L1 English (2)

- **Lexicon-syntax interface** (Levin & Rappaport-Hovav, etc):
  - Unaccusative Hypothesis (Burzio 1986, etc) [existence and appearance]
    (3) *There **sang** four girls at the opera. [**unergative** verb]
    (4)There **arrived** four girls at the station. [**unaccusative** verb]

- **Syntax-discourse interface** (Biber *et al*, Birner 1994, etc):
  - Postverbal material tends to be **focus/relatively unfamiliar information,** while preverbal material links S to previous discourse.
    (5) We have complimentary soft drinks and coffee. Also complimentary is **red and white wine**.

- **Syntax-Phonological Form (PF) interface** (Arnold *et al* 2000, etc)
  - **Heavy** material is sentence-final (**Principle of End-Weight**, Quirk *et al*. 1972) – general processing mechanism (reducing processing burden)
    (6) One Sunday morning the warm sun came up and - pop!- out of the egg came a tiny and very hungry caterpillar. [Eric Carle, *The very hungry caterpillar,* London: Penguin]

Subjects which are focus, long and complex tend to occur postverbally in those structures which allow them (unaccusative Vs).

VS in L1 Spanish/Italian (1)
Lexicon-syntax: Unaccusative Hypothesis
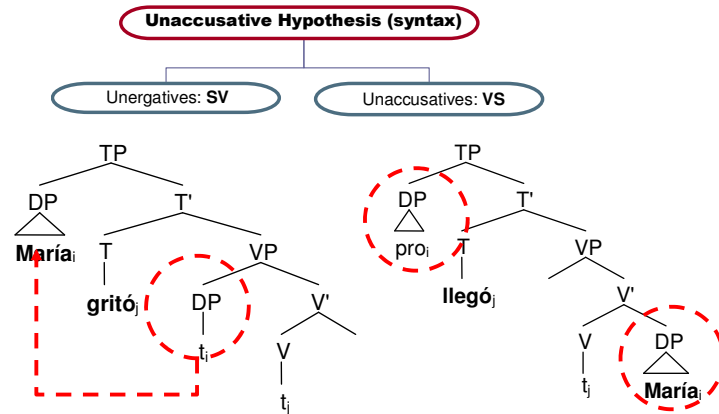
Neutral (non-focus) contexts: Discourse-initial

(1) a. María **gritó**   (unerg)   (2) a.   # María **llegó**.(unacc)
    b. #/**Gritó** María.   b.   **Llegó María**
    'María shouted'   'María arrived.'   11
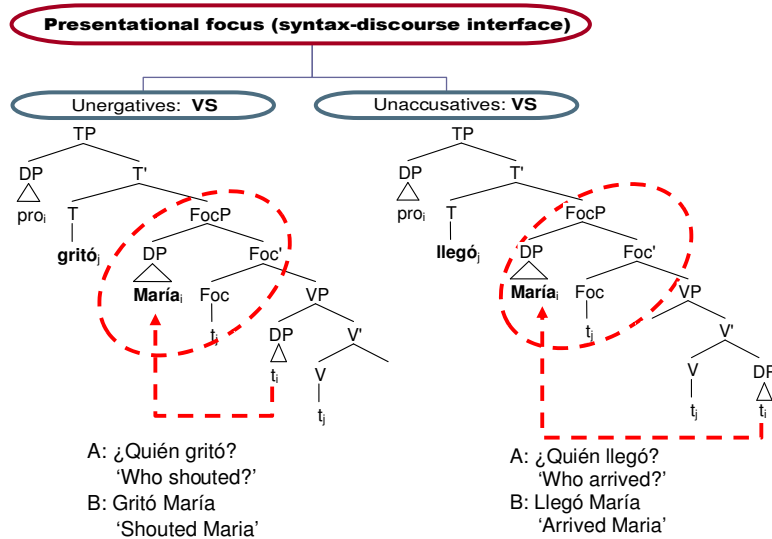

VS in L1 Spanish/Italian (2)

➡ Postverbal subjects are produced <u>freely</u> with all verb classes in languages like Spanish and Italian:

(1) a. Ha **telefoneado María** al presidente.   *(transitive).*   *Spanish*
       Has phoned Mary the president

    b. Ha **hablado Juan**.   *(unergative)*   c.   Ha **llegado Juan**   *(unaccusative)*
       has spoken Juan   .   has arrived Juan

➡ 'Free' inversion: is among the cluster of properties that distinguish languages that are positively marked for the **Pro-drop Parameter** (e.g. Spanish/Italian) and languages that are negatively marked for the Pro-drop Parameter (e.g. English/French)

[see, *inter alia*, Chomsky 1981, Rizzi 1982, Burzio 1986 Jaeggli & Safir 1989, Fernández-Soriano 1989 and Luján 1999, and more recently, Rizzi 1997, Zagona 2002 and Eguren & Fernández-Soriano 2004)]

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VS in L1 Spanish/Italian (3): Narrow focus

Presentational focus (syntax-discourse interface)

Unergatives: **VS**

TP
- DP
  - pro_i
- T'
  - T
    - **gritó**_j
  - FocP
    - DP
      - **María**_i
    - Foc'
      - Foc
        - t_i
      - VP
        - DP
          - t_i
        - V'
          - V
            - t_j

Unaccusatives: **VS**

TP
- DP
  - pro_i
- T'
  - T
    - **llegó**_j
  - FocP
    - DP
      - **María**_i
    - Foc'
      - Foc
        - t_i
      - VP
        - V'
          - V
            - t_j
          - DP
            - t_i

A: ¿Quién gritó?
  'Who shouted?'
B: Gritó María
  'Shouted Maria'

A: ¿Quién llegó?
  'Who arrived?'
B: Llegó María
  'Arrived Maria'

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VS in L1 Spanish/Italian (4)

- **Lexicon-syntax interface**

  No restrictions: postverbal subjects occur with all verb classes

- **Syntax-discourse interface**

  Postverbal subjects in Spanish and Italian are focus

- **Syntax-Phonological Form (PF) interface**

  Heavy subjects show a tendency to be postposed – a universal language <u>processing mechanism</u>: placing complex elements at the end of a sentence reduces the processing burden (J. Hawkins 1994).

Subjects which are focus, long and complex tend to occur postverbally, with no restrictions at the lexicon-syntax interface.

