

Exploring the role of transfer in the L2 acquisition of aspect: the case of the Spanish Imperfect

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Spanish Learner Language Oral Corpora

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333,500 words
461 sounds files
70 hours of recordings

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SPLLOC Principles (Mitchell et. al. 2008)

1. Complete **open access**
2. Theory focused
3. Focus on semi-naturalistic oral data
4. Variety of genres (narrative, interview, picture description, peer discussion).
5. Balance of open ended and focused tasks (production and interpretation)
6. Variety of learner levels
7. Use of CHILDES procedures (CLAN, MOR etc)

SPLLOC 2 (2008-2010)



- Funded by the UK Economic and Social Research Council (RES-062-23-1075).
- Laura Dominguez (PI) (Southampton), Ros Mitchell (Co-I) (Southampton), Florence Myles (Co-I) (Essex), Nicole Tracy-Ventura (RA) (USF) and Maria J Arche (Grenwich)
- Research Agenda: to examine the emergence and development of L2 tense and aspect morphology by 60 (beginner, intermediate and advanced) instructed English speakers of Spanish.
- Mixed-methods approach: semi-spontaneous oral and comprehension data to test hypotheses relevant to SLA theory (=the 'Lexical Aspect Hypothesis' in L2 Spanish).

60 English Learners of Spanish and 15 native controls

Group	Typical Age	Hours of instruction (appr.)	Common Euro Framework
Year 10 (n=20)	14-15	200	A2
Year 13 (n=20)	17-18	750	B1-B2
Undergraduates (n=20)	21-23	900	C1

SPLLOC 2 Tasks

Open-Ended	Task Type	Format
	1. Impersonal Narrative	<i>Cat Story</i> : picture-based story retell
	2. Impersonal Controlled Narrative	<i>Las Hermanas</i> : picture-based story retell
	3. Semi-structured Interview	Personal interview based on learners' past experiences
Focused	Task Type	Format
	4. Comprehension task	On-line context-dependent preference task
	5. Production task	<i>Simultaneous Actions</i> : Picture description production task

SLA Research on tense/aspect

- Although this is one of the most investigated areas in SLA research, we still don't know how L2 speakers learn tense and aspect morpho-syntax.
 - E.g. why do English speakers find learning the imperfect/preterit distinction in Romance so difficult?
 - Ana **coleccionaba** sellos (imperfective, unbounded)
Ana collected/used to collect/was collecting stamps
 - Ana **coleccionó** sellos (perfective,

What makes aspect difficult to study?

- No unified linguistic account of aspect
 - How is it syntactically, semantically and morphologically encoded?
 - How do we account for cross-linguistic variation?
- Complexity of the phenomenon
 - Grammatical and lexical aspect interact
 - Syntactic, morphological, semantic and pragmatic dimensions
- Limitations of the ‘Aspect Hypothesis’
 - What about the role of the L1?
- Methodological issues (Dominguez et al. 2013)
 - Mostly uncontrolled, oral data. Lack of statistical analyses.

Aspect

- Conveys information about
 - whether eventualities are in progress, finished or about to start.
 - the number of occasions an eventuality takes place.
- Perfective (bounded/finished event) vs imperfective (unbounded/unfinished)
- Imperfectivity involves (at least) three meanings: progressive, habitual, continuous

Grammatical Aspect

(Comrie 1976, Smith 1991, Verkuyl 1993, Demirdache & Uribe-Etxebarria 2000, Arche 2006, 2013)

Meaning	Nr of occasions	Status	English	Spanish
Perfective	1	Finished	John walked in the park/ John was sick the whole 2002.	Juan caminó /Juan estuvo enfermo
Progressive	1	Unfinished	John was walking in the park	Juan caminaba
Habitual	>1	Period unfinished Each instance, finished	John used to walk/walked in the park	Juan caminaba
Continuous	∃	Unfinished	John was sick when I visited him	Juan estaba enfermo

Spanish

- Spanish makes use of morphology to encode aspectual contrasts such as imperfective versus perfective.
- Spanish imperfect morphemes can correspond to more than one single interpretation:
 - **Habitual:** where several instances of the event are involved
 - **Progressive:** only one instance of the event is involved and is presented as being in progress
 - **Continuous:** where no counting of instances is involved.
- The available interpretations depend on the internal aspect properties of the predicate, in particular whether the verb is **eventive/dynamic** (activities, accomplishments and achievements) or **stative/non-dynamic** (states).

Grammatical Aspect and Lexical Aspect

- Inner Aspect/Situation Aspect/Lexical Aspect: internal temporal structure of eventualities (e.g. duration, culmination, or delimitation).
 - Vendler 1967, Verkuyl 1993, Smith 1991, a.o.

