

GASLA14

***The 14th Generative
Approaches to Second
Language Acquisition
Conference***

UNIVERSITY OF
Southampton

7–9 April 2017

Welcome!

We are delighted to welcome you to the 14th edition of the Generative Approaches to Second Language Acquisition conference. GASLA 14 is being held at the University of Southampton from 7 to 9 April 2017. It is our pleasure to host you here in the United Kingdom for the first European edition of this conference.

We are honoured to have Heather Marsden (University of York), Mike Sharwood Smith (Heriot Watt University and Edinburgh University) and Marit Westergaard (The Arctic University of Norway and The Norwegian University of Science and Technology) as plenary speakers. Jason Rothman (University of Reading and The Arctic University of Norway) is the invited speaker for the special session on linguistic input, which will take place on Sunday. The rest of the schedule features twenty-four papers in the main session, three papers in the special session on input, and twenty-six posters. All of these were selected from the one hundred submitted abstracts which went through an anonymous review process. The two poster sessions take place at lunchtime on Friday and Saturday.

There will be a wine reception on Friday evening at Avenue Campus which all attendees are invited to attend. The conference dinner on Saturday evening will take place at the Ceno restaurant, a short walk from the conference venue (see details in the conference pack).

We would like to take this opportunity to thank everybody involved in the organisation of this conference, in particular, Erin Forward, who has provided valuable administrative support, and Charlotte Wood from the Conference, Events and Hospitality Office. Our special thanks go to the Centre of Linguistics, Language Education and Acquisition Research (CLLEAR) and the postgraduate Linguistics students in the Department of Modern Language and Linguistics (listed below) for their help and contribution to the organisation of this conference.

Finally, we would like to give a special mention to the reviewers who generously dedicated their time to reading and scoring abstracts, and to all the participants for submitting their work and making this edition of GASLA a success.

Thank you for coming to Southampton. We hope you enjoy the conference!

GASLA 14 Organising Committee

Roumyana Slabakova
Laura Domínguez

James Corbet
Amber Dudley
Elina Tunian
Amy Wallington



GASLA 14 Reviewers

Our greatest thanks and appreciation to the submitting authors, attendees and the fifty-one reviewers, listed below, who read and rated the submissions received this year:

Sharon Armon-Lotem	Julia Herschensohn	Silvia Perpiñán
Joyce Bruhn de Garavito	Makiko Hirakawa	Philippe Prévost
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Kook-Hee Gil	Theo Marinis	Darren Tanner
Heather Goad	Heather Marsden	Ianthi Tsimpli
Inmaculada Gómez Soler	John Matthews	Sharon Unsworth
Theres Gruter	Kate Miller	Elena Valenzuela
Pedro Guijarro-Fuentes	Silvina Montrul	Lydia White
Ayşe Gurel	Öner Özçelik	Melinda Whong
	Ana T. Pérez-Leroux	Martha Young Scholten

GASLA 14 Programme
Lecture Theatre A (Avenue Campus)
University of Southampton

Friday, 7 April 2017

8:15–9:00	Registration
9:00–9:15	Opening and Welcome
	<i>Subject Pronouns (chair Roumyana Slabakova)</i>
9:15–9:45	Anaphora resolution in Italian by Croatian-Italian simultaneous bilinguals <i>Tihana Kras and Maja Milicevic, U. of Rijeka and U. of Belgrade</i>
9:45–10:15	Anaphora resolution by experienced and trainee translators: native or attrition-like? <i>Maja Milicevic, Tihana Kras and Vladivoj Lisica, U. of Belgrade and U. of Rijeka</i>
10:15–10:45	L1 effects in the interpretation of subject pronouns in L2 Portuguese <i>Maria Lobo, Ana Madeira and Carolina Silva, CLUNL/FCSH-UNL</i>
10:45–11:15	Coffee Break
	<i>Clitics (chair Elina Tunivan)</i>
11:15–11:45	The interpretation of strong and clitic pronouns in L2 Portuguese <i>Alexandra Fiéis and Ana Madeira, CLUNL/FCSH-UNL</i>
11:45–12:15	Production of object clitics in French: child 2 versus contexts involving language pathology <i>Philippe Prévost and Laurie Tuller, Université François Rabelais, Tours</i>
12:15–14:15	Lunch and Poster Session I
	<i>Syntax-discourse interface (chair Glyn Hicks)</i>
14:15–14:45	Is the syntax-discourse interface a locus of permanent optionality? The case of locative inversion in L2 English <i>Joana Teixeira, Universidade Nova de Lisboa</i>
14:45–15:15	Ultimate attainment at the syntax-discourse interface: L1 effects and object movement in Dutch <i>Liz Smeets, McGill U.</i>

15:15–15:45	Coffee Break
	<i>Semantics and pragmatics (chair Laura Dominguez)</i>
15:45–16:15	L2 acquisition of definiteness in English: mapping two meanings to one form <i>Elina Tunivan and Roumyana Slabakova, U. of Southampton and U. of Iowa</i>
16:15–16:45	“Maximize Presupposition!”: L2 processing at the syntax-pragmatics interface <i>Jacee Cho, U. of Wisconsin, Madison</i>
16:45–17:15	Telicity and modes of Merge in L2 acquisition of resultatives <i>Sujeong Kim, Heejeong Ko and Hyun-Kwon Yang, Seoul National U.</i>
17:15–18:15	INVITED SPEAKER <i>Heather Marsden, U. of York</i> “Searching for a common language: where do GenSLA research and the language classroom meet?”
18:30	Reception

Saturday, 8 April 2017

	<i>Language Processing (Chair Jacee Cho)</i>
9:00–9:30	Cross-linguistic lexical and syntactic influences in simultaneous bilingual and child L2 gender processing <i>Holger Hopp and Natalia Lemmerth, TU Braunschweig and U. of Mannheim</i>
9:30–10:00	Processing of Informational Focus in Spanish <i>Brad Hoot and Tania Leal, DePaul U. and U. of Nevada, Reno</i>
10:00–10:30	Syntactic L1 co-activation in the on-line processing of L2 English <i>wh</i> -questions <i>Tom Rankin, Theres Grüter and Holger Hopp, WU Vienna, U. of Hawaii and TU Braunschweig</i>
10:30–11:00	Coffee Break
	<i>Pronouns (chair Tania Leal)</i>

11:00–11:30	Pronoun interpretation in L2 Italian: effects of pause and stress <i>Heather Goad, Lydia White, Guilherme D. Garcia, Natália B. Guzzo, Marzieh Mortazavinia, Liz Smeets and Jiajia Su, McGill U.</i>
11:30–12:00	The L2 acquisition of the Dutch quantitative pronoun ER by L1 French adults. <i>Sanne Berends and Petra Sleeman, U. of Amsterdam</i>
12:00–14:00	Lunch and Poster Session II
14:00–15:00	INVITED SPEAKER <i>Mike Sharwoord Smith, U. of Edinburgh and Heriot Watt U.</i> “Expanding explanations: the life cycle of a representation”
	<i>Syntax (chair Amy Wallington)</i>
15:00–15:30	Selective success in highly-proficient L2 grammars: Evidence from verb phrase ellipsis and adverb placement <i>Kholoud Al-Thubaiti, Umm AL-Qura University</i>
15:30–16:00	Unlearning reconstruction in L2 Japanese relative clauses by L1 Chinese learners <i>Yunchuan Chen and Shin Fukuda, U. of Hawaii at Manoa</i>
16:00–16:15	Coffee break
	<i>Variation in complex structures (chair Amber Dudley)</i>
16:15–16:45	Acquisition of two domains of knowledge of demonstrative pronouns by L1 English speakers of L2 Japanese. <i>Tokiko Okuma, University of Shizuoka</i>
16:45–17:15	Variation in Italian embedded wh-questions: heritage speakers vis-à-vis monolingual speakers <i>Stefano Quaglia, Tanja Kupisch and Anika Lloyd-Smith, U. of Konstanz and UiT The Arctic U. of Norway</i>
17:15–18:15	INVITED SPEAKER <i>Marit Westergaard, UiT The Arctic U. of Norway and NTNU Norwegian U. of Science and Technology</i> “Micro-variation in multilingual situations”
19:30	Conference Dinner

Sunday, 9 April 2017

	<i>Phonology/Morphology/Features (chair James Corbet)</i>
9:00–9:30	Interaction of knowledge of forms and the Conceptual System <i>Rodica Frimu</i> , Indiana U.
9:30–10:00	The role of gender in mixed-language nominal phrases: Insights from Distributed Morphology <i>Michele Burkholder, Éric Mathieu and Laura Sabourin</i> , U. of Ottawa
10:00–10:30	Learners can acquire structurally-conditioned variation: High vowel deletion in Quebec French <i>Natália B. Guzzo, Heather Goad, Guilherme D. Garcia</i> , McGill U.
10:30–11:00	Coffee Break
	<i>Morphology (chair Sharon Unsworth)</i>
11:00–11:30	Headedness in the grammar of English-Spanish bilinguals: Evidence from inflectional and derivational affixes <i>Rachel Klassen and Juana Liceras</i> , U. of Ottawa
11:30–12:00	Bilingualism is beneficial to dyslexia: The case of morphological awareness <i>Maria Vender, Denis Delfitto, Federica Mantione and Chiara Melloni</i> , U. of Verona
12:00–13:00	Organizational Meeting (all invited) and Lunch
	<i>Special Session on the role of Input (chair Holger Hopp)</i>
13:00–13:30	Input cues for the acquisition of gender marking and agreement in Spanish <i>Silvina Montrul, Sara Mason, Andrew Armstrong and Chase Krebs</i> , U. of Illinois at Urbana Champaign
13:30–14:00	Exploring the role of input quality in bilingual language acquisition <i>Sharon Unsworth, Josje Verhagen and Elise de Bree</i> , Radboud U., Utrecht U. and U. of Amsterdam
14:00–14:30	Development in L3 acquisition: The role of L1/L2 exposure <i>Jennifer Cabrelli Amaro, Michael Iverson, David Giancaspro and Becky Halloran</i> , U. of Illinois Chicago, Indiana, Rutgers, Indiana
14:30–15:30	INVITED SPEAKER <i>Jason Rothman</i> , U. of Reading and UiT The Arctic U. of Norway “Input Matters and Matters of Input”
15:30	Conference ends

ABSTRACTS

GASLA14

Invited Speaker: Friday 7 April 17:00-18:00

Heather Marsden, *University of York*

Searching for a common language: where do GenSLA research and the language classroom meet?

The GASLA conference in 2013 hosted a workshop on “Applying Generative SLA to the Language Classroom”, which—acknowledging the very minimal interaction between generative SLA (GenSLA) research and the practice of language teaching—aimed to present ways in which GenSLA could be informative for language teaching. However, as Widdowson (2000) cautioned, an endeavour to inform language teaching cannot succeed without a mediating relationship between the research and language teaching. This talk reflects on a three-year project to create opportunities for building such a relationship. Specifically, I will showcase highlights and challenges from two networks that I co-directed during 2014–2016 with the aim of fostering dialogue among language teachers, language learning researchers, and other stakeholders in language learning. The key activity of the networks was to hold workshops for researchers and teachers to share knowledge and ideas. We also conducted focus group meetings with teachers, created some preliminary video resources, and engaged with academic conferences and professional organisations. This talk takes stock of what was achieved, and considers where next for the endeavour of teacher-researcher dialogue and collaboration.

Invited Speaker: Saturday 8 April 14:00-15:00

Mike Sharwood Smith, *University of Edinburgh, Heriot-Watt University*
Expanding explanations: the life cycle of representation

In this paper, I will present a processing-based 'working model' of the mind based on research findings across a range of disciplines within cognitive science. Both representational and processing accounts are incorporated within this model, or more properly, within this theoretical 'framework'. One aim of the framework is to provide a crossdisciplinary platform for integrating and explicating research findings in what are, in practice, often quite separate areas of language research. A platform like this arguably has not been available to researchers and, I hope to persuade my audience, is still wrongly regarded as a luxury extra or perhaps just something 'for the future'. Nowadays, separate hypotheses and theories are typically developed and tested using terminology and techniques that facilitate empirical work only within one individual research area but do little to promote a combined view of what they all mean for our understanding of the mind.

After very briefly discussing the basic features of this framework, I will go on to show how language cognition fits with cognition in general. This will include accounting for how two or more languages can be accommodated within the same mind. The presentation will finish with sample implementations. This will include a precise definition of 'acquisition' as part of a developmental theory that explains in outline any type of cognitive growth or attrition, one that happens to be compatible with a generative, biolinguistic perspective. It will also include as an illustrative example, an explication of Lardiere's feature reassembly. The presentation will be based on my book *Introduction to language and cognition: mapping the mind* (2017, Cambridge University Press) which is one spin off from Sharwood Smith & Truscott's *The Multilingual Mind: a modular processing perspective* (2014, Cambridge University Press). More information on this approach can be usefully obtained, in advance of the presentation, from <http://www.mogulframework.com>.