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2. VS in SLA

2.1. VS at the lexicon-syntax interface

2.2. VS at the syntax-discourse interface

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VS in SLA: lexicon-syntax (1)

➡ VS order as one of the manifestations of the pro-drop phenomenon, has been extensively researched in **Second Language Acquisition (SLA),** as it can throw light on issues which are central in SLA, such as the role of **transfer** when the L1 and the L2 differ as to whether they allow null subjects/VS or not.

- Previous studies are mostly **experimental** (often based on grammaticality judgements) [except for Oshita 2004] and focus on the **status of V** in VS structures

  [e.g. White 1985; 1986; 1989; Hilles 1991; Phinney 1987; Rutherford 1989; Zobl 1989, Liceras 1988; 1999; Yuan 1997; Al-Kasey and Pérez-Leroux 1998; Liceras and Díaz 1999; Oshita 2004].

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VS in SLA: lexicon-syntax (2)

- A number of studies have found that L2 learners are aware of the argument structure distinction between unaccusative and unergative Vs and that they use this as a guiding principle to construct **L2 mental grammars**.

- However, learners have difficulty in determining the range of appropriate **syntactic realizations** of the distinction, and this can persist into near-native levels of proficiency (see R. Hawkins 2001: 5.4).

Two production studies, **Zobl (1989)** and **Rutherford (1989)** support the hypothesis that L2 learners of English from pro-drop languages produce VS structures with **unaccusative** Vs only:

(1) Sometimes <u>comes</u> **a good regular wave**.

<div align="right">(L1 Japanese; source: Zobl 1989: 204)</div>

(2) On this particular place called G… <u>happened</u> **a story which now appears on all Mexican history books…**.

<div align="right">(L1 Spanish; source: Rutherford 1989: 178-179)</div>

(3) The bride was very attractive, on her face <u>appeared</u> **those two red cheeks…**

<div align="right">(L1 Arabic; source: Rutherford 1989: 178-179) 17</div>

VS in SLA: lexicon-syntax (3)

- Explanation of why VS order is found with unaccusatives:

  - For **Zobl (1989)**, it is **developmental**; it precedes a stage when learners are able to determine the canonical alignment between semantic roles and syntactic structure: the subject surfaces in its D-Structure position.

  - For Rutherford (1989), VS production is the result of **transfer** (but no explanation is offered as to why (XP)VS order in the learners' grammar is restricted to a definable class of lexical verbs: unaccusatives of existence and appearance)

- Problems:
- Their conclusions are based on a relatively small number of learners and a very small number of VS instances;
- Not enough information is provided about learners', sample size, proficiency and so on.

VS in SLA: lexicon-syntax (4) -Oshita (2004)

OBJECTIVE: To investigate the psychological reality of **null expletives** (ØVS)

DATA: *Longman Learners' Corpus* (version 1.1)
- 941 token sentences (concordances) on 10 common **unaccusative** Vs
- 640 token sentences with 10 common **unergative** Vs from L2 English compositions written by speakers of Italian, Spanish, Japanese and Korean.

  S-V   S be Ven   It V S   There V S   Ø V S

(1)   a. …it will happen **something exciting**.... (L1 Spanish)
      b. …because in our century have appeared **the car and the plane**… (L1 Spanish)

<div align="right">[Oshita 2004: 119-120)]</div>

RESULTS : His results corroborate the role of **unaccusativity** (i.e, the lexicon-syntax interface): L1 Spanish and L1 Italian learners produce VS only with unaccusatives (never with unergatives), and their production ratios are similar (14/238 (6%) Spanish; 14/346 (4%) Italian)

PROBLEM: His conclusions, like those of the studies mentioned above, are based on a relatively small number of tokens for each L1 and he doesn´t examine the whole range of VS structures in learner languages.

<div align="right">19</div>

VS in SLA: syntax-discourse (1)

- Recent research on the acquisition of VS in **L2 Italian/Spanish** by speakers of **L1 English** shows points consistently towards problems in the integration of syntactic and discourse properties

  <div align="right">(e.g. Belletti & Leonini 2004, Hertel 2003, Lozano 2006, Belletti et al. 2007) [see White, forthcoming]</div>

  - L2 learners fail to produce VS in focused contexts or accept VS/SV in equal proportion (optionality)

  "In other words, while appropriate L2 syntax is acquired, 'external' constraints on the syntax are acquired late (or not all)" [White, forthcoming]

  <div align="center">= '*syntax* before *discourse'* hypothesis</div>

<div align="right">20</div>

VS in SLA: syntax-discourse (2)
(Lozano 2006a, 2006b)

Groups	Spanish native controls n=14	L1 Greek L2 Spa n=18	L1 English L2 Spa n= 17
Proficiency		Mean = 92% (range 80% - 100%)	Mean = 90% (range 80% - 100%)

Advanced proficiency (Univ Wisconsin College Placement Test)

- Instrument:
  - Contextualised acceptability judgement test (Hertel, 2000)

    Tú estás en una fiesta con tu amiga Laura. Laura sale de la habitación y en ese momento llega la policía porque hay mucho ruido en la fiesta. Cuando Laura vuelve, te pregunta: '¿*Quién llegó*?' Tú contestas:

    (a) La policía llegó. −2 −1 0 +1 +2

    (b) Llegó la policía. −2 −1 0 +1 +2

Translation 'You are at a party with your friend Laura. Laura leaves the room and at that moment the police arrive because the party is too noisy. When Laura comes back, she asks you: '*Who arrived*?' You answer:

(a) The police arrived −2 −1 0 +1 +2

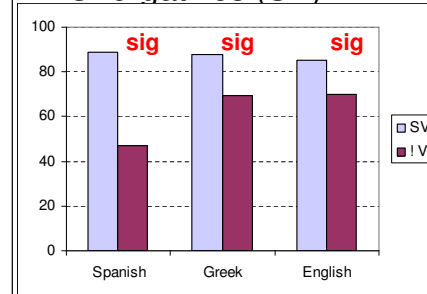(b) Arrived the police −2 −1 0 +1 +2'
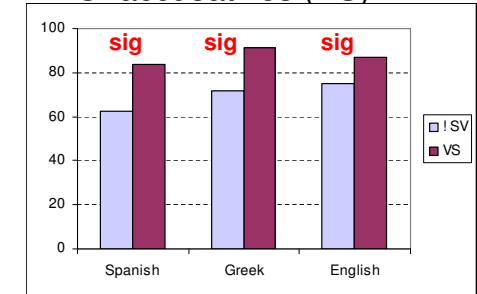
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VS in SLA: syntax-discourse (3)
Results: neutral contexts