Grammatical Aspect	States 'have' 'know'	Activities 'swim' 'walk'	Accomplishments 'find' 'die'	Achievements 'paint a picture' 'build a house'
	Non-dynamic Durative No endpoint	Dynamic Durative No endpoint	Dynamic Durative Endpoint	Dynamic Non-durative Endpoint
Perfective	†	†	†	†
Progressive	+	†	†	✗
Habitual	†	†	†	†
Continuous	†	+	+	+

CONTINUOUS contexts (states)

1. Marta **was** ill when I visited her
2. Marta **estaba**_{impf} enferma cuando la visité
3. Marta **estuvo**_{pret} enferma cuando la visité
4. Marta worked very hard when she **was** in France

Language-specific Semantic-Morphology mappings

Meaning	Eng Morph	Spa Morph
Perfective	Past	Preterit
Continuous	Past	Imperfect
Habitual	Periphrasis used to/would	Imper/Per. Soler+INF
Progressive	Periphrasis copula + V-ing	Imper/Per. copula + V-ndo

- Contrasts between Eng/Spa are difficult to account by a single formal feature (Georgi & Pianesi's 1997 [+perfective]) or a single parameter (Slabakova's 2001 telicity parameter)
- Semantic/Syntactic **features** are relevant but how they are **assembled** onto lexical items in each language is important too (Lardiere's 2009 'Feature Assembly' (FA))

What do L2 speakers need to do?

- English learners of Spanish need to establish the correct correspondences between the morphemes and their meanings (correct semantics-morphology mapping).
 1. They have to acquire the imperfect/perfect contrast
 2. They have to figure out how to discriminate the different meanings encoded in the imperfect form
 3. They need to learn that in continuous contexts imperfect morphology is possible in Spanish, i.e.
remapping of an established syntax-morphology association (Dominguez et al. 2011; 2017)

What guides this process?

1. Universal cognitive principles ('Aspect Hypothesis')
 - No explanatory enough. No role of L1 influence or language-specific properties
2. Universal linguistic principles and corresponding parameters (Slabakova 2001; Slabakova & Montrul 2003)
 - Not explanatory enough; are English and Spanish associated with the same parameter?
3. Feature selection and re-assembly (Dominguez, Arche & Myles 2011; 2017)
 - Relevance of L1 influence and language-specific syntax-morphology mappings (feature re-assembly)

The 'Lexical Aspect Hypothesis' (LAH) (Anderson 1986; Anderson & Shirai 1994)

- Inherent aspectual (lexical) properties of verbs guide the acquisition of tense and aspect morphology
- Certain form-meaning associations (i.e. telic-preterit and atelic-imperfect) are prioritised
- Imperfect is acquired AFTER preterit
- Aspect morphology emerges in a sequence of stages (emergence and spread across lexical classes)

Prototypical Associations

Event type	Grammatical Aspect
Telic (accomp, achievmts)	Perfective (preterit)
Atelic (activities, states)	Imperfective (imperfect)

LAH predictions for L2 Spanish

1. Prototypical semantic-morphological pairings (i.e. perfective-telic and imperfective-atelic) are favoured at the beginning of the acquisition process
2. Preterit appears before imperfect
3. All three meanings associated with the imperfect (habitual, progressive and continuous) appear simultaneously

Existing evidence is inconclusive

- In favour of the LAH (using mostly uncontrolled oral data): Ramsay 1990; Hasbún 1995; Camps 2005; Cadierno 2000; López-Ortega 2000.
- Against the LAH: Bergström 1995; Salaberry 1998, 1999, 2000; Lubbers-Quesada 2007; Camps, 2002; González 2003; Tracy-Ventura 2008; Housen 1994; Dominguez et al. 2013.

SPLLOC contribution: combining corpus and experimental data to show that

- The predictions of the LAH are a by-product of frequency effects
- Problems with the imperfect affect the continuous meaning only and this is due to a semantics-syntax remapping issue
 - L1 English speakers do not reject the preterit

SPLLOC 2 Oral Tasks

(Dominguez, Tracy-Ventura, Arche, Myles and Mitchell, 2013)

Task Type	Area investigated	Format
Impersonal Narrative	Emergence and development of past tense forms in naturally occurring contexts	Cat Story: picture-based story retell
Impersonal Controlled Narrative	Emergence and development of past tense forms in exceptional contexts	Las Hermanas: picture-based story retell
Personal Narrative	Emergence and development of past tense forms in naturally occurring contexts	Semi-structured interview

Semi controlled Narrative: 'The Cat Story'

Todas las mañanas eran iguales.

Natalia...



Controlled Narrative: 'Las Hermanas'

Gwen de niña...cada fin de semana



(leer) un libro



(escribir) un cuento



(pintar) un cuadro

Exceptional contexts (e.g. states in one-time, telic contexts)

De repente en el tren...