Invited Speaker: Saturday 8 April 17:15-18:15

Marit Westergaard, *UiT The Arctic University of Norway and NTNU Norwegian University of Science and Technology*

Microvariation in multilingual situations

In this talk I will first introduce the micro-cue model of L1 acquisition and support it with data from child language, focusing on cases where there is micro-variation in the input (Westergaard 2009, 2014). Findings show that children are sensitive to fine distinctions in syntax and information structure from early on and that they are conservative learners, generally making errors of omission rather than commission (Snyder 2007). I will then sketch a research program investigating to what extent similar processes can be found in L2A and multilingual situations more generally. Considerable data show that adult L2 learners are not conservative, thus happy to make much larger generalizations than L1 children. Nevertheless, transfer/crosslinguistic difference can be argued to be selective, dependent on micro-variation in the L1. This is related to the idea put forward in Amaral & Roeper (2014) that transfer may only affect “simple rules”. In my interpretation, this means that transfer is local, applying property-by-property in quite small domains. This also resonates with recent proposals for L3 acquisition, the Scalpel Model (Slabakova 2016) and the Linguistic Proximity Model (Westergaard et al. 2016).

Invited Speaker: Sunday 9 April 2017

Jason Rothman, *University of Reading and UiT The Arctic University of Norway*
Input Matters and Matters of Input

There is no question that input is the main (external) driving force of (all instances of) language acquisition. Notwithstanding access to domain specific linguistic mechanisms (e.g., Fodor, 1984; Chomsky 1957; 1981)—guaranteed for the child learner, the degree and nature of which is controversially debated for adults—acquisition is simply impossible in the absence of input. As cases such as Genie remind us (Curtiss, 1977), having Universal Grammar is necessary but not sufficient. Input matters a great deal! And, nativist approaches to language acquisition have never suggested otherwise. The stance of the generative paradigm is clear; input matters but it is not everything.

The more nuanced question is how to determine the relative weight of specific input in terms of shaping a learner's grammar both over time (development) and its final state (ultimate attainment). Although it might be fair to say that generative approaches to language have historically not focused on the deterministic role input plays as much as other paradigms, recent trends in generative language acquisition (from monolingual children to various types of bilingualism) for more than a decade have turned our attention to it much more overtly (e.g., Yang, 2002; 2016; Westergaard, 2009; Pascual y Cabo and Rothman, 2012; Unsworth 2013, 2014; Rankin and Unsworth, 2016; Kupisch and Rothman, 2016; Yang and Montrul, 2017, a.o.). In the present talk, I will bring together insights from the study of bi-multilingual development in adulthood (e.g. the beginning stages of L3/Ln acquisition), the grammatical outcomes of childhood bilingualism (e.g. adult heritage speaker competence/performance) and issues/evidence pertaining to L1 maintenance under certain adult non-sequential bilingual conditions (e.g., L1 attrition) that speak to the deterministic role input plays in shaping grammatical competence in general. More specifically, we discuss how input considerations alter and delimit the learning task of non-monolinguals which in turn can account for at least some of the variation and divergent paths associated with all types of bilingual competence/performance.

PRESENTATIONS

Kholoud Al-Thubaiti, Umm Al-Qura University.

Selective success in highly proficient L2 grammars: Evidence from verb phrase ellipsis and adverb placement.

This presentation reports on results from a study on the L2 acquisition of English verb phrase ellipsis (VPE) and adverb placement by highly proficient L1 Saudi Arabic speakers. English VPE is licensed by modals and raising auxiliaries in Tense but not by non-raising main verbs (Aelbrecht, 2010). Unlike English, Saudi Arabic is a verb-raising language that doesn't license VPE. Adverb placement was tested to determine the baseline for whether the L2 speakers have acquired the verb-raising differences between English auxiliary and main verbs (Pollock, 1989).

Two subtle cases for English VPE were examined in partial morphological identity with the antecedent verb: (a) elision of copula *be* and main verbs following a stranded modal (e.g. *John is here, and Mary will too vs. John slept, and Mary will too), and (b) progressive *be* and perfect *have* stranding (e.g. *John slept, and Mary was too vs. Peter saw your parents last week, but he hasn't since) (examples from Lasnik, 1999). These contrasts illustrate complex computations of identity at the syntax-morphology interface (Rouveret, 2012). Assuming that verb deletion is marked before morphological merge, the ungrammaticality of copula *be* elision results from non-identical verb entries [is] and [be] unlike the verb entries for [sleep] (Lasnik, 1999). The ungrammaticality of progressive *be* stranding results from having an underlying stranded *-ing* bearing interpretable features as opposed to *-en* with uninterpretable features. Since the *-ing* is required for progressive interpretation, it cannot be deleted unless recoverable from the antecedent (Rouveret, 2012). These contrasts are highly underdetermined by input. We argue that selective success at the syntax-morphology interface is predictable when uninterpretable features are involved (Tsimpli & Dimitrakopoulou, 2007).

The participants were 34 (very)-advanced Saudi Arabic L2 speakers alongside 15 English controls. The L2 speakers' English proficiency was tested by the Oxford Placement Test and Vocabulary Levels Test (Nation, 2002). They were university instructors or graduate students in Saudi Arabia. All participants completed a bimodal timed acceptability judgment task with 48 items testing VPE and 48 adverb placement. They rated their judgments on a 5-point scale. The VPE stimuli were conjunct structures testing four factors: (1) the licenser (auxiliary, modals, and main verb), (2) identity (morphologically identical vs. non-identical), (3) recoverability (stranded affixes *-ing* vs. *-en*), and (4) negative clitic (absence vs. presence). The adverb placement stimuli were declarative sentences testing four factors: (1) adverb position (pre/postverbal), (2) verbal construction (simple finite, progressive, and perfect), (3) complement type (object vs. PP), and (4) adverb type (manner vs. frequency).

Results on paired conditions of adverb placement showed that the L2 speakers learned the contrast between English auxiliary and main verbs. Results on VPE indicated that they successfully acquired the contrast in verb elision constraints between copula *be* and main verb, and progressive *be* and perfect *have* stranding (see Figure 1). However, in subsequent analyses, the L2 speakers' judgments were found to be affected by the presence of a negative clitic on stranded auxiliaries. Unlike the English controls, the L2 speakers' judgments of perfect *have* stranding (contra *be* stranding) were significantly improved in the presence of the negative clitic to approximate target-like performance (see Figure 2). This effect apparently concealed difficulty in acquiring an uninterpretable feature not instantiated in their L1. Although L1 Saudi Arabic speakers of high English proficiency can appear target-like, they show selective non-target-like judgments at a very subtle detail in their L2 grammars.

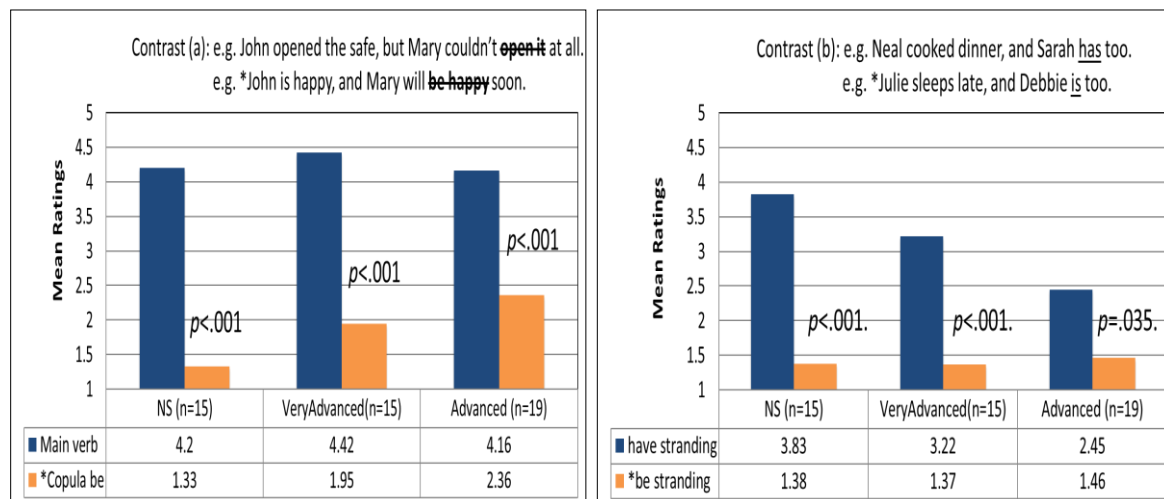


Figure 1. Paired comparisons for the contrasts in (a) and (b) with a finite antecedent.

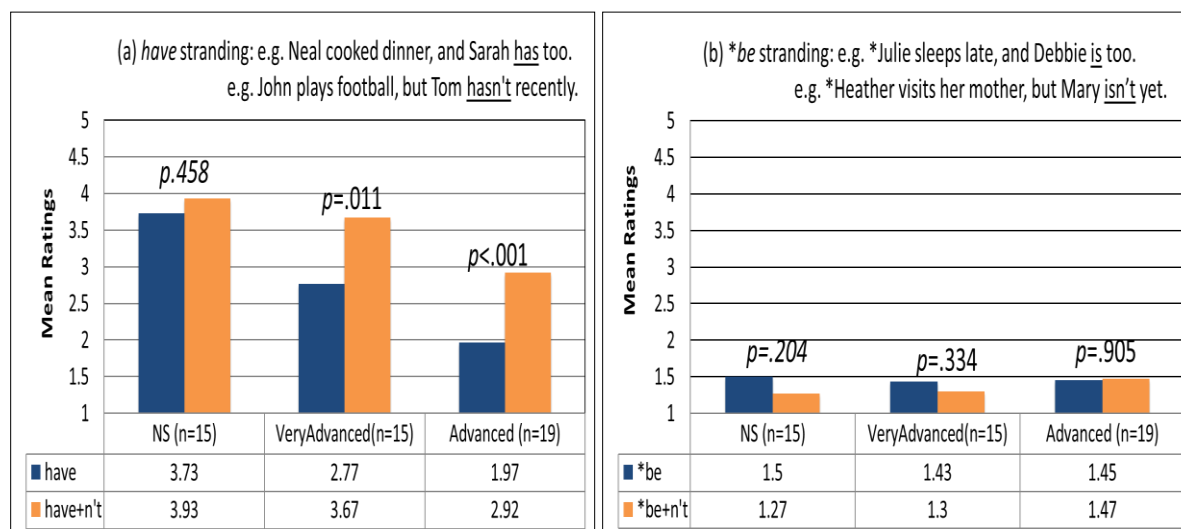


Figure 2. Paired comparisons by negative clitic for (a) *have* stranding and (b) *be* stranding with a finite antecedent

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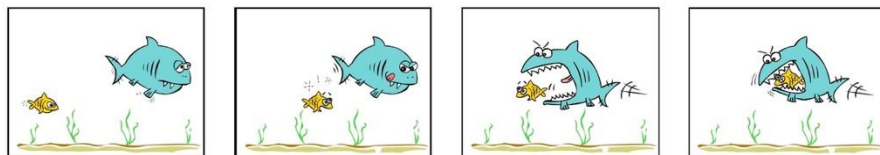
Fatih Bayram, Jason Rothman, Michael Iverson, Tanja Kupisch, David Miller, Eloi Puig-Mayenco, Marit Westergart. *University of Reading, Indiana University, University of Konstanz, UiT The Arctic University of Norway, NTNU Norwegian University of Science and Technology.*
Distinct Patterns of Use with the Same Mental Representations: Passives and Relative Clauses in Heritage Turkish in Germany

Divergence from monolingual norms in adult heritage speaker (HS) outcomes is well attested (see e.g., Montrul, 2016). This is also the case for Turkish as a heritage language in various bilingual contexts. Adult HSs of Turkish have been found to use less clausal linkage and subordination, replacing them with simple conjunctions, which is regarded as failure to acquire certain features of Turkish grammar and to attain a non-monolingual-like level of proficiency (Backus, 2004; Treffers-Daller, et al., 2008; Verhoeven, 2004). However, recent work has challenged the assumption that all HS differences reflect a process of incomplete acquisition (e.g., Rothman, 2007; Pascual y Cabo and Rothman, 2012; Putnam and Sánchez, 2013; Kupisch and Rothman, 2016), suggesting that when HS grammatical outcomes differ from baselines (see Kupisch and Rothman, 2016), they are reflective of alternative paths inherent to language development in bilingual environments. Since most HS studies examine the adult outcomes of early child bilingualism, it is not clear how to adjudicate between competing proposals to determine how HS adult grammars obtain because it is difficult to reliably reconstruct developmental paths from end-state data where surface representations of grammatical structures have been reported to diverge from that of age-matched monolingual norms. In an effort to address this issue, we examine HSs of Turkish in Germany at an early age of development (10-15 years old).