Unergatives (SV)

Unaccusatives (VS)

Convergence with natives (native-like knowledge)
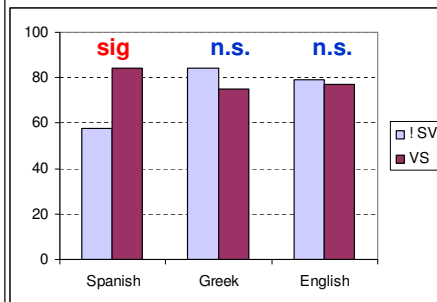
22

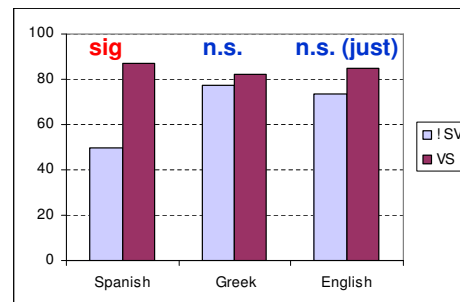## VS in SLA: syntax-discourse (4)
Results: focused contexts

¿Quién gritó / llegó? "Who shouted / arrived?"

Unergatives (VS)

Unaccusatives (VS)

Divergence with natives (subtype: **optionality**)

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VS in SLA: syntax before discourse?

- **Lozano (2006a, 2006b):**
  - There is no reasons to think that learners are not sensitive to the topic/focus distinction, as it is present in L1 (in fact, it is **universal**: Vallduví 1993, 1995, Vallduví & Engdahl 1996).
  - Learners are sensitive to discourse status but are unable to encode it syntactically with the pragmatically most adequate word order ➔ **syntactic deficit**

- In line with findings by **Domínguez and Arche (2008):**
  - Availability of optional forms can be accounted for by a purely **syntactic deficit**, probably due to apparently ambiguous input occurs

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3. VS in corpus studies

3.1. Lozano & Mendikoetxea (2008)

3.2. Lozano & Mendikoetxea (2009, in preparation)

VS in corpus studies (1)

Lozano & Mendikoetxea (2008, 2009, in preparation) (L & M)

➢ What are the conditions governing the production of VS structures in L2 English by **L1 Spanish** and **L1 Italian** learners? (L & M, 2008)

➢ Do learners of English (**L1 Spanish**) produce inverted subjects (VS) under the same conditions as **English natives** do, regardless of problems to do with syntactic encoding (grammaticality)? (L & M, 2009, in preparation)

⇨ A proper analysis of VS structures must take into account not only the properties of V but also the properties of the postverbal S.

Hypotheses:

- **H1 [LEXICON]: Lexicon-syntax interface**:
  - Postverbal subjects with **unaccusatives** (never with **unergatives**)

- **H2 [WEIGHT]: Syntax-PF interface**:
  - Postverbal subjects: **heavy** (but preverbal **light**)

- **H3 [FOCUS]: Syntax-Discourse interface**:
  - Postverbal subjects: **focus** (but preverbal **topic**)

VS in corpus studies: L &M (2008) (1)

- **Learner corpus**: L1 Spa – L2 Eng; L1 Ital – L2 Eng
  - ICLE (Granger et al. 2002)

Corpus	Number of essays	Number of words
ICLE Spanish	251	200,376
ICLE Italian	392	227,085
TOTAL	643	427,461

- **WordSmith** v. 4.0 (Scott 2004)

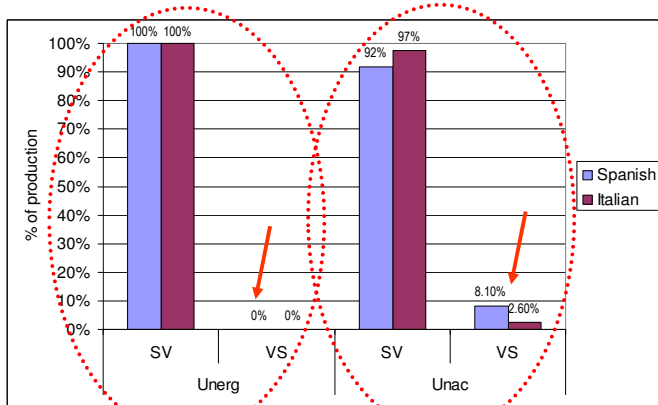| Subcorpus	V type	# usable concordances
Spanish	Unergative	153
	Unaccusative	640
Italian	Unergative	143
	Unaccusative	574
TOTAL		1510

appear, appears, appearing, appeared, appeard, apear, apears, apearing, apeared, apeard.

METHOD (1)

- Based on Levin (1993) and Levin & Rappaport-Hovav (1995):
  - **Unergatives**: *cough, cry, shout, speak, walk, dance…*
    - [TOTAL: 41]
  - **Unaccusatives**: *exist, live, appear, emerge, happen, arrive…*
    - [TOTAL: 32]

UNACCUSATIVES		UNERGATIVES		
SEMANTIC CLASS	VERB	SEMANTIC CLASS	SEMANTIC SUBCLASS	VERB
EXISTENCE	exist	EMISSION	LIGHT EMISSION	beam
	flow			burn
	grow			flame
	hide			flash
	live		SOUND EMISSION	bang
	remain			beat
	rise			blast
	settle			boom
	spread			clash
	survive			crack
APPEARANCE	appear			crash
	arise			cry
	awake			knock
	begin			ring
	break			roll
	develop			sing
	emerge		SMELL EMIS.	smell
	flow		SUBSTANCE EMISSION	pour
	follow			sweat
	happen	COMMUNICAT.	MANNER OF SPEAKING	cry (*)
	occur			shout
	rise			sing (*)
DISAPPEARANCE	die		TALK VERBS	speak
	disappear			talk
INHERENTLY DIRECTED MOTION	arrive	BODILY PROCESSES	BREATHE VERBS	breathe
	come			cough
	drop			cry (*)
	enter			sweat (**)

VS in corpus studies :L & M (2008) (2) H1

Subcorpus	V type	# postverbal S	# usable concordances	Rate (%)
Spanish	Unergative	0	153	0/153 (0%)
	Unaccusative	52	640	52/640 (8.1%)
Italian	Unergative	0	143	0/143 (0%)
	Unaccusative	15	574	15/574 (2.6%)