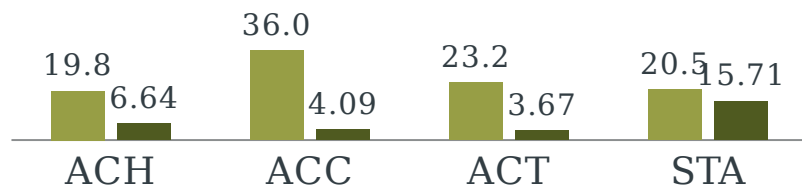
(haber) un gran revuelo



(creer) que habia un
problema

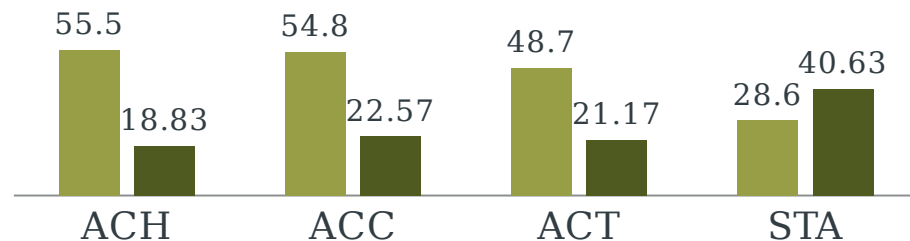
Beginners

■ Preterit ■ Imperfect



Intermediates

■ Preterit ■ Imperfect

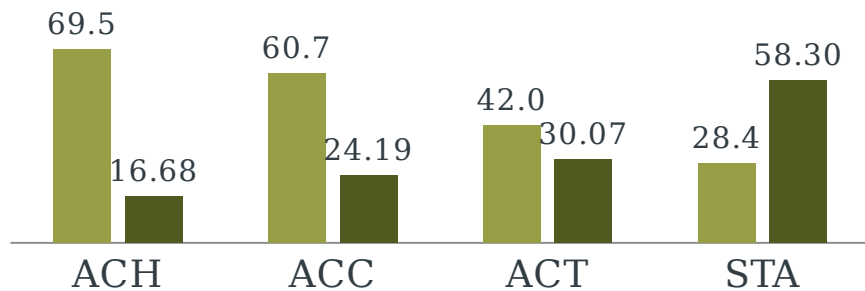


Early sensitivity to the dynamic/non-dynamic distinction

Advanced speakers behave similar to native controls

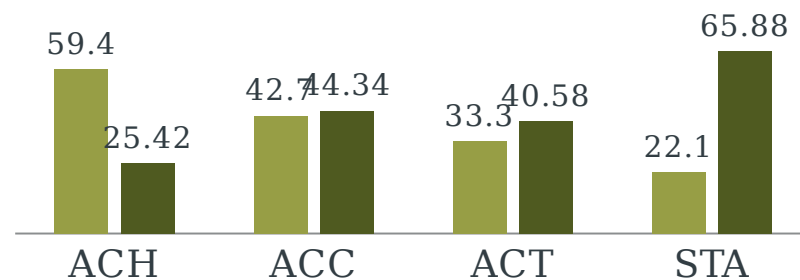
Advanced

■ Preterit ■ Imperfect



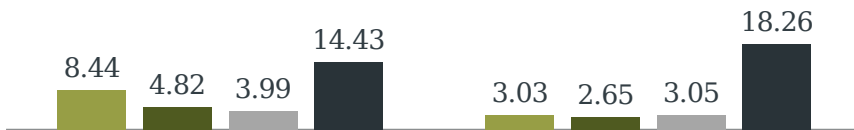
Controls

■ Preterit ■ Imperfect



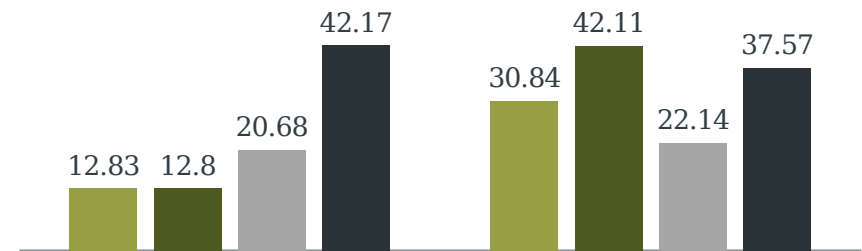
Beginners

ACH ACC ACT STA



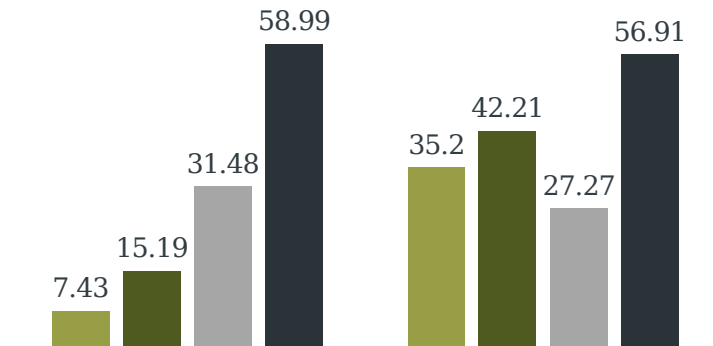
Intermediates

ACH ACC ACT STA



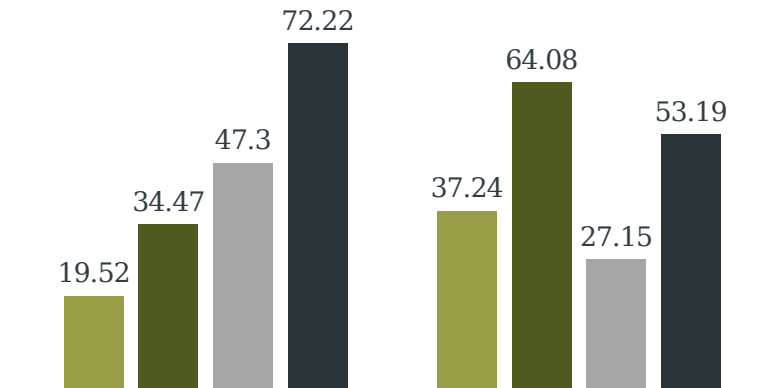
Advanced

ACH ACC ACT STA



Controls

ACH ACC ACT STA



Comprehension Task

- Context-Sentence matching task
- 32 target sentences

CONTEXT	TYPE OF PREDICATE	TARGET FORM
Habitual	Eventive	Imperfect
	Stative	Imperfect
One-Off event	Eventive	Preterit
	Stative	Preterit
Continuous	Stative	Imperfect
Progressive	Eventive (non-achievements)	Imperfect

Context → When Ana was a child she had a very close friend, Amy, and she liked to spend a lot of time at her house after school.

Ana estuvo mucho en casa de Amy al salir del colegio.