We tested child heritage speakers of Turkish in Germany (n=20) in their L1 heritage language (Turkish) and their dominant L2 (German), as well as monolingual controls of the same age group in Turkey (n=20) and Germany (n=20), using a behavioral methodology via a structured (picture description) elicitation task for passives (see 1) and a spot-the-difference task for relative clauses (see 2). We tested these two properties since they are known to be late(r) acquired in monolingual children—passives before age 3 (Aksu-Koç and Ketrez, 2003) and relative clauses around age 6 (Slobin, 1986). Under an arrested development account, these properties should be particularly vulnerable or not have been acquired at all-- more so for relative clauses, since shift of dominance from L1 Turkish to L2 German begins at around age 3 which potentially leads to incomplete acquisition. This timely shift would also mean that Turkish HSs should acquire passives and relative clauses in German naturalistically since monolingual German children acquire these two structures at age 4-6 (Brandt et al., 2008; Mills, 1985).

The results show that Turkish HSs' use of passives and relative clauses in German is quantitatively and qualitatively similar to that of German monolinguals. Their use of the same structures in Turkish shows quantitative variation—significantly fewer passives and relative clauses produced, but crucially not qualitative variation (when produced they are grammatical) as compared to Turkish monolinguals. We discuss these results pertaining to explicating ultimate attainment outcomes in heritage language acquisition. That is, although there are differences on the surface as regards use, the heritage speakers have the same underlying mental representation that enables them to produce grammatical instances of passives and relative clauses in both languages.

1. Passive Elicitation Task Pictures (14 different sets of pictures, 28 contexts for passives)



Q: What is happening to the small fish in picture 3/4?

Picture 3:

A: küçük balık kovala-**n**-ıyor.

small fish chase-**Pass**-Pro-3sg

Der kleine Fisch wird gejagt.

The small fish be-**Pass**-3sg chase-past participle

"The small fish is being chased."

Picture 4:

A: küçük balık ye-**n**-iyor.

Small fish eat-**Pass**-Pro-3sg

Der kleine Fisch wird gefressen

the small fish be-**Pass**-3sg eat-past participle

"The small fish is being eaten."

2. Relative Clause Elicitation Task Pictures (14 contexts for relative clauses)



Q: In your picture, do you have a cat that is biting a snake?

A: Hayır, benim resm-im-de kedi-yi kovala-**yan** bir yılan var.

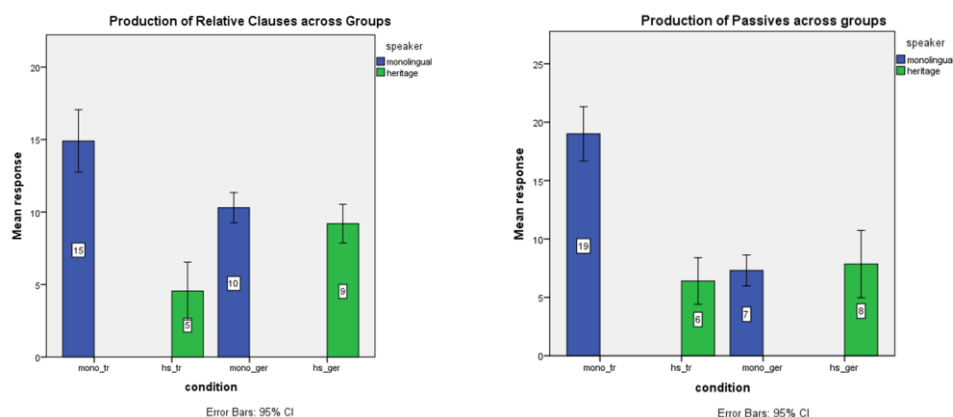
No, my picture-Poss-Loc cat-Acc chase-**Rel** a snake exist.

Nein, in meinem Bild ist eine Schlange, die eine Katze jagt.

No in my picture is a snake that a cat chases

"No, in my picture there is a snake that is chasing a cat."

Figure 1



Selected References

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Sanne Berends and Petra Sleeman, *University of Amsterdam.*

The L2 acquisition of the Dutch quantitative pronoun ER by L1 French adults.

This study reports experimental data on the (re)production abilities of French-speaking adults (L1) in three different conditions with the quantitative pronoun ER in Dutch (L2). French also has a quantitative pronoun, EN. In both languages the quantitative pronoun can occur with object noun phrases containing an empty noun, but its licensing conditions are not always identical (1)-(2) and therefore both positive and negative cross-linguistic influences are expected.

Besides cross-linguistic influence, we base our predictions on a recent version of the Interface Hypothesis that claims that narrow syntax should be more easily processed than internal interfaces. Moreover external interfaces are expected to be still more vulnerable than internal interfaces (Tsimpili and Sorace, 2006; Sorace and Serratrice, 2009; White, 2011). To test this, we have included all three conditions in our data set comprised of Dutch sentences with quantitative ER. See example (1) for narrow syntax, example (2) for the internal interface and example (3) for the external interface. All three conditions incorporated various subcategories.

To the best of our knowledge the processing of quantitative ER in Dutch (L2) by French-speaking adults (L1) has never been studied before.

French adults (N = 26) who learned Dutch after puberty (level > B2) and Dutch adult controls (N = 26) took part in a Sentence Imitation Task in which audio-recorded target sentences were presented, belonging to the three aforementioned conditions. All target sentences were preceded by an introductory sentence and all of them contained 17 or 18 syllables to prevent the task from being accomplished by simply relying on phonetic memory. Language proficiency measures (TDV), working memory measures (FDS) and a language background questionnaire were also administered. Mann-Whitney-Wilcoxon Tests reveal that no between-group differences are observed for variables like working memory, vocabulary and socio-economic status.

Although in general the advanced L2 learners differ significantly from the L1 group in narrow syntax ($W = 583.5$, $p < .001$), internal interface ($W = 598.5$, $p < .001$) and external interface ($W = 651.5$, $p < .001$), the data show that with respect to the imitation of target like sentences, the L2 speakers score significantly more native like in the syntax condition than in the internal interface condition ($p = .009$) and in the external interface condition ($p = .001$), see Graph 1.

The outcomes reveal that even at advanced stages of L2 acquisition native-like attainment of semantics and pragmatics is not reached in (this form of) production. At first glance this could be explained by cross-linguistic influence because when looking at the subcategories in the syntax condition, the ones in which the use of ER and EN is identical show the most resemblance between the L1 and L2 group. However, when looking at the interface conditions, in which the use of ER and EN in the subcategories is also partially identical and partially different, just like in the syntax condition, the role of cross-linguistic influence is much less obvious. Nevertheless, there is a significant difference between the conditions, which suggests that cross-linguistic influence apparently can be overridden by the Interface Hypothesis in predicting the success in the L2 acquisition of quantitative ER by L1 French adults.

- (1) Narrow syntax
- | | | |
|----|-------------------------|--------|
| a. | Ik heb er drie gelezen. | DUTCH |
| b. | *Ik heb drie gelezen. | DUTCH |
| c. | J'en ai lu trois. | FRENCH |
- ‘I have read three.’

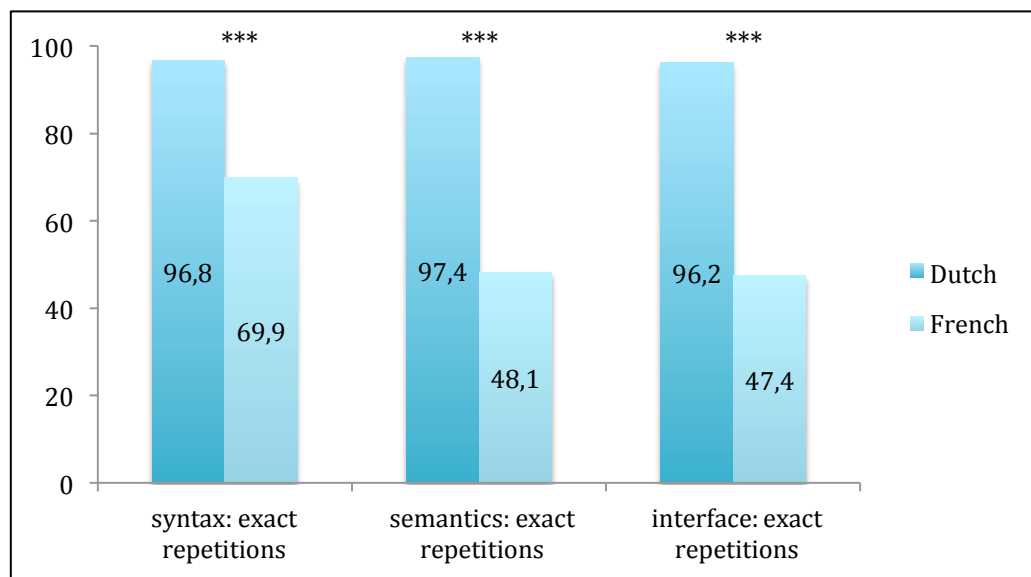
Subcategories: position, omission and presence of an adjective

- (2) Internal interface
- | | | |
|----|------------------------------|--------|
| a. | Ik heb de helft gelezen. | DUTCH |
| b. | *Ik heb er de helft gelezen. | DUTCH |
| c. | J'en ai lu la moitié. | FRENCH |
- ‘I have read some.’

Subcategories: presuppositionality and definiteness of the quantifier

- (3) External interface
- | | | |
|----|-------------------------------|--------|
| a. | Ik heb er snel twee gelezen. | DUTCH |
| b. | *Ik heb snel er twee gelezen. | DUTCH |
| c. | J'en ai vite lu trois. | FRENCH |
- ‘I have read three quickly.’

Subcategories: scrambling, far scrambling and definiteness of the article



$p < .001$ ***

Figure 1. Proportions of target like group repetitions per condition and per language

Sorace, A. & Serratrice, L. (2009). Internal and external interfaces in bilingual language development: Beyond structural overlap. *International Journal of Bilingualism*, 13, 195-210.

Tsimpli, T. & Sorace, A. (2006). Differentiating Interfaces: L2 performance in syntax- semantics and syntax-discourse phenomena. In D. Bamman, T. Magnitskaia & C. Zaller (Eds.), *Proceedings of the 30th Boston University Conference on Language Development* (pp. 653-664). Somerville, MA: Cascadilla Press.

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It is well established that bilinguals often integrate elements from both of their languages within the same sentence, and even within the same “word”. Such language mixing is spontaneous and unpredictable; however, it is also highly constrained. While there is a long tradition of generative approaches in accounting for mixed-language data (e.g. MacSwan 2005), it is only recently that such approaches have incorporated the non-lexicalist assumptions of Halle and Marantz’ (1993) Distributed Morphology (DM) framework (e.g. Grimstad et al., 2014; Alexiadou et al., 2015). As such, the present study has two major goals. The first is to demonstrate that DM can provide important insights regarding a particular language-mixing asymmetry involving Spanish-English and Norwegian-English nominal phrases (DPs); the second is to test the predictions that this account makes for French-English mixed DPs using a self-paced reading task.

The issue in question involves the claim that it is grammatical to switch between a Spanish determiner (D) and an English noun (N), as in (1a), but not between an English D and a Spanish N, as in (1b). MacSwan (2005) and others have argued that this directional asymmetry is a consequence of an underlying morphosyntactic feature asymmetry between the two languages: Spanish has grammatical gender whereas English does not. In contrast, however, data reported by Grimstad et al. (2014) and Alexiadou et al. (2015) suggest that this switch is permitted in both directions in Norwegian-English language mixing, as in (2), even though a gender feature asymmetry also exists in this language pair.

From a theoretical perspective, I argue that the separation of the abstract gender feature (e.g. [+FEM]) from the bare lexical root (e.g. $\sqrt{\text{BY}}$ ‘city’), as argued in Kramer’s (2015) DM-based proposal, is crucial in accounting for this data. In a nutshell, the gender features of Norwegian (and Spanish) are postulated to be found on the nominalizing head, *n*, which merges with uncategorized lexical roots in the narrow syntax to form nouns. In language mixing, this combination of *n*+ROOT occurs in a language non-selective manner, and is what constrains the language membership of the spelled-out D, leading to the attested combinations in (3) for Norwegian-English. To account for the asymmetry in the Spanish-English data exemplified in (1), I propose that when “Spanish” roots merge with a genderless “English” *n* in the narrow syntax, there is no available Vocabulary Item that can be spelled out, as Spanish roots need to be specified for gender in order to surface with a declension class suffix (e.g. $\sqrt{\text{CAS}}$ +a ‘house’). This essentially leads to forms such as ‘*the casa*’ being blocked. Importantly, because French has no declension class suffixes, French-English mixed DPs are predicted to pattern like those of Norwegian-English, not like those of Spanish-English. Consequently, no directional asymmetry is expected for this language pair.

To test this prediction, 21 native speakers of French with high proficiency in and early exposure to English (mean age = 1.1 years), and who reported mixing these languages, performed a self-paced reading task with mixed language sentences, such as (4), and provided acceptability ratings. Critical trials manipulated two variables: *Language of D* (French/English) and *DP Type* (mixed/unmixed), and filler trials included other types of morphosyntactic and code-switching violations. Reading times (RTs) to critical nouns and global acceptability ratings were analyzed. Results for RTs (shown in 5), which were consistent with results for ratings, indicated that participants processed unmixed DPs more quickly than mixed DPs ($F(1,20) = 21.202, p < .001$), but crucially, they had no preference for switches involving a French D and an English N (interaction: $p = .930$). These results support the theoretically motivated prediction that French-English mixed DPs should pattern like Norwegian-English DPs. As such, this study has provided both theoretical and empirical evidence that DM is a useful framework from which to investigate bilingual competence.