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H2 results: syntax-phonology
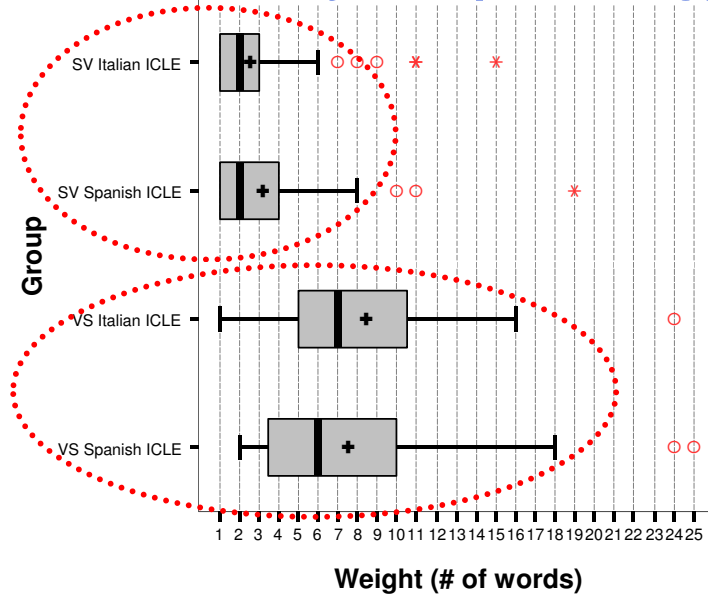
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Examples H2: syntax-phonology

SV: typically LIGHT

(23) a. …but **they** may <u>appear</u> everywhere.

    b. …since **the day** eventually <u>came</u>…

    c. …**these people** should <u>exist</u>, …

VS: typically HEAVY

(24) a. Against this society drama <u>emerged</u> **an opposition headed by Oscar Wilde and Bernard Shaw.**

    b. … <u>exists</u> yet in Spain **a group of people who are supposed to be professional soldiers.**

    c. It is almost <u>disappearing</u> **the use of writing nice letters to friends.**

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H3: syntax-discourse
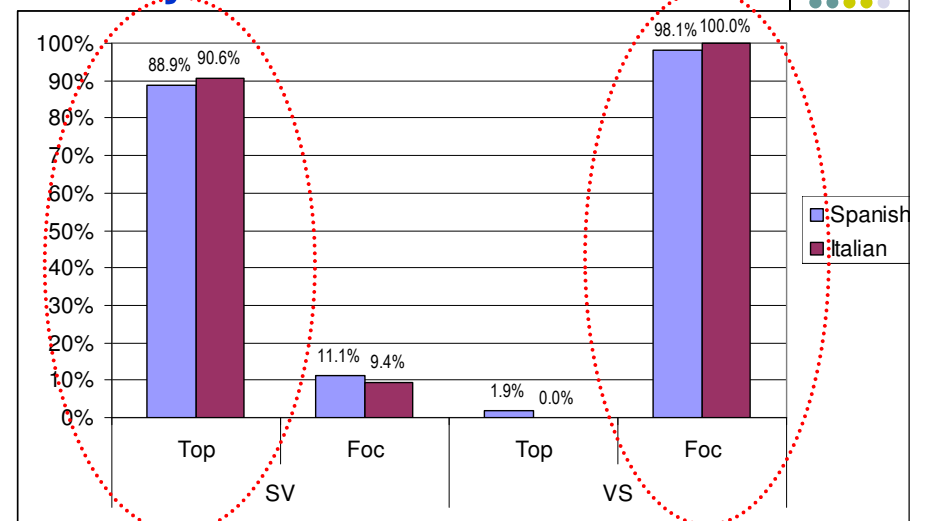
Discourse status (topic/focus) has to be measured manually by establishing theoretical criteria and then by checking the context (or even the essay) manually

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Examples H3: syntax-discourse

VS: FOCUS

(25) a. …there also exists **a wide variety of optional channels which have to be paid.**

 b. So arised **the Saint Inquisition**.

 c. In 1880 it begun **the experiments whose result was the appearance of the television some years later.**

SV: typically TOPIC

(26) a. I use the Internet … I find windows … if they press on any of these windows … **these windows** cannot appear because a child could enter easily…

 b. …the world of drugs: mafias … problems with mafias finished … dangerous people making money … no reason why **these people** should exist.

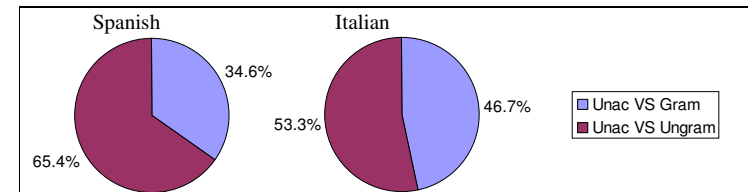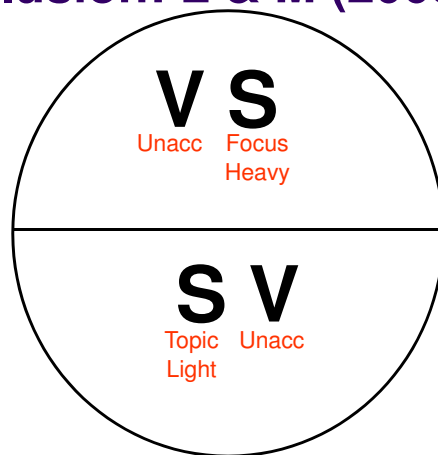## Results: (un)grammaticality

GRAMM.
- **Locative** inversion:
  (16) In the main plot appear **the main characters: Volpone and Mosca**.
- **There**-insertion:
  (17) There exist **positive means of earning money**.
- **AdvP**-insertion:
  (19)…and here emerges **the problem**.

UNGRAM.
- * **it**-insertion:
  (20) *…it still live **some farmers who have field and farmhouses**.
- * **Ø**-insertion:
  (21) …*because exist **the science technology and the industrialisation**.
- * **XP**-insertion:
  (22) *In 1760 occurs **the restoration of Charles II** in England.