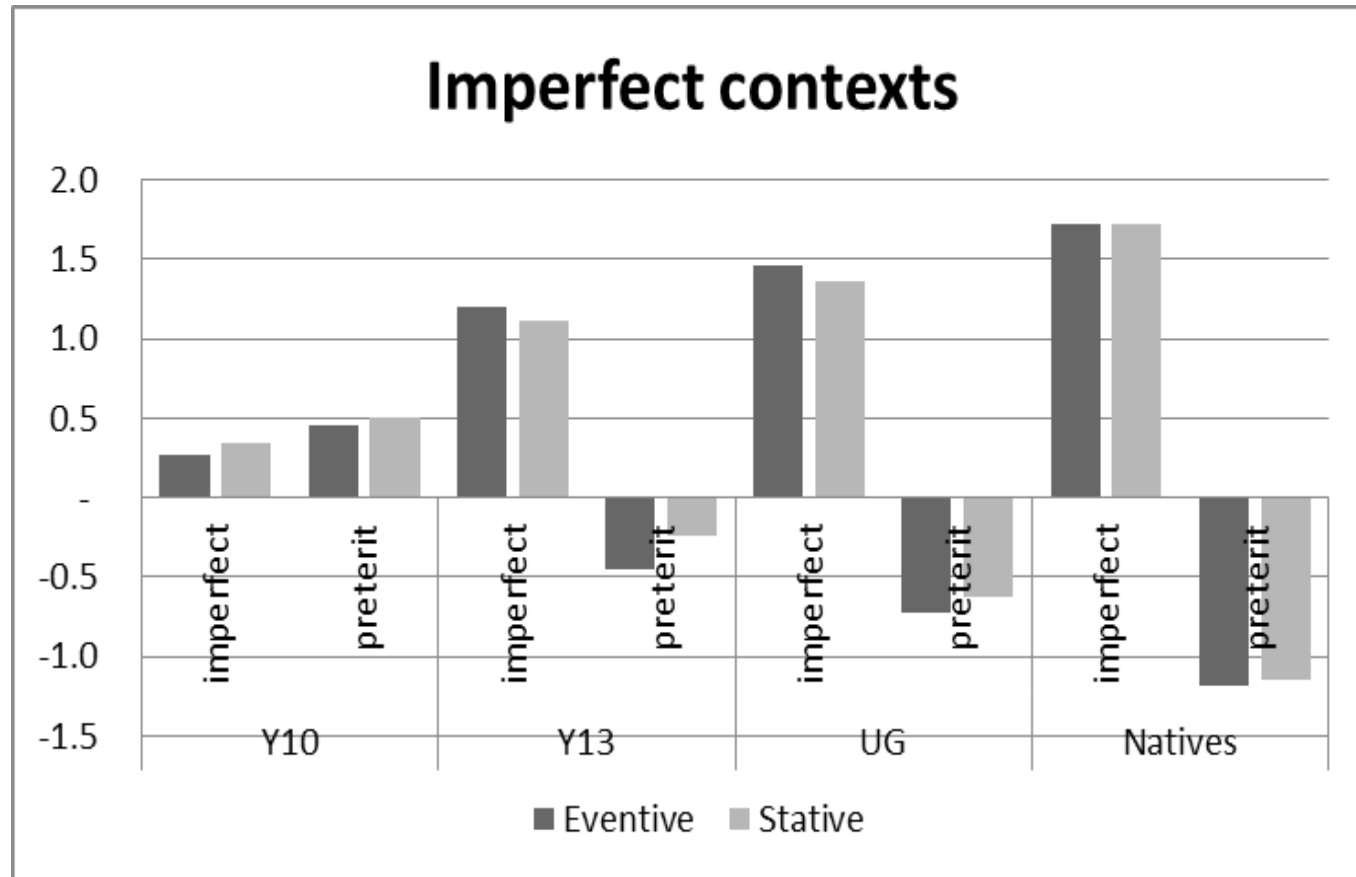
-2 ○ -1 ○ 0 ○ +1 ○ +2 ○

Ana estaba mucho en casa de Amy al salir del colegio.

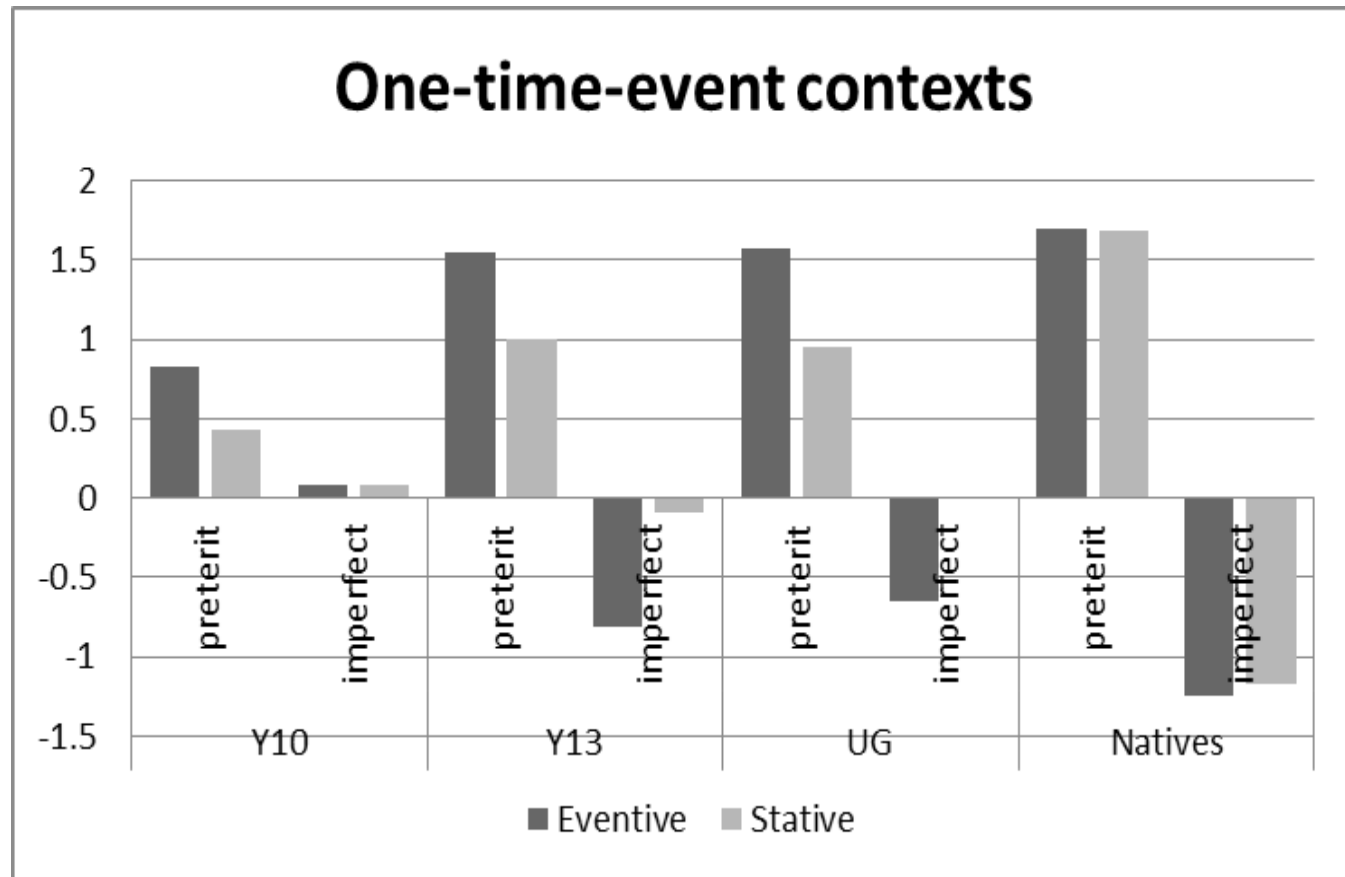
-2 ○ -1 ○ 0 ○ +1 ○ +2 ○

5 choices

next



Verb type does not affect intermediate and advanced learners' responses; ($p=0.58$ for Imperfect sentences and $p=0.59$ for Preterit for advanced learners; $p=0.69$ for Imperfect sentences and $p=0.49$ for Preterit for Y13 learners).