Examples, tables, and figures.

- (1) a. la house
the.DEF.SG.F house
- b. * the casa
the.DEF house.F

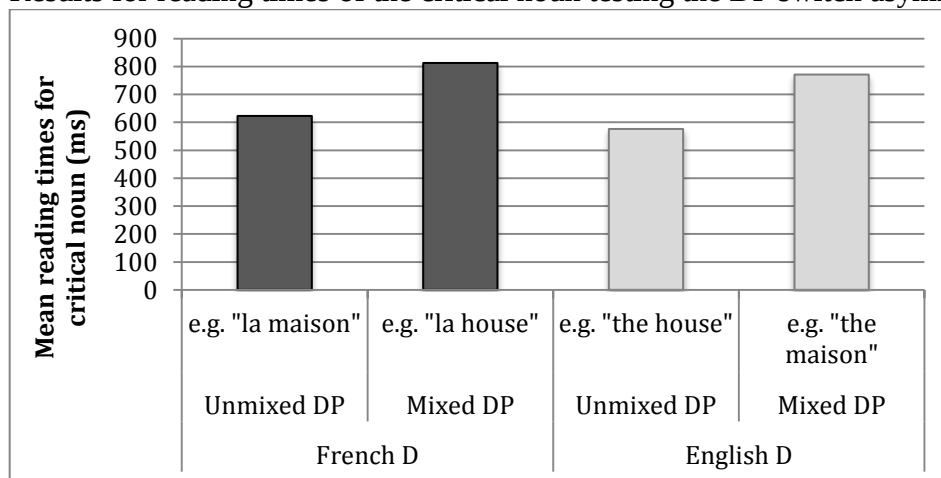
- (2) a. den field-a
that.DEF field-DEF.F
- b. the by
the.DEF city.M

- (3) Combinations of roots and *n*'s assuming a “distributed” Norwegian-English lexicon.

	“English” <i>n</i> (no gender)	“Norwegian” <i>n</i> (gender)
“Norwegian” root	(a) the by the.DEF city ‘the city’	(c) (det) felt-et (that.DEF.N) field-DEF.SG.N ‘(that) field’
“English” root	(b) the city the.DEF city ‘the city’	(d) (det) field-et (that.DEF.N) field-DEF.SG.N ‘(that) field’

- (4) Paul bought trois livres pendant [**le month**]_{DP} of May.
‘Paul bought three books during the month of May.’

- (5) Results for reading times of the critical noun testing the DP switch asymmetry.



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Development in L3 Acquisition: The role of L1/L2 exposure

Research on the initial stages of L3 acquisition suggests transfer is determined by structural similarity of the L1 vs. L2 (i.e., native vs. non-native) to the L3 (e.g. Foote, 2009; Montrul, Dias, & Santos 2011; Rothman 2011, 2015). This transfer may come from either existing system, and may be facilitative or non-facilitative. Non-facilitative transfer from the L2 may create a qualitatively different L3 learning task compared to L1 transfer. The aim of this study is to identify potential differences in the developmental sequence conditioned by L1 vs L2 transfer.

We examine the acceptability of differential object marking (DOM) by English/Spanish bilingual learners of L3 Brazilian Portuguese (BP). In Spanish, accusative object DPs that are both semantically specific and animate are marked with *a*, while other accusative objects are unmarked (examples 1-4). Neither English nor BP exhibit this contrast. Bilinguals of Spanish and English learning L3 BP have two grammars available for transfer at the initial stages, which for DOM could be facilitative (i.e. English) or non-facilitative (i.e. Spanish). Despite the availability of a target-like option from English, L3 learners at the initial stages transfer the incorrect option from the structurally more similar Spanish (Giancaspro, Halloran, & Iverson 2015).

In addition to a control group of native speakers of BP (n=22), we tested six groups of adult Spanish/English bilinguals at two levels of proficiency in BP. Four groups acquired the L2 sequentially, and were advanced speakers of their respective L2s (English or Spanish): L1 Spanish/Advanced L3 BP (n=17), L1 Spanish/Low L3 BP (n=13), L1 English/Advanced L3 BP (n=19), and L1 English/Low L3 BP (n=16). The remaining two groups were highly proficient early childhood bilinguals (i.e. heritage speakers of Spanish): HS/Advanced L3 BP (n=9), and HS/Low L3 BP (n=27). Participants completed an acceptability judgment task. There were 8 target conditions: the four combinations of [$\pm$ animate, $\pm$ specific] as seen in (1)- (4), with and without the DO marker *a*. Influence from Spanish is expected at the initial stages. Beyond this, if L1/L2 status does matter, we expect divergence in these groups, particularly in conditions with a [+animate, +specific] object (where DOM is used in Spanish).

All L3 groups at the initial stages (i.e. Span Low, Eng Low, HS Low) fail to significantly distinguish between [+animate, +specific] items with DOM (ungrammatical in BP) and without DOM (Figure 1). The L1 Spanish/Advanced L3 BP group (Span Adv) and the HS/Advanced L3 group pattern with the low-proficiency L3 groups, showing no signs of development. The L1 English/Advanced L3 BP group (Eng Adv), however, shows a more polarized response—approaching that of the BP control group—making a significant distinction between items with DOM and items without DOM. We take these results to suggest that the L1 English/Advanced L3 BP group has retreated from initial non-facilitative transfer, while the L1 Spanish and HS Advanced L3 BP groups have failed to do so. We discuss these results in light of possible sources of non-convergence, including L1 inhibition issues and relative amount of Spanish and English exposure.

Examples

- | | | |
|-----|---|-----------------------|
| (1) | <i>Busco (a) una secretaria</i>
I am looking for DOM a secretary
'I am looking for a (specific) secretary.' | [+animate, +specific] |
| (2) | <i>Busco (*a) una secretaria</i>
I am looking for *DOM a secretary
'I am looking for a (non-specific) secretary.' | [+animate, -specific] |
| (3) | <i>Juan destruyó (*a) la ciudad</i>
John destroyed *DOM the city
'John destroyed the city' | [-animate, +specific] |
| (4) | <i>Juan destruyó (*a) una ciudad</i>
John destroyed *DOM a city
'John destroyed a city' | [-animate, -specific] |

(Zagona, 2002, p. 13)

(Rodríguez-Mondoñedo, 2007, p. 92)

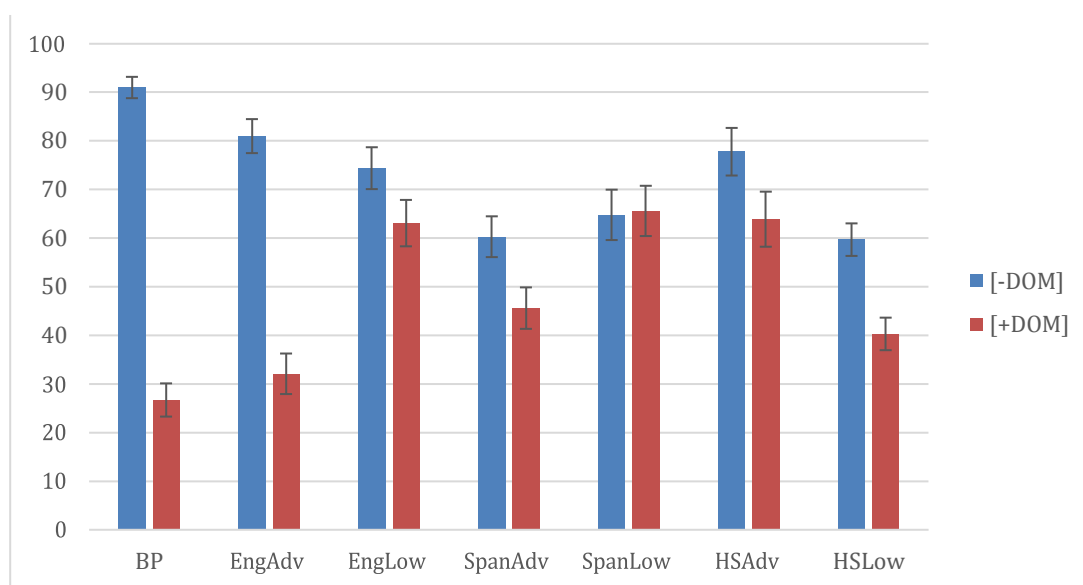


Figure 1. Percent acceptability results for the critical condition, [+animate, +specific] objects with or without DOM; Error bars indicate standard deviation

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In Chinese relative clauses (CRCs) with a gap, the head NP is raised (Aoun & Li, 2003). One motivation is that the subject-oriented anaphor (SOA) *ziji* within the head NP can reconstruct within the CRC to refer to either the matrix or the embedded subject, as in (1). By contrast, in Japanese RCs (JRCs), the SOA *jibun* cannot reconstruct to refer to the embedded RC subject (e.g. Murasugi, 2000). Only the matrix subject is possible, as in (2). This difference between Chinese and Japanese leads to a learnability question: when L1 Chinese learners of L2 Japanese learn Japanese RCs, can they acquire the knowledge that the SOA *jibun* within the head NP cannot refer to the RC subject within JRCs? The knowledge cannot come from the input, the explicit instruction or the L1 Chinese.

We did picture-matching Truth Value Judgment Task (TVJT) studies with Chinese and Japanese. In each stimulus, participants saw a picture like (3) and read a sentence with an RC, which has an SOA inside the head NP (1a/2a). Then they judged whether the interpretation of the sentence matches the picture. There were two conditions: (i) a picture is such that the SOA must refer to the matrix subject (SOA-M) and (ii) a picture is such that the SOA must refer to the RC subject (SOA-E). Twelve items were created for SOA-M and SOA-E and presented with 24 fillers involving a ditransitive verb like (4) and 12 fillers with an SOA inside an embedded clause like (5). Twenty-eight Japanese natives participated in the Japanese TVJT as controls and 69 Japanese-major college students in China participated in both Japanese and Chinese TVJTs, who were further categorized into 35 advanced learners and 34 intermediate learners by Marsden's (2004) Japanese proficiency test.

Figure 1 shows the means of matching judgments in the two critical conditions. The Japanese natives' means for SOA-M ($M=11.25$, $SD=1.11$) and SOA-E ($M=1.25$, $SD=1.55$) differ significantly: $t(27) = 22.76$, $p<.01$, suggesting that head NP in JRCs do not reconstruct; i.e., they are base-generated. Meanwhile, the Chinese natives' means for SOA-M ($M=9.97$, $SD=2.29$) and SOA-E ($M= 10.2$, $SD=2.57$) do not differ significantly: $t(68) = -0.514$, $p=.61$. Moreover, by checking L2 learners' judgments on the Chinese and Japanese SOA-E conditions, we found there was a significant difference for advanced learners: $t(34) = -3.46$, $p<.01$ but there was no significant difference for intermediate learners: $t(33) = -.98$, $p=.33$. The individual data showed that 6 out of the 35 (17.1%) advanced learners rejected 9 or more out of the 12 items in the Japanese SOA-E.

Our finding suggests that L1 Chinese learners of L2 Japanese are able to acquire the knowledge that the SOA within head NP cannot refer to the RC subject in JRCs. We propose the knowledge could be derived by the acquisition of the syntactic knowledge that the head NP in JRCs must be base-generated through input like (6).