Spanish: 34.6%, 65.4% — Italian: 46.7%, 53.3%
☐ Unac VS Gram
☐ Unac VS Ungram

Conclusion: L & M (2008)

V S
Unacc Focus
Heavy

S V
Topic Unacc
Light

Interfaces:
Lexicon-syntax
Syntax-discourse
Syntax-phonology

VS in corpus studies (4): L & M (2009, in preparation)

- **Copora**:
  - L1 Spa – L2 Eng (2 corpora: ICLE + *Wri*CLE)
  - Eng natives (LOCNESS: Louvain Corpus of Native English Essays))

Table 1: Corpora details

	Learner corpora		Native corpus	
Words	ICLE-Spanish	200,376	LOCNESS USarg	149,574
	WriCLE	63,836	LOCNESS USmixed	18,826
			LOCNESS Alevels	60,209
			LOCNESS BRsur	59,568
Total no. of words		**264,212**		**288,177**

- **Query software**: WordSmith v. 4.0 (Scott 2004)

Corpus	Verb type	Usable concordances
Learner	Unerg	181
	Unac	820
Native	Unerg	185
	Unac	719
TOTAL		**1905**

Slide 37: H1: Lexicon-syntax: L & M (2009)
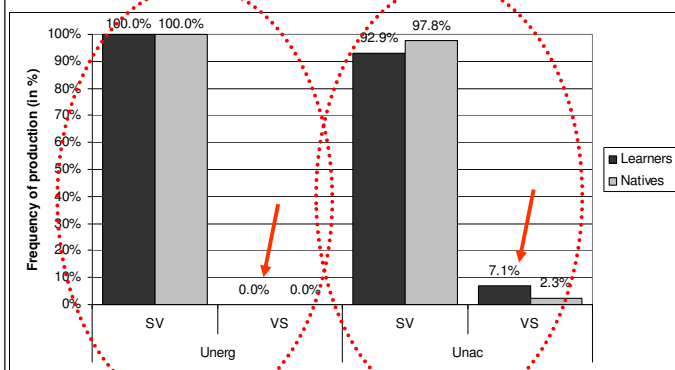
Table 1: Frequency of postverbal subjects produced

Corpus	Verb type	Postverbal subjects	Usable concordances	% frequency
Learner	Unerg	0	181	**0%**
	Unac	58	820	**7.1%**
Native	Unerg	0	185	**0%**
	Unac	16	719	**2.2%**

Slide 38: H2 results: syntax-phonology

Weight (# of words)
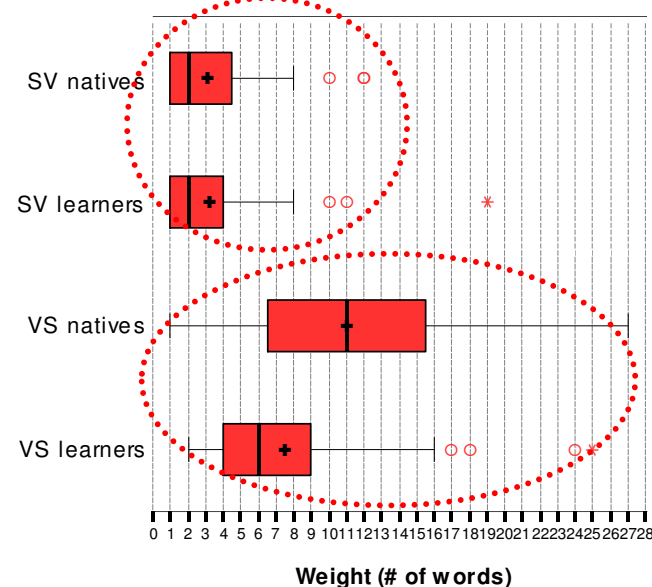
Slide 39: Examples H2: syntax-phonology

SV: typically **LIGHT** (Pronoun, D + N)

Learners: …but **they** may <u>appear</u> everywhere.

…since **the day** eventually <u>came</u>…

Natives: **These debates** <u>began</u> over two decades ago.

…**a great controversy** <u>exists</u> over the topic.

VS: typically **HEAVY** (postmodification)

Learners: Against this society drama <u>emerged</u> **an opposition headed by Oscar Wilde and Bernard Shaw.**
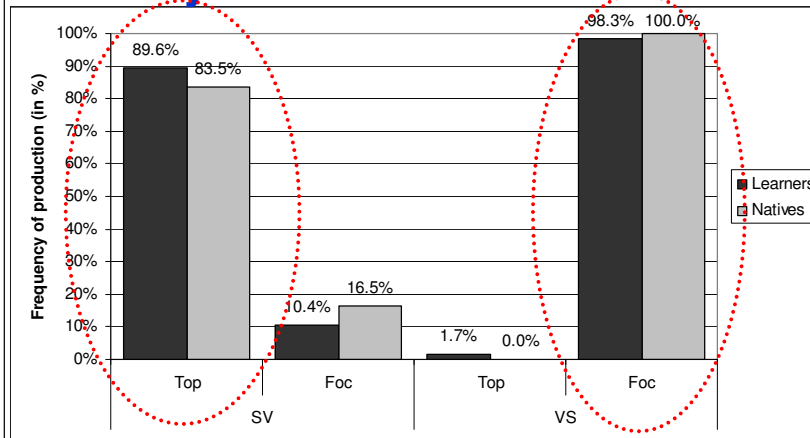
… <u>exists</u> yet in Spain **a group of people who are supposed to be professional soldiers.**

Natives: With this theory also <u>came</u> **the area of quantum mechanics**.

Thus <u>began</u> **the campaign to educate the public on how one contracts aids.**

Slide 40: H3: syntax-discourse

Corpus	Weight	SV order	VS order
Learner	Light	65/96 (**67.7%**)	11/58 (**19.0%**)
	Heavy	31/96 (**32.3%**)	47/58 (**81.0%**)
Native	Light	62/91 (**68.1%**)	3/16 (**18.8%**)
	Heavy	29/91 (**31.9%**)	13/16 (**81.3%**)

Examples H3: syntax-discourse

VS: FOCUS

Learners: …there also exists **a wide variety of optional channels which have to be paid.**

Natives: With this theory also came **the area of quantum mechanics.**

SV: typically TOPIC

Learners: I use the Internet … I find windows … if they press on any of these windows … **these windows** cannot appear because a child could enter easily…

Natives: However, Hugo is not prepared … Louis took such exception to Hugo … **Hugo** came from a bourgeoisie family.

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Conclusion of corpus studies (2)

- These results confirm that Spanish & Italian L2 learners of English produce postverbal subjects under exactly the **same 3 interface conditions** as in L1 English (unaccusativity being a necessary but not a sufficient condition).
  - **Unaccusativity Hypothesis**: postverbal subjects appear with unaccs.
  - **End-weight principle**: postverbal subjects tend to be long and complex.
  - **End-focus principle**: postverbal subjects tend to be focus.

- So, learners **do not show a pragmatic deficit** at the **syntax-discourse** interface.