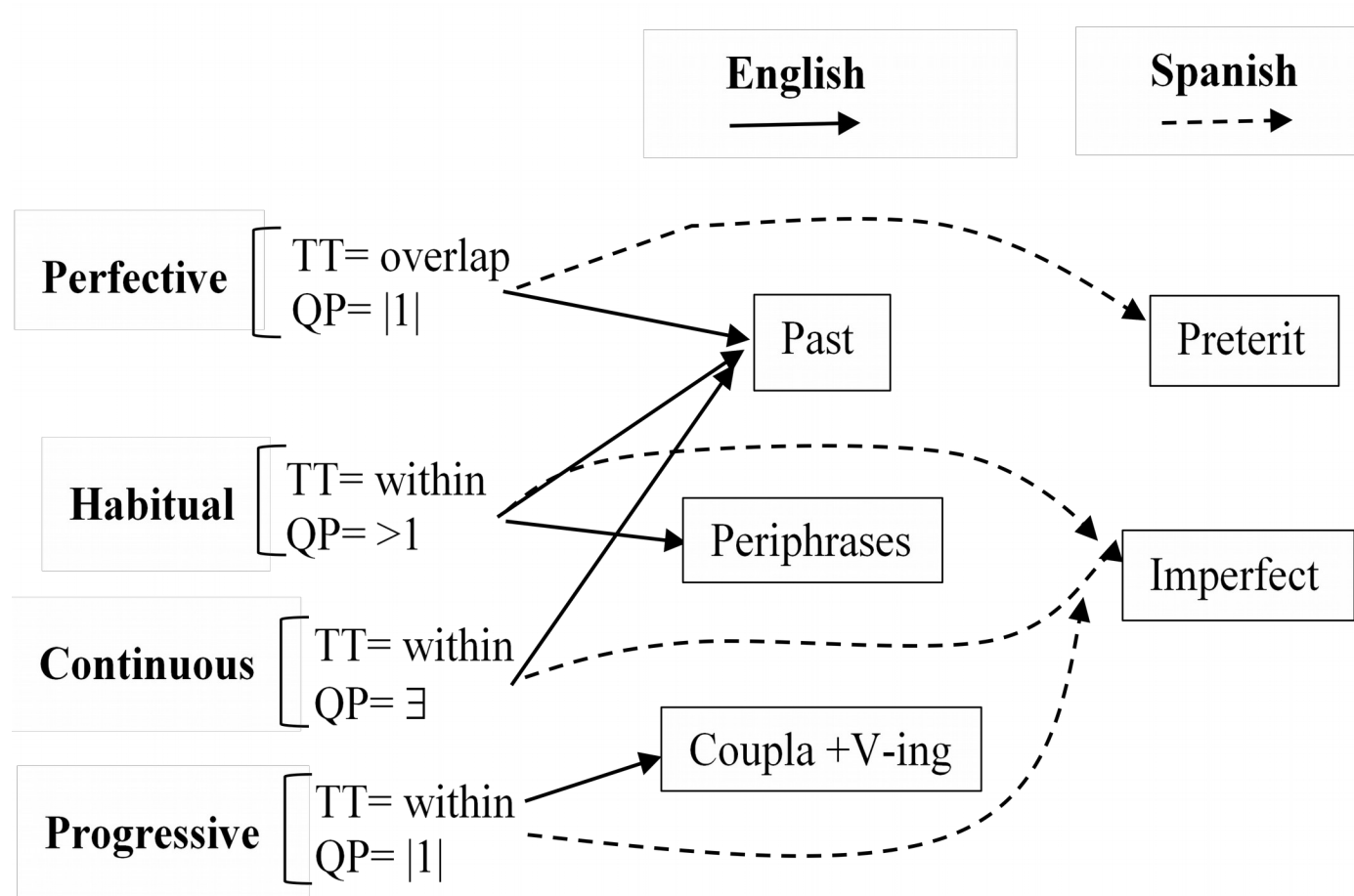


Significant effect of verb type for the advanced learner's judgements of Imperfect ($F(1, 38) = 9.5093$, $p=0.003$) and Preterit ($F(1,38)=10.792$, $p=0.002$), and for Imperfect ($F(1,34)=6.0255$, $p=0.01$) and Preterit ($F(1,34)=5.0660$, $p=0.03$) for the intermediate group

The role of L1 influence (Dominguez, Arche & Myles 2011; 2017)

- We need to examine the three meanings separately.
- Problems in ‘continuous’ contexts as it is a meaning that requires re-assembly (i.e. reorganisation between the form and the meaning).
- ‘Continuous’ maps onto past morphology in English but onto imperfective in Spanish.
- Differences between production and comprehension data?