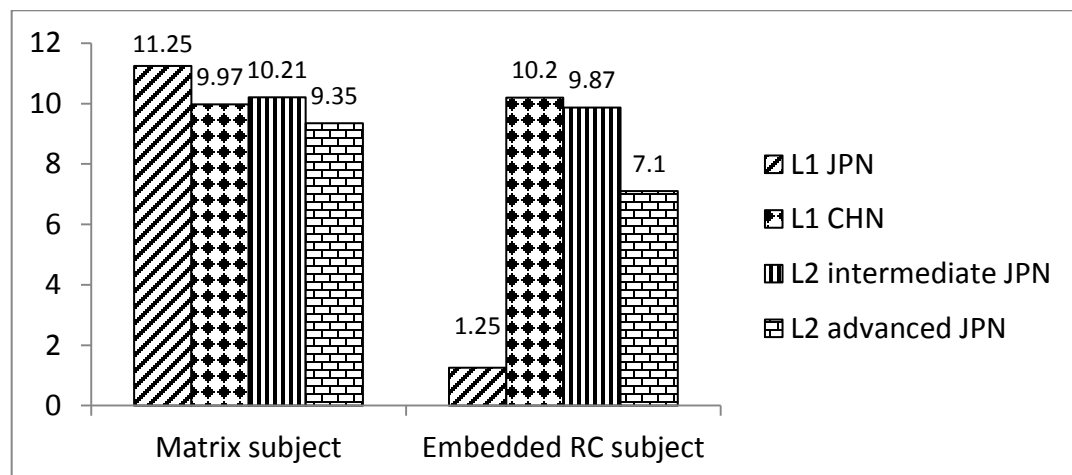
- (1) a. Daisiya_j nongzang-le Miqik_k xi de zij_{j/k}-de maozi.
 Daisy stain-PST Mickey wash DE self-DE hat
 ‘Daisy_j stained self_{j/k}’s hat that Mickey_k washed.’
 b. Daisy_j stained [_{RC} [Mickey_k washed t_i] [self_{j/k}’s hat]_i]. (head-raising)
- (2) a. Daisy_j-ga Mickey_k-ga arat-ta jibun_{j/*k}-no booshi-o yogoshi-ta.
 Daisy-NOM Mickey-NOM wash-PST self-GEN hat-ACC stain-PST
 ‘Daisy stained the hat that Mickey washed.’
 b. Daisy_j [_{RC} [Mickey_k pro_i washed] [self_{j/*k}’s hat]_i] stained. (base-generation)

(3)



- (4) Mickey_j-ga Daisy_k-ni jibun_{j/*k}-no hon-o kashi-ta.
 Mickey-NOM Daisy-DAT self-GEN book-ACC lend-PST
 ‘Mickey lent his book to Daisy.’
- (5) Daisy_j-ga Mickey_k-ga jibun_{j/k}-no huku-o aratta-no-o mita.
 Daisy-NOM Mickey-NOM self-GEN clothes-ACC wash-PST-NO-ACC see-PST
 ‘Daisy saw Mickey wash his/her clothes.’

Figure 1: Means of matching judgments out of 12 in the two critical conditions.



- (6) [_{CP} Kimura-ga [_{NP} pro_i ashi]-o hunda] [_{NP} inu]_i
 Kimura-NOM foot-ACC step on-PST dog
 ‘the dog whose foot Mr. Kimura stepped on’

In recent years, there has been an increasing interest in processing-based approaches to second language (L2) acquisition. One particularly influential theoretical proposal (Interface Hypothesis) is that processing information at the interfaces between the linguistic system (e.g., syntax) and other cognitive domains (e.g., pragmatics) is the main source of lasting difficulties in L2 acquisition due to limited L2 processing capacity (Sorace, 2011). The present study investigates L2 acquisition at the syntax-pragmatics by examining L1 Korean speakers’ online and offline comprehension of English articles in two different definite contexts: anaphoric and non-anaphoric (the latter is often referred to as ‘bridging’).

According to Heim (1991), the crucial difference between the definite article (the) and the indefinite article (a) is that the definite article carries a presupposition (the presupposition of familiarity and uniqueness) while the indefinite article does not (i.e., ‘neutral’). This presupposition can be satisfied by previous mention, i.e., anaphoric (e.g., Brad gave a ring to Mary. She accepted the ring) or through shared world knowledge, i.e., bridging (e.g., Brad proposed to Mary. She accepted the ring). Heim (1991) further formulates the *Maximize Presupposition* (MP) principle which states that the speaker is required to use the option with the strongest presupposition among a set of alternatives. On this account, the indefinite article which lacks presuppositions is infelicitous in contexts where the presuppositional definite article can be used. For example, *the ring* is more felicitous than *a ring* in “Brad proposed to Mary. She accepted the ring/#a ring” since the context (marriage proposal) establishes the presupposition that Brad gave a unique ring to Mary.

Previous processing studies have shown that such presupposition inferences derived from pragmatic knowledge are rapidly available in L1 real-time processing (O’Brien et al 1988; Burkhardt 2005). However, if integrating pragmatic knowledge is challenging in an L2, the comprehension of *the* vs. *a* in bridging contexts (pragmatic inference required) should present more difficulties than anaphoric contexts (pragmatic inference not required) for L2 speakers. More importantly, we should see accuracy differences in online vs. offline comprehension. This study tests these predictions by examining L1-Korean speakers’ online processing and offline comprehension of L2 English articles in anaphoric and bridging definite contexts.

Methodology: L1-Korean L2-English learners (advanced, n=40) and native English speaker controls (n=35) completed a self-paced reading task (SPRT), an acceptability judgment task (AJT) and a proficiency test. Half of the target items were felicitous the+NP and the other half were infelicitous a+NP in two different conditions (anaphoric vs. bridging). Eight lists were created for both SPRT and AJT using a Latin Square design so that participants saw 8 experimental items embedded in 92 controls, distractors and fillers. Reading times (RTs) for each segment as well as acceptability ratings (on a 4-point scale) were analyzed and compared.

Findings and Conclusion: Reading time data were analyzed using linear mixed models (*lme4* under R). Both native and L2 speakers’ RT differences for the+NP vs. a+NP in the critical region in both anaphoric and bridging contexts were significant (all $t > 2$, all $p < .05$). There was no main effect of context (all $t < |1|$). However, L2 speakers differ significantly from native speakers in their offline comprehension. While native speakers showed a contrast between the+NP vs. a+NP ($t = -4.5$, $p < .0001$), L2 speakers did not differentiate them in either context ($t = -1.26$, $p = .2$). As shown in Fig 4., L2 speakers accepted a+NP against the Maximize Presupposition (MP) principle. While the question of why L2 speakers violate the MP principle remains open, the data indicate that advanced L2 speakers’ non-target-like offline performance with English articles doesn’t appear to be real-time interface processing issues.

Table 1. SPRT Sample test items (Double slashes indicate region boundaries in moving window)

Condition	Context sentence	Test sentence
Anaphoric (n=8)	Jason was about to repair his stove and microwave.	He // checked out // the stove (#a stove) // and // found // no problem.
Bridging (n=8)	The handyman just arrived in Sarah's kitchen.	He // checked out // the stove (#a stove) // and // found // no problem.

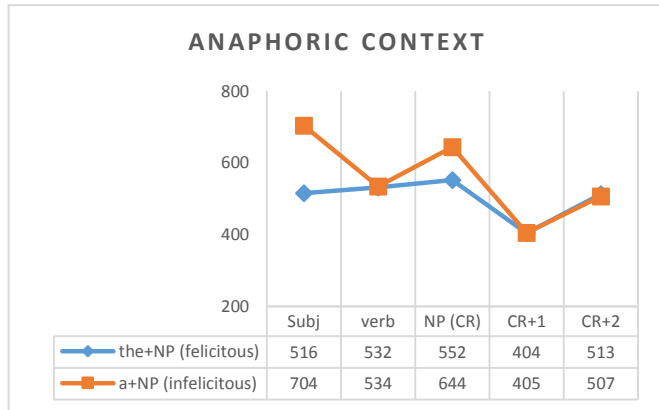


Fig. 1. L2 speakers' RT per segment in anaphoric

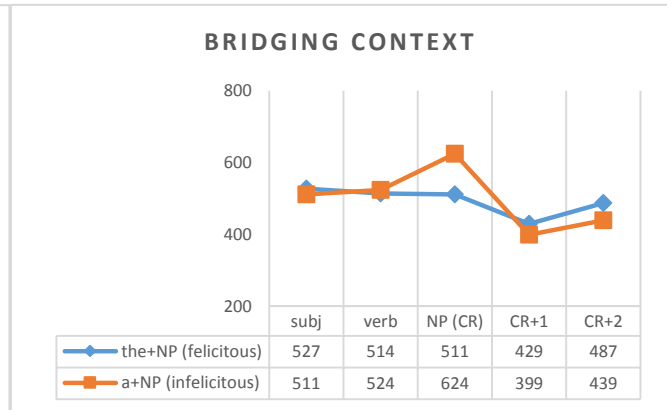


Fig. 2. L2 speakers' RT per segment in bridging

Table 2. AJT Sample test items (4 = acceptable; 1 = unacceptable)

Condition	Context sentence	Test sentence
Anaphoric (n=8)	Amy found a driver and a secretary to hire today.	She talked to <u>the driver</u> (#a driver) and asked questions. [1 2 3 4 I don't know]
Bridging (n=8)	Amy got into a cab.	She talked to <u>the driver</u> (#a driver) and asked questions. [1 2 3 4 I don't know]

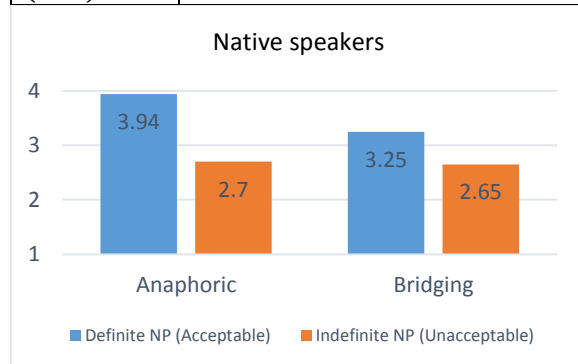


Fig. 3. Native speakers' AJT mean ratings

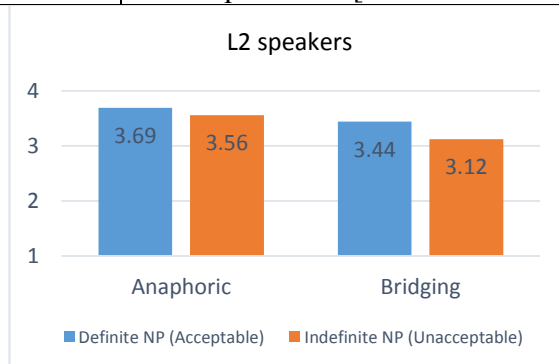


Fig. 4. L2 speakers' AJT mean ratings

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The interpretation of strong and clitic pronouns in L2 Portuguese.

In this talk we investigate whether L2 learners of European Portuguese (EP) show difficulties in the interpretation of strong and clitic pronouns. Previous research on the L2 acquisition of object pronouns shown that knowledge of the referential dependencies involving both reflexive and non-reflexive clitic pronouns pose no difficulties for Chinese-speaking intermediate learners of L2 EP (Fiéis & Madeira, 2016). As for strong pronouns, although there are no studies investigating their acquisition in L2 EP, Kim, Montrul & Yoon (2014) found that Korean-speaking advanced learners of L2 English exhibit difficulties in the interpretation of non-reflexive pronouns (but not of reflexives) in *picture-noun* phrases, which they attribute to difficulties in the integration of the syntactic and discursive knowledge necessary for the interpretation of non-reflexive pronouns. Moreover, there is evidence that L1 speakers of Korean, which displays long distance binding, experience difficulties regarding the interpretation of reflexive pronouns in L2 English in contexts where there are two potential subject antecedents for the reflexive (Domínguez, Hicks & Song, 2012). Given that, unlike English, EP displays a reflexive which can take both a local and a long-distance antecedent (1), and L1 effects have been reported in the acquisition of long-distance reflexives (e.g. Yuan, 1998), it is expected that the interpretation of this reflexive should not be problematic for learners whose L1 also displays long-distance reflexives. Hence, our study addresses the following research questions: (i) Is the grammatical status of the pronoun relevant in L2 EP, i.e., are there asymmetries in the acquisition of strong and clitic pronouns? (ii) Is locality relevant, i.e., are there asymmetries re. the establishment of referential dependencies with local and long-distance antecedents?

The study is based on two truth-value judgement tasks. A picture showing two or three characters was presented to the participants, who had to answer ‘yes’ or ‘no’ to the question asked. The first task (which is an adaptation of the task used in Silva’s 2015 study) tests comprehension of accusative clitics and strong pronouns in prepositional contexts in simple sentences; all pronouns are 3rd person singular. Four conditions were tested, with 20 items each (10 true and 10 false): (i) reflexive clitic; (ii) non-reflexive clitic; (iii) reflexive pronoun; (iv) non-reflexive pronoun (see figure 1). The second task focused on reflexive clitic and strong pronouns in complex sentences; in this task, there were two potential antecedents (both in subject position) for the object pronoun in the embedded sentence. The variables tested were the type of pronoun (clitic/strong) and the antecedent (local/long-distance). Hence the task included four conditions, with 6 items each: (i) clitic with a local antecedent (expected answer=true); (ii) clitic with a non-local antecedent (expected answer=false); (iii) pronoun with a local antecedent; (iv) pronoun with a non-local antecedent (expected answer in both conditions=true) (see figure 2). The participants are 25 intermediate speakers of Chinese (ages 17-21; mean 19). A control group of 16 L1 speakers of EP was also included (ages 22-41; mean 29.4).

Considering the results of the learner group, in simple sentences there are no asymmetries between reflexive and non-reflexive clitic pronouns, but participants are less accurate with reflexive than with non-reflexive strong pronouns (table 1). Hence, the grammatical status appears to be relevant only for reflexives: the learners show no difficulties in the interpretation of clitics, but, unlike what has been found in previous studies (e.g. Kim, Montrul & Yoon, 2014), they exhibit difficulties in the interpretation of reflexive strong pronouns (although exhibiting great individual variation). As for complex sentences, participants are less accurate in rejecting a long-distance interpretation for the reflexive clitic and in allowing a local antecedent for the reflexive strong pronoun (table 2), indicating that, in this case, it is easier to establish co-reference between the pronoun and a non-local antecedent. Hence, as predicted, this interpretation is not problematic for Chinese learners, whose L1 also displays long-distance reflexives. This fact may also explain why these learners appear to find the interpretation of reflexive pronouns harder than that of non-reflexive pronouns.