- Learners **show rather a persistent problems in the syntactic encoding of the construction**
  - High production of ungrammatical examples (it-insertion, Ø-insertion, wrong XP).
  - Spanish learners **overuse** the construction and show a lexical bias for the V *exist*.
    Example
    - * … **it** will not exist **a machine or something able to imitate the human imagination**. ➡
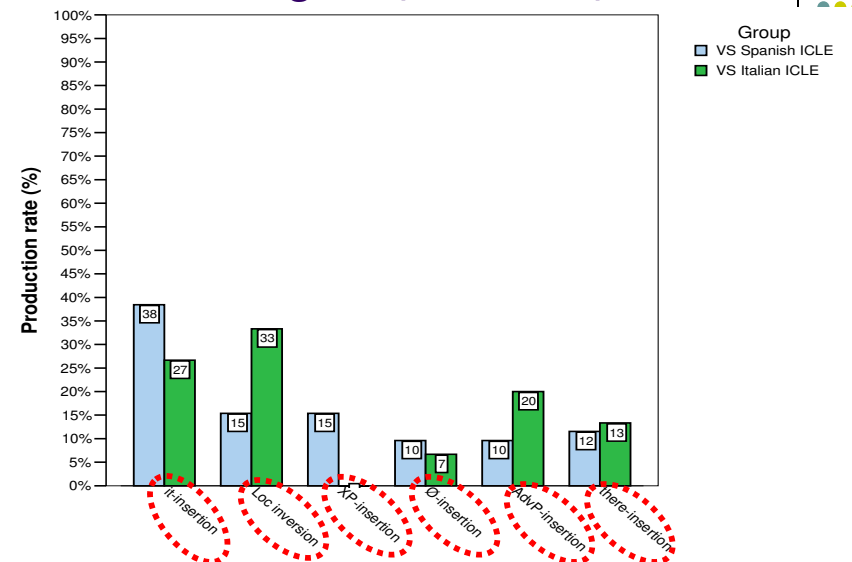
    Discourse before syntax?
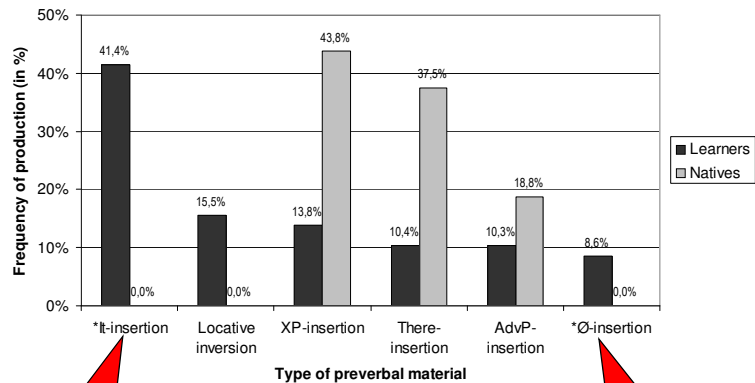
42

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4. A look at processing and crosslinguistic influence

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VS structure types (1): L1 Spanish/ Italian – L2 English (L & M 2008)

VS structure types (2):
L1 Spanish-L2 English vs. L1 English
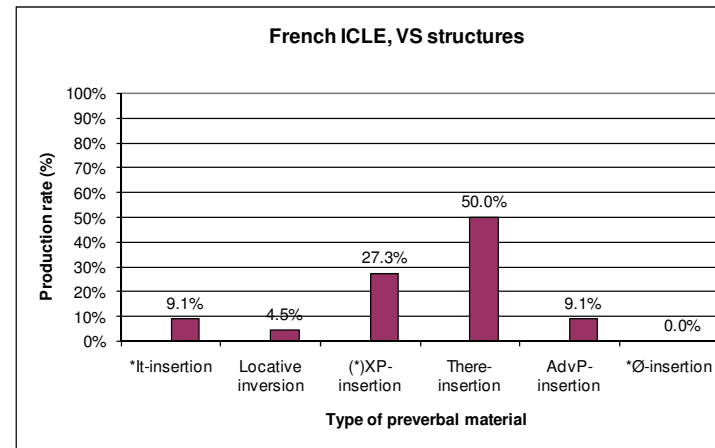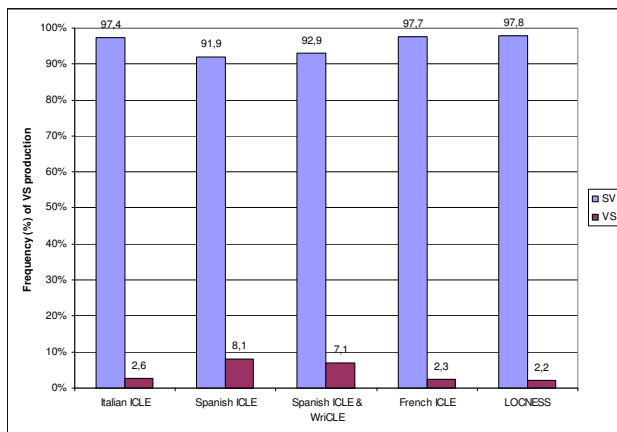### (L & M 2009, in preparation)

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VS structure types (3):
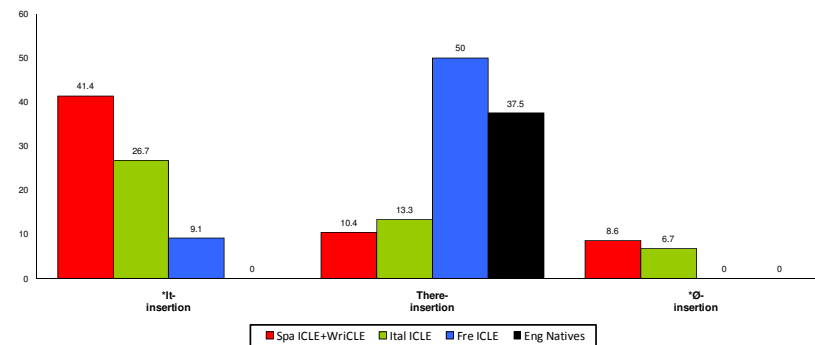### L1 French-L2 English

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VS structure types (4):
SV-VS: L2 English (different L1)-L1 English


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VS structure types (5): all

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VS structure types (6): some observations

- Learners of L2 Eng overuse VS (especially Spanish L1 learners) and show persistent difficulties in the syntactic encoding of the construction, even at high levels of proficiency
  - **L1 Spanish and Italian** learners produce mostly ungrammatical structures
  - **L1 French learners** of L2 English (non pro-drop) show residual problems in that at high levels of proficiency, they still produce some ungrammatical structures

- The most common ungrammatical structure for all learners is ***It VS**. Of all VS:
  - L1 Italian: 27%
  - L1 French: 9.1%
  - L1 Spanish (L & M, 2008): 38%
  - L1 Spanish (L& M, 2009): 41.4%

- This is followed by **ØVS**, which is produced by Spanish and Italian groups of learners:
  - L1 Italian: 7%
  - L1 Spanish (L & M, 2008): 10%
  - L1 Spanish (L& M, 2009): 8.6%

- Among the grammatical structures:
  - L1 French learners overuse *there*-insertion with unaccusative Vs, BUT this construction is underused by Spanish and Italian learners (who use *it*-insertion instead).