Meaning-Form mappings



Same features and semantic interpretations; different meaning-form mappings

Cat Story

Group	Context	Form		
		<i>imperfect</i>	<i>preterit</i>	<i>other</i>
NS	<i>CONTINUOUS</i>	100%(131/131)	0	0
	<i>HABITUAL</i>	100%(198/198)	0	0
	<i>PROGRESSIVE</i>	100%(87/87)	0	0
Y10	<i>CONTINUOUS</i>	10%(3/29)	7%(2/29)	83%(24/29)
	<i>HABITUAL</i>	13%(14/105)	18%(19/105)	69%(72/105)
	<i>PROGRESSIVE</i>	19%(3/16)	13%(2/16)	69%(11/16)
Y13	<i>CONTINUOUS</i>	44%(40/91)	12%(11/91)	44%(40/91)
	<i>HABITUAL</i>	24%(41/168)	41%(69/168)	35%(58/168)
	<i>PROGRESSIVE</i>	58%(7/12)	42%(5/12)	0
UG	<i>CONTINUOUS</i>	67%(78/117)	9%(11/117)	24%(28/117)
	<i>HABITUAL</i>	59%(83/141)	19%(27/141)	22%(31/141)
	<i>PROGRESSIVE</i>	56%(43/77)	0	44%(34/77)

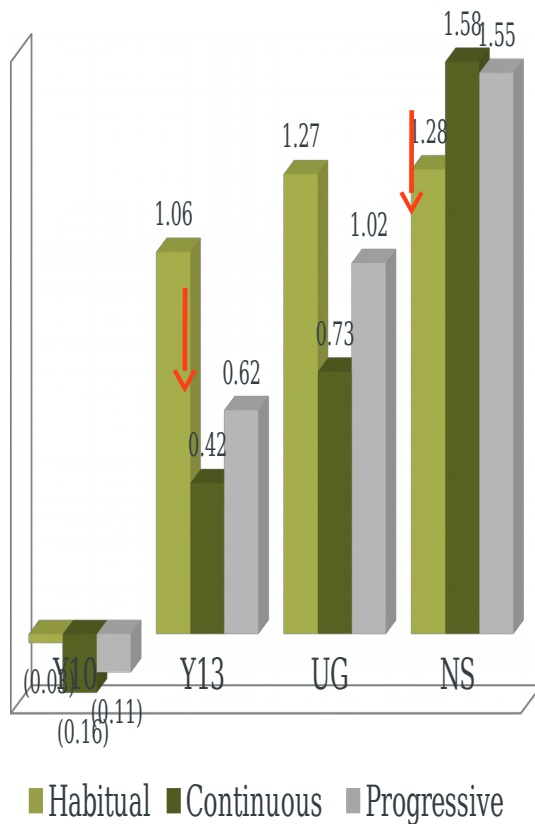
Both context and proficiency have a significant effect on which form is used ($p < 0.0001$).

Interview

Group	Context	Form		
		<i>imperfect</i>	<i>preterit</i>	<i>imperfect</i>
NS	CONTINUOUS	100%(164/164)	0	0
	HABITUAL	100%(113/113)	0	0
	PROGRESSIVE	100%(48/48)	0	0
Y10	CONTINUOUS	18%(17/97)	13%(13/97)	69%(67/97)
	HABITUAL	5%(2/44)	30%(13/44)	66%(29/44)
	PROGRESSIVE	50%(2/4)	0	50%(2/4)
Y13	CONTINUOUS	49%(84/171)	23%(23/171)	27%(47/171)
	HABITUAL	65%(32/49)	27%(13/49)	8%(4/49)
	PROGRESSIVE	42%(8/19)	32%(6/19)	26%(5/19)
UG	CONTINUOUS	31%(19/62)	16%(10/62)	53%(33/62)
	HABITUAL	63%(64/102)	25%(26/102)	12%(12/102)
	PROGRESSIVE	96%(25/26)	4%(1/26)	0