Keywords: Strong pronouns, Clitic pronouns, Interpretation, Binding, Locality, Portuguese L2, Chinese L1

References:

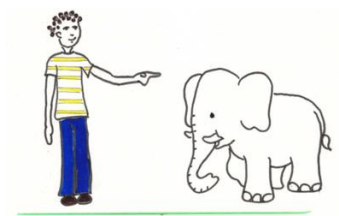
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- (1) A Joana_i acha que a Raquel_j gosta de si_{ij}
 the Joana thinks that the Raquel likes of herself
 ‘Joana thinks that Raquel likes her/herself’



Uma avó e uma rapariga. A avó está a penteá-la?
 A grandmother and a girl. Is the grandmother combing her?

Non-reflexive clitic (expected answer=true)



Um rapaz e um elefante. O rapaz está a apontar para si?
 A boy and an elephant. Is the boy pointing at himself?
Reflexive strong pronoun (expected answer=false)

Figure 1: Example items from task 1



O príncipe acha que o pirata está a apontar para si?
 Does the prince think that the pirate is pointing at him(self)?

Pronoun with a non-local antecedent (expected answer=true)

Figure 2: Example item from task 2

	L1 Chinese		Controls	
	reflexive	non-reflexive	reflexive	non-reflexive
Clitics	69.80%	76.40%	99.30%	97.80%
strong pronouns	47.00%	78.80%	98.75%	54.30%

Table 1: Accuracy rates per condition in simple sentences

	L1 Chinese		Controls	
	local	long distance	local	long distance
Clitics	81.30%	54.00%	99.30%	97.91%
strong pronouns	46.70%	70.70%	65.60%	53.10%

Table 2: Accuracy rates per condition in complex sentences

Rodica Frimu, Indiana University
 Interaction of knowledge of forms and the Conceptual System

Adult second language (L2) learners often resort to default forms (Herschensohn, 2001, 2003; Lardiere, 1998; McCarthy, 2008; Prévost & White, 2000). I present new evidence exploring the distinction between underspecification errors and feature-clash errors (McCarthy, 2008); mainly the impact of error detection on the Conceptual System (CS) of L2 learners and native speakers (NS) of French. Detecting an underspecification error requires a real-time CS inference, in which the absence of [F], a feature specification, signifies [-F]. Hence it is predicted that rejecting a default form for an expected specified form will impact CS to a greater extent than noticing a feature-clash.

This was explored in a forced-paced reading task administered in DMDX. Respondents read the stimuli out loud (as in 1a-d), providing grammaticality judgments after each sentence. As they read the stimuli, a [$\pm$ human] picture appeared briefly on a computer screen in different positions. All pictures in critical items represented a likely object of the verb in question [-human], for instance a picture of a sandwich at the offset of *manger* ‘eat’ (1a-d). Differences in picture classification times were analyzed as evidence of processing in CS, expecting error type effects based on the real-time inference [-plural]. There were 40 critical items and 66 fillers, containing a variety of errors. All subjects were exposed to all items. The grammatical and ungrammatical items were balanced, as well as the number of [$\pm$ human] pictures. Three groups were tested: intermediate learners (with off-line knowledge of future), advanced learners, and native speakers of French, with 16 to 19 participants per group.

The intermediate learners’ picture-classification times were flat for both tasks. However, they showed no consistent error detection. In contrast, the advanced learners and NSs were highly accurate. Both groups showed effects of grammaticality, meaning that they were slower at classifying pictures after an error as opposed to the grammatical conditions. Moreover, advanced learners classified pictures after underspecification errors (831ms) more slowly than in the other conditions with similar classification times (≈ 777 ms, $p=.007$). NSs showed only an effect of grammaticality (≈ 70 ms difference), but no interaction. However, when a larger group of NSs (36) performed the task at a considerably faster speed (as per Hopp, 2010), they patterned exactly as the advanced learners did, being significantly slower at classifying a picture after a default error than the other conditions (≈ 70 ms difference, $p=.01$).

Increased classification times after underspecification errors in advanced learners and native speakers under limited memory resources suggests the involvement of the CS in error detection. This indicates a real-time CS inference [-plural], not needed with specified features. Greater CS costs for underspecification vs. feature-clash errors suggest that the overuse of default forms even by advanced learners might involve computations that fail to fully complete in real time. The replication of the results with NSs under pressure suggests grammatical organization and processing procedures that are fundamentally the same in L1 and L2.

- 1) a) Demain, **l'enfant** ne mangera PICTURE pas beaucoup de desserts. (Agree & Underspec)
 Tomorrow the child neg eat-FUT-3-SING neg lots of desserts
- b) *Demain, **les enfants** ne mangera PICTURE pas beaucoup de desserts.
 (Mismatch & Underspec)
 Tomorrow the children neg eat-FUT-3-SING neg lots of desserts
- c) Demain, **les enfants** ne mangeront PICTURE pas beaucoup de desserts.
 (Mismatch & Specified)
 Tomorrow the children neg eat-FUT-3-PL neg lots of desserts
- d) *Demain, **l'enfant** ne mangeront PICTURE pas beaucoup de desserts. (Agree & Specified)
 Tomorrow the child neg eat-FUT-3-PL neg lots of desserts

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Heather Goad, Lydia White, Guilherme D. Garcia, Natália B. Guzzo, Marzieh Mortazavinia, Liz Smeets and Jiajia Su, McGill University.
 Pronoun interpretation in L2 Italian: effects of pause and stress

In this paper we offer a prosodic account to supplement some well-known findings relating to choice of antecedents for pronouns in L2 Italian. In biclausal sentences like (1a), null pronouns are preferred when the antecedent is the discourse topic and subject of a higher clause; otherwise, overt pronouns are preferred.

Sorace and Filiaci (2006) and Belletti et al. (2007) report that L2 speakers of Italian overuse overt pronouns in contexts where null pronouns would be appropriate; they attribute this overuse to problems at the syntax-discourse interface (a failure to fully appreciate the discourse requirements on overt pronouns) and/or to processing problems relating to the Position of Antecedent Strategy (PAS) proposed by Carminati (2002). In addition to the behaviour of the L2ers with respect to overt pronouns, there are some puzzling results in this literature: native speakers and L2ers fail to perform as expected with null pronouns, allowing them to take object antecedents about 50% of the time.

Hypothesis: We hypothesize that prosody may influence pronoun choice, leading to interpretations other than those expected if only syntax-discourse considerations are involved. We expect interpretive differences depending on whether or not there is a pause between the clauses containing the pronoun and its antecedent and whether or not an overt pronoun is contrastively stressed. In the previous literature, picture verification tasks were used: participants made judgments based on pictures accompanied by orthographically-presented sentences, making it impossible to determine what (silent) prosody had been assumed by participants.

Experiment: In this paper, we report on an experiment testing effects of pause and stress. Participants were high-intermediate/advanced L2 learners of Italian with Dutch and English as L1s, as well as a control group of Italian speakers. To test for prosodic effects, it is essential that participants hear the stimuli rather than read them. 80 biclausal sentences were presented aurally only. Here we report on a subset of the sentences ($n=30$), namely those involving main-subordinate clause order and forwards anaphora; see (1a). Each sentence was followed by an aural comment about the potential antecedent, which participants had to agree or disagree with; see (1b). Overt/null pronouns, presence/absence of pause and presence/absence of contrastive stress on overt pronouns were manipulated.

Results: Results show that prosody affected participants' antecedent choices, leading to departures from the typical case. When there was no pause between clauses or no contrastive stress on overt pronouns, results mirrored previous research, namely a strong preference for subjects as antecedents for null pronouns and objects for overt. A pause between clauses increased object responses for null pronouns. Contrastive stress on the overt pronoun increased selection of an external referent.

In conclusion, our results suggest that prosodic factors affect the ways in which pronouns are interpreted with respect to participants in the discourse and thus should not be ignored in assessing performance on pronoun interpretation, by both native speakers and L2ers.

- 1) a. **Target sentence:** Lorenzo ha scritto a Roberto quand Ø/lui si è trasferito a Torino.
'Lorenzo wrote to Roberto when (he) moved to Turin.'
- b. **Comment:**
- Subject:** È Lorenzo che si è trasferito a Torino.
'It is Lorenzo who moved to Turin.'
- Object:** È Roberto che si è trasferito a Torino.
'It is Roberto who moved to Turin.'
- External:** È una persona diversa da Lorenzo e Roberto che si è trasferito a Torino.
'It is a person other than Lorenzo or Roberto who moved to Turin.'

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Research on L2 acquisition has shown that learners' interlanguage grammars can accommodate variable phonological processes (see Romaine 2003 for a review). When acquiring processes that are variable in the target language, learners need to identify the factors that condition the application of such processes. We propose that the acquisition of a given variable process will be particularly difficult if the process is subtle and the structure which underlies it is not signalled in output strings.

We probe this issue by examining the acquisition of a subtle variable phenomenon, namely, high vowel deletion (HVD), in Québec French (QF) by English-speaking learners. In previous work (Garcia et al., to appear), we argued that HVD motivates iterative iambic footing in QF, as it is preferred in even-numbered syllables from the right word edge, i.e., in the dependent positions of iambic feet (see Verluyten 1982; cf. Cedergren 1986); see (1). French, however, lacks the typical signatures of word-level stress and footing, since the only obligatory position of prominence is the right edge of the phonological phrase (PPh), regardless of how many lexical words it contains (Dell 1984, Jun & Fougeron 2000 on European French; Thibault & Ouellet 1996 on QF); see (2). English, on the other hand, has word-level stress and builds trochaic feet iteratively, which indicates that lexical words may have multiple stresses (see (3)).

In view of these cross-language differences, English-speaking learners acquiring QF face a twofold challenge: (i) HVD seems to be regulated by footing, even though there is no stress-based evidence for footing in QF; (ii) English has a different type of footing. We hypothesize that because the typical signatures of footing are absent in QF and because HVD applies variably, L2ers will not understand that QF requires iterative footing. Thus, HVD will not be sensitive to foot structure.

English-speaking L2ers ($n = 10$; intermediate) and native speakers of QF ($n = 10$, controls) rated how natural 3-6-syllable words ($n = 275$, plus fillers) sounded when pronounced with deletion or non-deletion of [i] in various non-final positions within the word. Target words had no schwas.

The data were modelled with a hierarchical ordinal regression (by-speaker and by-item random intercepts). The results show that, overall, non-deletion is preferred over deletion ($\hat{\beta}=1.55$, $p=0.00001$). Contrary to our hypothesis, L2ers' preferences mirror native speakers' ($\hat{\beta}=-0.11$, $p=0.85$). For both groups, HVD is preferred in even-numbered syllables from the right edge ($\hat{\beta} = 0.29$, $p = 0.01$); see (1a). Learners thus understand that QF builds iambic feet iteratively from right to left, with HVD preferred in foot-dependent positions. Figure 1 illustrates the foot-dependent/foot-head difference for both groups of speakers.

HVD yielding strings mirroring well-formed complex onsets is dispreferred ($\hat{\beta}=-0.72$, $p=0.0002$); see Figure 2. This means that HVD in a word such as [supire] 'to sigh' is dispreferred relative to HVD in a word such as [kõbine] 'to combine'; while [pr] is a well-formed branching onset, *[bn] is an ill-formed branching onset. This shows that learners, like native speakers, are sensitive to foot structure: if HVD affects segments only, leaving syllabification and footing intact, then deletion in [kõbine] should be preferred as it is easier to recover the deletion site when the string resulting from HVD is phonotactically ill-formed; i.e., [kõbne] can only be reconstructed as [kõ.bV.ne], while [supre] could be either [su.pV.re] or [su.pre].

In conclusion, our results support the idea that L2ers can acquire structurally conditioned variable aspects of the phonology of a second language, even at intermediate levels of proficiency. Given the way that prominence manifests itself in English and QF, transfer is not a likely source for learners' target-like behaviour.