- → Now, let's turn to preliminary analysis of the pre-verbal element in unac VS, as it will tell us something about input, processing and x-ling influence.
  - WARNING: while overal VS rates are large and stable, specific constructions to be analysed are low frequency (we're conducting experimental work on this).

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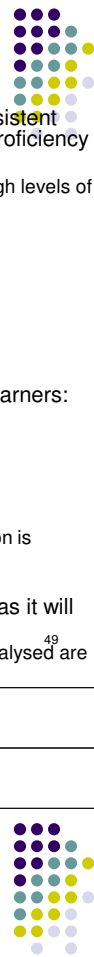
ØVS structures in L2 English: a preliminary analysis (1)

- Production of **ØVS** structures is often attributed to **crosslinguistic influence** (**transfer**)- Spanish & Italian equivalent constructions contain a null expletive

  - There is evidence that for L1 speakers of pro-drop languages null expletives are harder to expunge from their L2 English that are null referential pronouns

    - Learners of L1 pro-drop languages omit expletives in contexts where they should be produced *(e.g. In winter, snows a lot in Canada*, L1 Spanish, White 1986)

    - Non-use of overt expletives persists longer than non-use of overt referential pronouns (Phinney 1987; Tsimpli & Roussou, 1991)..

- That is: at advanced levels, we expect learners to produce sentences like (1) (VS with a null expletive), but not sentences like (2), with a missing subject, a null referential pronoun, equivalent to 'yo' (I).

	L1 Spanish		**L2 English**
(1)	**pro**$_{expl}$	existen problemas	√exist problems
(2)	**pro**	llegué ayer	**X** arrived yesterday
	pro-1pl	*arrived-pl yesterday*	

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ØVS structures in L2 English: a preliminary analysis (2)

- There is evidence that **L1 Spanish learners** also omit expletive *it* in contexts where it is required e.g.in subject position after extraposition (examples from Spa ICLE corpus by Hannay & Martínez Caro 2008: 241):

  - Finally must be added that in our days it is necessary for a country to be provided with a good army.. [ICLE-SP-UCM-0013.4]
  - Talking about the rehabilitation is important to consider two points. The first one is … [ICLE-SP-UCM-0018.4]

> All this can be explained by the '**transfer**' account, as well as the fact that **L1 French learners** do not produce **ØVS** structures.

BUT:
- Why are VS structures restricted to unaccusatives since in languages like Italian and Spanish we can find VS with all verbs classes?

- Why are our learners' postverbal subject rates relatively low (7.1%)? (they mainly produced grammatical SV (92.9%)).
  - Experimental work shows that Spanish natives significantly (and drastically) prefer VS to SV with unaccusatives, yet SV to VS with unergatives (Hertel 2003, Lozano 2003, 2006a). Hence, if L1 transfer was the only reason for the occurrence of VS structures, we would expect our learners to show higher VS rates.

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It VS structures in L2 English: a preliminary analysis

- *It* **VS** shows learners are aware that the subject position must be filled in VS structures.
  - BUT despite positive evidence *(e.g. there*-insertion possible with the Vs for which *it* is used), *it* is the preferred expletive to fill in the null subject position: unlike *there* whose primary use is 'adverbial' *it* is always 'nominal' (Oshita 2004)

  (1) Mrs Ramsay is dead yet **it** remains **something like a glow**   [ICLE fruc1046]
  (2)…and **there** remains **a great deal more to say on the subject**   [ICLE frub1022]

  ⟹ Further evidence- incorrect VS: Hannay & Martínez Caro (2008: 241):

  (3) …**it** is not taken into account **the significance of the subjective elements that the victim gives to what he no longer owns**.   [ICLE-SP-UCM-0027.3]
  (4) … In my opinion **it** is very logic **the idea of having voluntary soldiers in the army**   [ICLE-SP-UCM-004.3]

- These constructions are again explained in terms of **transfer**:
  "The Spanish learners seem to transfer the postverbal subject of the Spanish construction incorrectly, and once they have done so, they apply the rule of obligatory subject in English by filling in the preverbal slot with dummy *it* as in extrapositions" (Hannay & M. Caró, 2008: 241).
- **BUT:** while transfer can explain VS, it cannot explain why we have expletive "it" nor why it-V-S is more frequent than Ø-V-S. 52

There VS structures in L2 English: a preliminary analysis (1)

- *There*-constructions (as in *There remain several problems)* are <u>rarely used by L2 learners of pro-drop languages</u>. [Oshita (2004) also notices this fact for Korean and Japanese speakers of L2 English].

- **Input** could be affecting these results.
  - The **low frequency** of these structures in native English (see Biber *et al*. 1999) could be affecting their low use in learner English.

  - **BUT** Existential *there-constructions* are introduced at an early stage in the learning process (Palacios Martínez and Martínez-Insúa 2006), so they must be **high frequency** structures in the input learner receive

    - An overview of textbooks for the teaching of English in Spain reveals that these constructions are introduced usually in the first 10 units.

    - They are learned as formulaic or prefabricated chunks with the V *be*. Thus, *there* may not be used as an independent expletive until learners reach a very advanced level (Oshita 2004: fn 2).