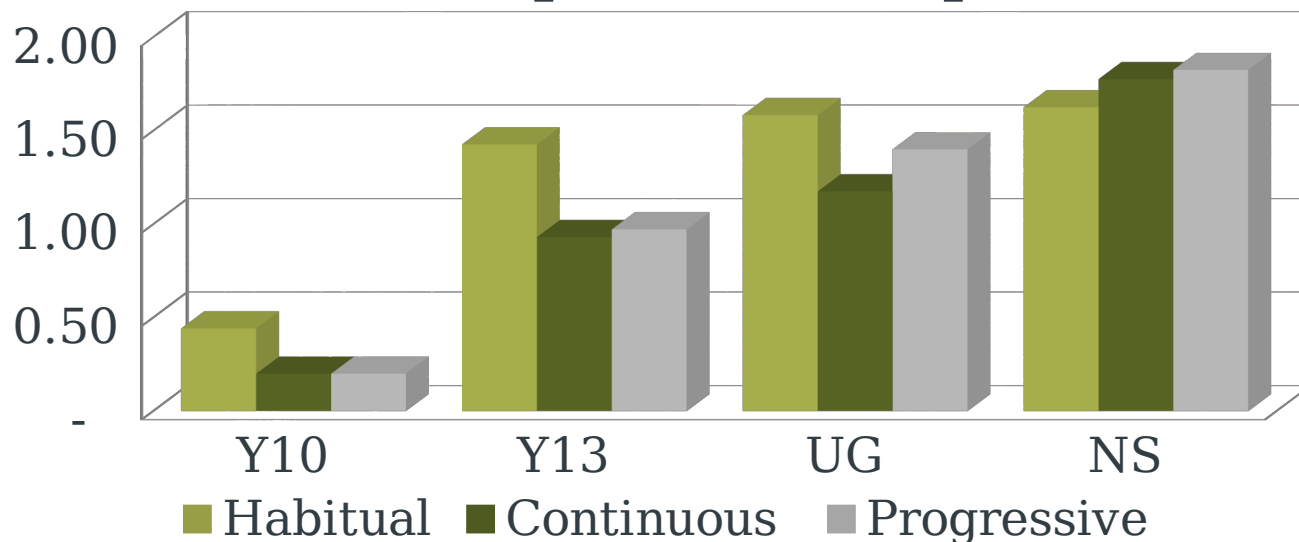
Overall Results-Interpretation Task

Mean Averages of Correct Responses(Acceptance of imperfect and Rejection of Preterit)

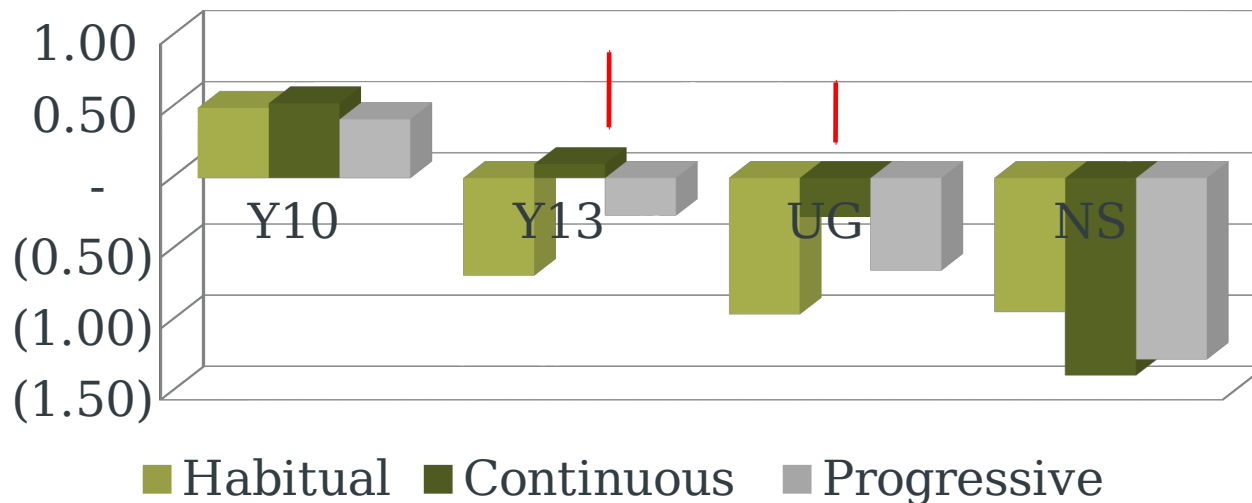


- Correct acceptance of the imperfect and correct rejection of the preterit rates are significantly lower in continuous contexts for Y13 and UG
- Y13 perform as low as Y10 in continuous contexts only
- UG do not perform natively like

Correct Acceptance of Imperfect



Correct rejection of Preterit



Discussion

- 1Results can be explained by the differences in the way L1 and L2 morphologically express each of the three aspectual meanings.
- 2Not all aspects of the Spanish Imperfect are equally problematic
- 3The meaning which needs semantics-morphology remapping (i.e. **Continuous**) seems to be the most problematic meaning (no rejection of preterit) even at advanced stages.
- 4L1 influence observed although not determined by feature selection alone, but by whether features are assembled into morphological configurations in a different way in each language.
- 5Interpretation \neq production

Where do we go from here?

1. Develop an approach which takes into account the conditions which determine the expression of aspect-related features in the L1 and the L2 (feature selection + assembly).
2. Careful selection of languages examined.
3. Need to examine both use and interpretation.
4. Provide a variety of contexts (prototypical and not prototypical).
5. Combine evidence elicited with a variety of methods.