(1) Footing and HVD in QF (deleted vowels underlined, heads of feet in bold):

	HVD site from right edge	Footing and HVD	
a. HVD preferred in foot-dependent position	Syllable 2 Syllable 4	kɔ̃ (bine) ‘to combine’ ma(nifɛs)(tasjɔ̃) ‘demonstration’	‘to combine’ ‘demonstration’
b. HVD dispreferred in foot-head position	Syllable 3 Syllable 5	ɔr(gani)(zatœr) (kapi)(tali)(zasjɔ̃))	‘organizer’ ‘capitalization’

(2) French phrase-final prominence:

[lə mɔ̃vɛz avɔ̃ **ka**]_{PPh} *le mauvais avocat* ‘the bad avocado’

(3) English lexical stress and trochaic feet:

[(.æ.və)_{Fi}(**ka:**)_{Fi}doʊ]_{PWd} ‘avocado’ [(**fa**.nə)(**la**.dʒə)kəl]_{PWd} ‘phonological’

Figure 1: Responses based on foot dependency (all possible positions of deletion included). Deletion in foot-dependent positions yield a higher concentration of natural responses. (1 = completely unnatural; 5 = completely natural)

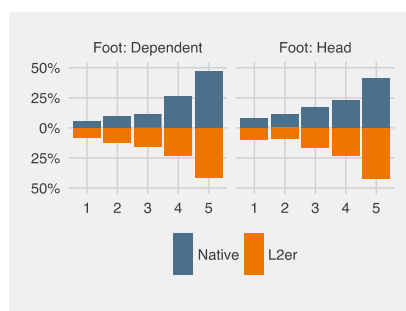
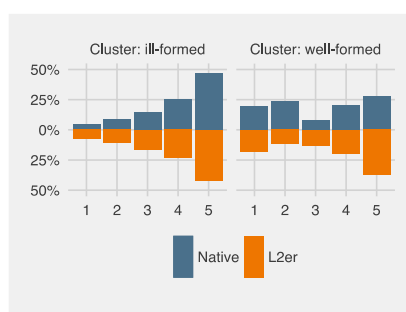


Figure 2: Responses based on resulting cluster. Deletion yielding strings mirroring ill-formed complex onsets yield a higher concentration of natural responses.



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Background: The syntax-discourse interface presents special difficulty for bilinguals,^[1,2] although its source is debated: some point to processing complexity,^[1] while others argue the interface is the site of transfer, mediated by language dominance.^[3] The Interface Hypothesis makes a linguistically principled distinction between internal (e.g. syntax-semantics) and external interfaces (e.g. syntax-discourse), predicting that processing limitations inherent to bilingualism affect—selectively—external interfaces and claiming native/nonnative asymmetries are due to lack of automaticity and/or excessive allocation demands.^[1] Alternatively, it could be the case that, initially, this interface property is the site of L1 transfer, modulated by dominance and L2 proficiency. As such, the acquisition of this property could be more affected by frequent exposure and consistent input.^[3] We test these hypotheses with an interface structure: the realization of subject and object narrow informational focus (the non-presupposed part of a sentence evoking alternatives)^[4] in Spanish (1). Information Structure influences Spanish word order, with focus appearing sentence-finally.^[5]

- | | |
|---|------------------------|
| (1) Context: Who read a novel? | Subject Focus |
| a. Leyó una novela [mi mamá] _F . | (Sentence-Final - VOS) |
| b. #Leyó [mi mamá] _F una novela. | (VSO) |
| ‘My mom read a novel.’ | |
| | |
| (2) Context: What did she read? | Object Focus |
| a. Mi mamá leyó [una novela] _F . | (Sentence-Final - VSO) |
| b. #Leyó mi mamá [una novela] _F . | (VOS) |
| ‘My mom read a novel.’ | |

Procedure: Two tasks were used to investigate both offline grammatical representations and online processing of focus in Spanish. We used a **forced-choice task** that used short Q-and-A pairs and pictures as context: 2x2x2 design, with sentence type (VOS/VSO and VOPP/VPPPO), context (subject/object focus) and word order (focus final/non-final) as factors. A **self-paced reading task** measured real-time processing: 2x2 design, with context (subject/object focus) and word order (VOS/VSO) as factors. We intentionally avoided included SVO

Participants: Catalan/Spanish bilinguals, divided by language dominance using the *Bilingual Language Profile Questionnaire*^[6] (Catalan-dominant [n=35] vs. Spanish-dominant, [n=34]) tested in Spain. Both Catalan and Spanish use syntactic movement to realize focus but differ in the allowable word orders. Because transfer is mediated by dominance, transfer accounts^[3] predict the existence of group differences in judgments and processing. Processing accounts^[1] predict no group differences due to language dominance but instead across-the-board effortful processing in the online task, possibly not reflected offline.

Results: Forced-choice results revealed that both groups exhibited the same pattern of preferences (see Example 1, Figure 2 below). Self-paced reading data (Fig. 1) (reading times were log transformed and length adjusted; all analyses were performed on residuals) showed that both groups (Spanish-dominant and Catalan-dominant) processed contextually infelicitous structures more slowly than felicitous structures for both focus types (subject/object). All effects are reported as significant at $p < .05$. A repeated-measures ANOVA (ez package in R) revealed that there no were significant main effects of the order, focus, or group ($F(1, 63) = .0998$, $F(1, 63) = .1568$, $F(1, 63) = .2646$, respectively). Importantly, there was a significant interaction between order and focus ($F(1, 63) = 11.558$, $p = .0011$). This interaction indicates that VOS orders were read faster in Subject Focus and VSO orders in Object focus, as predicted. Thus, we have evidence that

Catalan-dominant bilinguals are able to overcome transfer effects and processing strategies from their L1. Furthermore, online results support a view that privileges processing as the locus of vulnerability but also reveal group differences, supporting directional transfer rather than overall processing complexity for syntax-discourse interface properties.

Figure 1. Residual Reading Times (Self-Paced Reading Task)

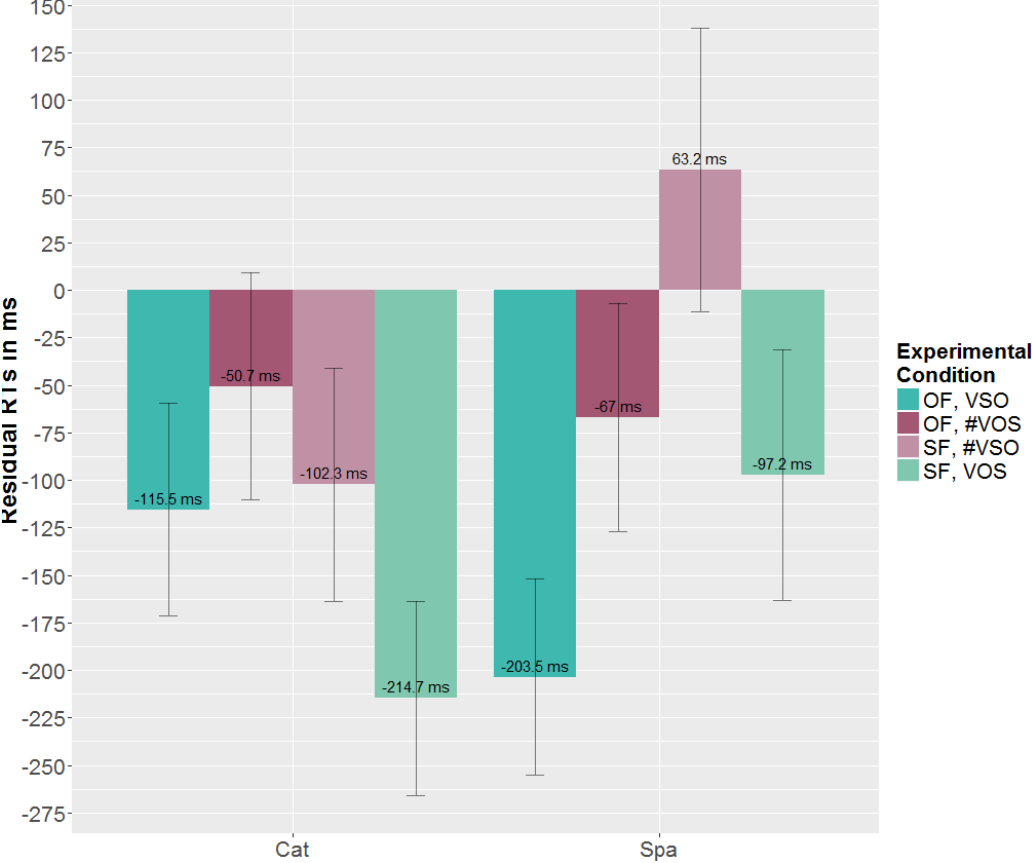
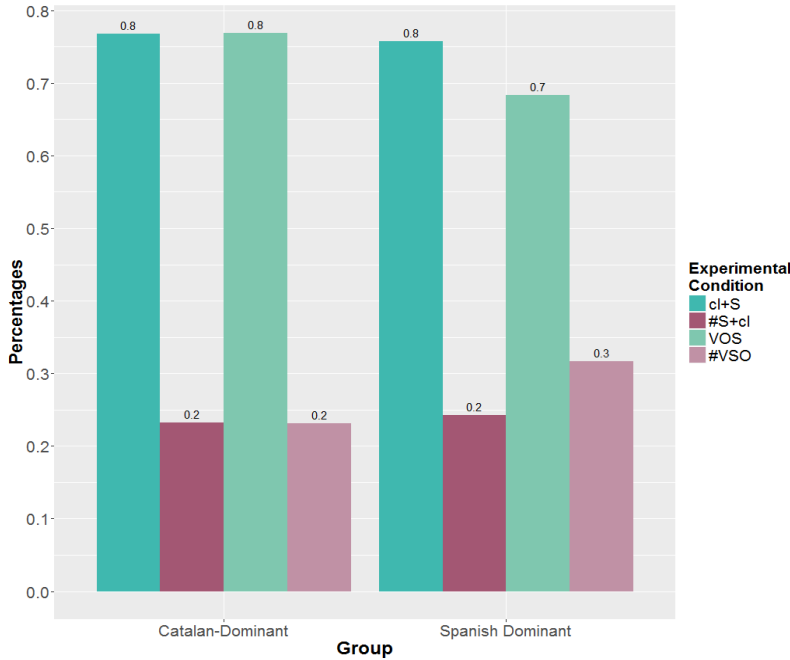


Figure 2. Offline Ratings (Forced-choice task)



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In the context of recent models about the relation between grammar and language processing in child and bilingual learners [1], this paper investigates how cross-linguistic influence at the lexical and syntactic level affects language processing in simultaneous bilingual and successive L2 children. Specifically, we test how lexical and syntactic differences in L1 and L2 grammatical gender affect children's predictive gender processing [2,3]. We focus on Russian and German. Both Russian and German categorize nouns into one of three gender classes (masculine, feminine, neuter). Yet, they differ in lexical gender congruency, i.e. whether a particular noun (e.g. 'house') is assigned to the same or a different gender class (German: 'Haus' → neut; Russian: 'dom' → masc). Further, they differ in that gender is syntactically expressed on postnominal suffixes in Russian (2a), but on prenominal determiners in German (1a). For adjectives, Russian and German both mark gender on suffixes (1&2b). This way, we can assess the relative impacts of cross-linguistic lexical and syntactic (in)congruency in gender processing.

In a visual-world eye-tracking experiment, 12 simultaneous Russian-German children (mean age: 8.3 yrs), 12 L1 Russian child L2 learners of German (8.4 yrs; mean age of L2 onset: 2.7 yrs), and 12 monolingual German children (mean age: 8.1 yrs) were tested. We assessed whether children use gender marking as a predictive cue on the determiner or adjective for anticipating the following noun, i.e. whether they construct forward gender agreement relations on-line ('das_{NEUT} → Haus_{NEUT}'). The design crossed the factors *lexical gender congruency* (congruent vs incongruent) and *syntactic congruency* (det vs adj marking) between German and Russian. In a production part, participants named the objects in the displays (Fig. 1), so that gender assignment was assessed. In a comprehension task, we collected eye-movements as participants listened to *wh*-questions like "Where is [DET] [ADJ] [Noun]?" After the experiment, the bilingual children also named all target objects in Russian. Results were analysed only for trials in which (bilingual) children assigned the target gender to items in both German and Russian. Trials were either *different gender trials*, i.e. the gender on the determiner or adjective used in the question was informative wrt to only one referent, or *same trials*, i.e. three referents had the same gender [4]. Mixed effect models show significant interactions of group and lexical gender congruency in mean first fixation on the target referent. Monolingual and simultaneous bilingual children used German gender predictively (i.e. earlier looks to target referent in *different* than *same* trials), irrespective of syntactic congruency (det/adj) or lexical gender congruency with Russian (Fig. 2). In contrast, the child L2 learners showed interactions of gender prediction with lexical gender congruency: Gender prediction in German obtained only for nouns that were lexically congruent in gender assignment in Russian (e.g. Tisch_{MASC} – stol_{MASC})

In sum, lexical properties of the other language only affected child L2 learners, yet not simultaneous bilingual children. In contrast to adult L2 learners [5], neither child group showed effects of syntactic congruency in predictive (L2) gender processing, i.e. syntactic properties of the L1 did not affect (L2) gender processing. We discuss the scope of cross-linguistic influence within early bilingualism, compare the findings for early versus late bilinguals in [5] and sketch the implications for models of bilingual grammatical processing.