- Input is a tricky factor, as its role is not fully understood yet in SLA.   53

There VS structures in L2 English: a preliminary analysis (2)

- Palacios-Martínez and Martínez Insúa (2006) found similar (but contradictory) facts:
  - There-constructions in general are <u>more frequent</u> in the written English of Spanish speakers than in native English.
  - *Be* is the most common V in *there*-constructions in both NNS and NS.
  - Natives have in their personal repertoire <u>a wider range of presentational Vs</u>:
    - Spanish ICLE: *exist*; Italian ICLE: *exist, remain*; French ICLE: *exist, follow, go, remain*
    - Natives (LOCNESS, LSWE, BNC subcorpus): *exist, remain, cease, need, appear, follow, develop*

- If this was true, the absence of *there-constructions* in learner language could be seen simply as a **lexical** problem: BUT
  - Alll Vs in native there-constructions are found in the learner corpora we have studied (except *cease* and *need,* which weren´t part of our target verbs)
  - Learners use these Vs for presentational purposes, though they use them in deviant *It* **V S** or **0 VS** constructions.

So the problem is not a lexical one, nor a discursive one (as learners are aware of the communicative function of There-V-S, but rather a **syntactic** one, that is, a problem with encoding discourse information syntactically➜ processing?

VS in L2 English: a look at processing (1)

- Structures requiring the integration of syntactic knowledge and knowledge from other domains require more processing resources than structures requiring only syntactic knowledge.
- Learners may be **less efficient** at integrating multiple types of information in on-line comprehension and production of structures at the syntax-discourse interface.
   [See Sorace & Serratrice, to appear and references cited therein]

- Though the precise nature of processing limitations is not well understood yet, it could well be that they may be responsible for at least some of the difficulties attested at the interfaces.
  - They could in principle explain why our L1 Spanish and L1 Italian learners produce **mostly ungrammatical VS structures**,
  - **But NOT**:
  - Why the structure is **overused**.
  - Why **L1 French learners** do not encounter the same difficulties   55

VS in L2 English: a look at processing (2)

- In L & M (2008, 2009) we show that VS structures are overwhelmingly used with 'heavy' or complex subjects both in native and non-native language and as such, they follow the **end-weight principle**.

- End-weight serves a processing function:
  - from the listener's perspective –putting long and complex elements towards the end of the clause facilitates <u>parsing</u>, as it reduces the processing burden and, thus, eases comprehension (cf. among others Hawkins 1994)– or
  - from the speaker's perspective –weight effects exist mostly to facilitate <u>planning</u> and production (Wasow 1997, 2002: ch 2: § 5).

- End-weight is a universal phenomenon (see Hawkins 1994 and Frazier, 2004) – the linguistic manifestation of extralinguistic principles which interact in language design (such as principles of data analysis that might be used in language acquisition and principles of structural architecture for computational efficiency, Chomsky 2005).   56

VS in L2 English: a look at processing (3)

- Overproduction of VS structures may be a result of processing limitations in L2 learners: VS structures maybe regarded as the default unmarked form for presentational purposes.
    - This is also supported by the fact that the end-weight principle and the end-focus principle reinforce each other.

> So, overproduction of VS may be due to fact that "Natural language syntax must be such that it can be easily acquired by children, rapidly parsed by listeners, and efficiently employed by speakers to express their thoughts." [Wasow 2002: 57].

- Learners experience processing difficulties and choose the option which is easier to process.
    - More advanced learners, however, experience fewer difficulties and are thus able to encode syntactic information more efficiently (**L1 French?**).
    - But there may be another explanation ➔ processing and x-ling influence.

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Processing and cross-linguistic influence (1)

- There is evidence for bilinguals that complete de-activation of one of the two languages when hearing/speaking the other is rarely possible:
    - The two languages of a bilingual speaker are always simultaneously active and in competition with one another (Dijkstra and van Heuven 2002; Green 1998).

- However, their relative activation levels and strength of competing structures will vary greatly according to the task, proficiency in each language, and frequency of use, among others.

- The assumption is that competition from L1 is a factor which influences processing difficulties.

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Processing and cross-linguistic influence (2)

- The fact that **L1 Spanish learner** overuse VS structures is explained in terms of the routine processing of these structures in Spanish in contexts where the postverbal subject is focus and/or heavy.
    - The accessibility of these structure makes it a stronger candidate in the competition with the English SV structure.

- Lack of competition from French explains why **L1 French learners** do not experience similar same processing difficulties: the do not overproduce VS and use grammatical structures.

- While 'ungrammatical' **ØVS** seems to be, partially, the result of transfer, *It* **VS** clearly shows the **competition between the Spanish form (VS) and the English form**, which requires an overt expletive in subject position, leading to increased processing difficulties.

> Coordination between different modules (syntax/discourse) is a costly operation – it requires more processing power – and hence these structures are more vulnerable to crosslinguistic influence.

Concluding remarks

- Romance learners of L2 English produce VS structures under the right discourse conditions but show persistent problems in the syntactic encoding of the construction.

- While our results support the hypothesis that the acquisition of (external) interface properties is problematic:
    - There is no evidence in our results for the **syntax-before-discourse hypothesis**.

    - Our results could instead be interpreted according to the **discourse-before-syntax hypothesis**:
        - Residual problems in the acquisition of English as non null subject language (**ØVS** in L1 Spanish/Italian).
        - *It* **VS** shows acquisition of syntax (either before or at the same time as discourse) by our learners, but may be an indication of **processing difficulties** in the integration of syntactic and discursive information, due to cross-linguistic influence.

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Thank you!!!

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Corpora used in the study

- **ICLE**: *International Corpus of Learner English*

    Granger S., E. Dagneaux and F. Meunier (2002) *The International Corpus of Learner English. Handbook and CD-ROM.* Louvain-la-Neuve: Presses Universitaires deLouvain

- **LOCNESS**: *Louvain Corpus of native English Essays*, UCL/CECL, Louvain-la Neuve
    http://www.fltr.ucl.ac.be/fltr/germ/etan/cecl/Cecl-Projects/Icle/locness1.htm

- *WriCLE*: *Written Corpus of Learner English*; Universidad Autónoma de Madrid (**Rollinson, O'Donnell, Mendikoetxea**, in progress)
    http://www.uam.es/woslac/wricle

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ADDITIONAL SLIDES TO FOLLOW

66

VS and the Pro-drop parameter (3)

Referential pro vs. expletive pro:

➡️ In VS structures, pro-drop languages have a 'null' expletive element in the preverbal subject position

(4) a. **pro**_{expl}   llegaron   tres niñas
         pro   arrived-3pl three girls

➡️ Non-pro-drop languages, on the other hand, have 'overt' expletives in VS structures (highly restricted environments).

(5) a. There arrived three girls   b.   **Il** est arrivé trois filles

Both English and French allow VS in restricted environments despite being non pro-drop