- | | | | | |
|-----|----|------------------------------|---|---|
| (1) | a. | der/die/das | | Tisch/Lampe/Kleid |
| | | the _{MASC/FEM/NEUT} | | table _{MASC} /lamp _{FEM} /dress _{NEUT} |
| | b. | ein | rot- er /- es | Tisch/Kleid |
| | | a | red _{MASC/NEUT} | table _{MASC} /dress _{NEUT} |
| (2) | a. | Ø | | stol/lampa/platje |
| | | (the) | | table _{MASC} /lamp _{FEM} /dress _{NEUT} |
| | b. | Ø | krasn- ij /- a ja/- oe | stol/lampa/platje |
| | | (a) | red _{MASC/FEM/NEUT} | table _{MASC} /lamp _{FEM} /dress _{NEUT} |

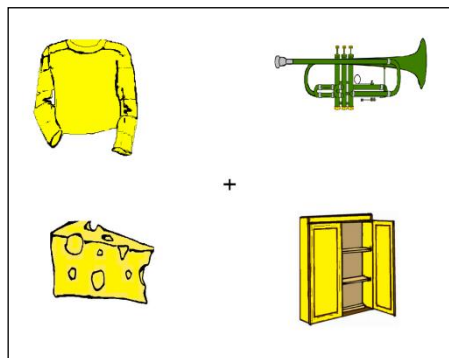


Figure 1 (left). Display:
3 identically coloured objects [all referents have different genders in *different* gender condition; all referents have same gender in *same* gender condition]. 1 differently coloured distractor [4].

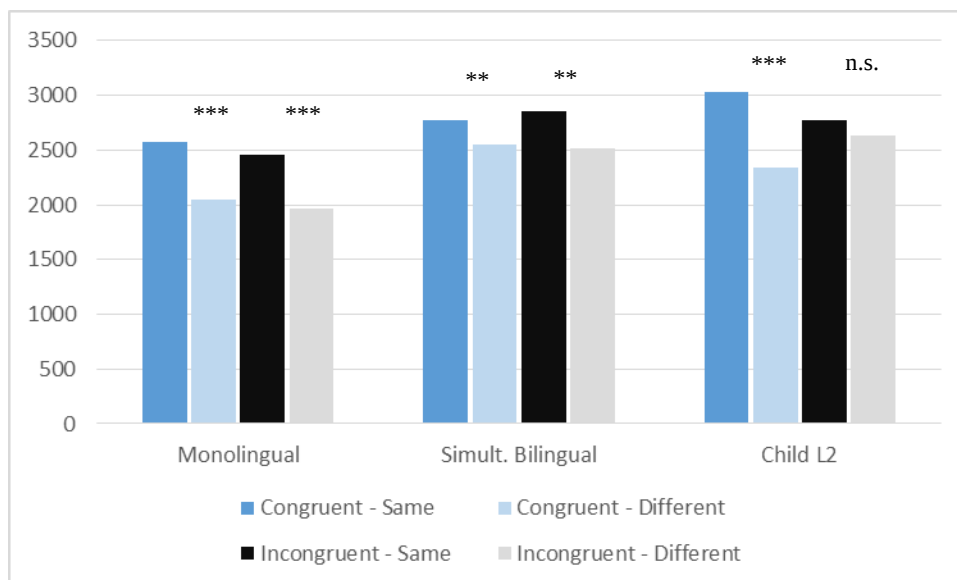


Figure 2. Mean reaction times (in ms) after gender marking onset for lexically gender-congruent (Congruent) and lexically gender-incongruent (Incongruent) nouns for *same* (Same) and *different* (Different) trials. All groups (n = 12 each).

- [1] Phillips & Ehrenhofer (2015) *LAB* 5: 409-453
[2] Dussias, Valdés Kroff, Guzzardo Tamargo & Gerfen (2013) *SSLA* 35: 353-387.
[3] Grüter, Lew-Williams, & Fernald (2012) *SLR* 28: 191-215.
[4] Hopp (2013) *SLR* 29: 33-56.
[5] Hopp & Lemmerth (2017) *SSLA*: DOI: 10.1017/S0272263116000437

Issue. *Resultative constructions* (RCs) show a wide range of cross-linguistic variations (Legendre 1997, Slabakova 2002). Most notably, RCs can be divided into two sub-types: complement vs. adjunct type. English RCs have been analyzed as a complement type, denoting telic events (Goldberg 1995, Kearns 2007). RCs in Korean, by contrast, belong to an adjunct type when morphologically marked by *-key* (Ko 2014, cf. Kim 1993, Wechsler and Noh 2001, Yeo 2006). This study investigates the question of *how L2 learners project the syntax and semantics of RCs* when their L1 encodes resultatives in different ways from the target language.

Hypothesis. It has been widely attested that Korean learners experience a considerable difficulty in acquiring English RCs (Sung & Yang 2016; Whong-Barr 2005). This difficulty has often been attributed to “syntactic” transfer; learners transfer their syntactic knowledge of Korean into English RCs. Importantly, however, little research has been conducted on how the syntax of RCs interacts with the semantics of RCs in L2A. Unlike English RCs, Korean RCs do not encode a telic event (e.g. ‘*I painted the wall black*’ does not entail ‘*the wall is black*’ in Korean), which has not attracted much attention in L2A. We hypothesize that L2 learners not only transfer L1 syntax but also L1 semantics. On this hypothesis, we predict that Korean learners would have difficulties in understanding the telicity as well as the structure of English RCs.

Method. Our hypothesis was tested with 99 Korean L2-learners and 17 native English speakers, using an *acceptability judgment task* (AJT) and an *elicited choice task* (ECT). The Korean learners were divided into two different proficiency levels (L: Low; H: High) based on the results of the Michigan Test. Three types of stimuli in the AJT are presented as shown in *Table 1*; Type 1 is a grammatical RC; Type 2 is syntactically ungrammatical in English (but grammatical in Korean), and Type 3 is semantically infelicitous in English (but acceptable in Korean). There were a total of 15 items in the ECT, 10 of which were experimental items and the five were distracters. Figure 1 illustrates an example of the ECT test items with a pictorial aid.

Result. The AJT results show that in contrast to native speakers (NSs) of English, Korean learners failed to accept the grammatical RCs and failed to reject the syntactically and semantically ungrammatical RCs (see *Figure 2*). Repeated-measured ANOVAs showed significant differences between three groups (NS vs. High vs. Low) in each type of stimuli ($p < .01$). It is noteworthy that even H-level learners made significant errors in rejecting atelic resultatives (78% errors in Type 3) – this error rate due to semantic mismatch is in fact much higher than the error rate attributed to syntactic transfer (45% errors in Type 2). The ECT results showed an asymmetry between Korean learners and NS groups. As *Figure 3* makes it clear, 90% of the NSs chose RCs while only 19.8% of the L-level group and 27.1% of the H-level group chose RCs in the same contexts: This means that Korean learners avoid using English RCs in the contexts where RCs are most likely used by the NS group. A chi-squared test showed significant group differences as well ($p < .01$).

Implication. Our results show that *Korean learners project English RCs with adjunct structures and interpret them as atelic events*. This conclusion was supported both in comprehension (AJT by incongruous judgements) and production tasks (ECT by avoidance of RCs). This finding is in line with previous studies in that L1 syntax plays a crucial role in projecting L2 syntax (Schwartz and Sprouse 1996). Furthermore, this finding adds novel experimental evidence that L1 semantics (*i.e.*

telicity) crucially influences the L2A, in tandem with (but *over and above*) L1 syntax. This implies that a proper theory of L2 acquisition of RCs must consider not only syntactic transfer effects but also subtle semantic differences between L1 and L2 (Della Putta 2016, Slabakova 2000).

Table 1. Sentence Types Used in Acceptability Judgment Task (AJT)

Type	Stimuli	#of items
1. Grammatical RCs	<i>Mary shook him awake.</i>	4
2. Syntactically Unacceptable RCs (adjunct: Possible in Korean)	<i>You can make the meat tenderly.</i>	4
3. Semantically Unacceptable RCs (atelic reading: Possible in Korean)	<i>She will drive you mad for a few minutes.</i>	4

Figure 1. A Sample Test Item of the Elicited Choice Task (ECT)



He heated the metal until it was red, and
 (hammered it flat / flattened it by hammering/ hammered it flatly).
 [target expression awkward expression adjunct expression]

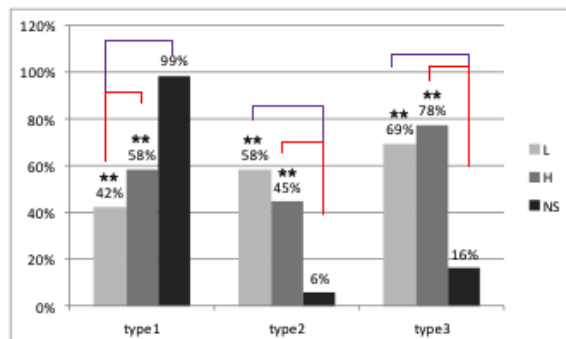


Figure 2. AJT: Acceptance Rates by Groups
 * $p < .05$, ** $p < .01$

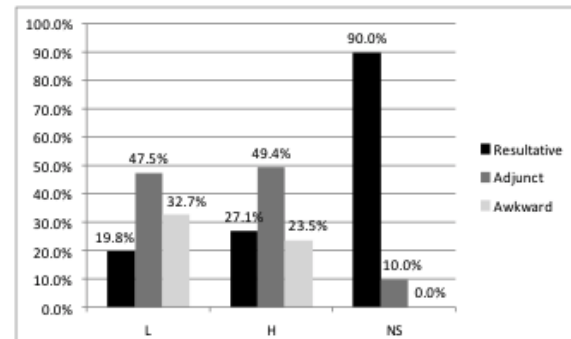


Figure 3. ECT: Distribution of Choices by Groups

<Selected References> Kearns, K. (2007). Telic senses of deadjectival verbs. *Lingua*, 117// Ko, H (2014). *Edges in syntax: scrambling and cyclic linearization*. OUP// Schwartz, B. D., & Sprouse, R. A. (2006). L2 cognitive states and the full transfer/full access model. *Second Language Research* 12.// Slabakova, R. (2002). The compounding parameter in second language acquisition. *Studies in Second Language Acquisition* 24. //

The study of headedness in bilinguals offers unique insight into the nature of the bilingual grammar. Previous studies have examined the relationship between headedness and inflectional morphology in Noun-Noun (NN) compounding in bilinguals (Gordon, 1985; Nicoladis, 2002, 2003, 2004; Licerias et al., 2002, 2004), revealing that adult L2 speakers accept right-headed compounds in left-headed languages and thus are not sensitive to the word marker feature that characterizes languages such as Spanish (Piera, 1995). Unlike inflectional morphology, derivational morphology in compounding has received little attention to date. To the best of our knowledge only one study has examined this, focusing on L1 English-L2 Spanish bilinguals' interpretation of the derivational affix *-ito* in Spanish NN compounds (Licerias & Klassen, 2015). These authors found that L2 Spanish speakers interpreted *-ito* as only affecting the noun to which it is attached – regardless of whether it is the head or the modifier – while the L1 Spanish speakers attributed a privileged status to the head such that *-ito* attached to the left-most noun (head) affected the interpretation of the whole compound. In this study, we directly examine whether inflection and derivation have the same status with respect to headedness in the grammar of L1 English-L2 Spanish bilinguals.

Inflectional affixes attach only to the head of a NN compound (as in (1a) versus (1b)). From a theoretical standpoint, Zwicky (1985) argues that inflectional and derivational morphology pattern together with respect to headedness, however experimental research seems to indicate that the relationship between headedness and diminutive affixes is not as clear-cut as the relationship between headedness and inflection. Though for L1 Spanish speakers the head noun seems to have the same privileged status with both the inflectional and derivational affixes, it is not clear whether the diminutive attached to the modifier noun is an ungrammatical option for native speakers, as is the case with inflection. Furthermore, though L2 Spanish speakers whose L1 does not display affective derivational affixes such as *-ito* do not seem to be sensitive to headedness in the interpretation of derivational morphology, there is currently a lack of experimental data that examines headedness in the L2 grammar with respect to both inflectional and derivational morphology.

In order to investigate whether inflectional and derivational affixation are treated in the same way by L2 Spanish speakers with respect to headedness, 27 L1 English-L2 Spanish (advanced) and 66 L1 Spanish speakers performed an Acceptability Judgment Task in which they rated the attachment of the diminutive derivational affix (*-ito*) and the plural inflectional affix (*-s*) to written Spanish NN compounds. The attachment of the affixes was manipulated to form three conditions: affix on the head (2a and 3a), affix on the modifier (2b and 3b), and affix on both nouns (2c and 3c).

Results show that both L2 and L1 speakers rate NN compounds with the inflectional (*sillas* *bar*) or the derivational (*sillita* *bar*) affix on the head the highest (Figure 1). While the L1 speakers significantly prefer the plural affix on the head over any other attachment (modifier: $p < .000$; both Ns: $p < .000$), the L2 speakers only significantly prefer *-s* on the head over the modifier ($p = .002$). The preferences are somewhat less clear-cut with the diminutive; the L1 speakers significantly prefer *-ito* on the head over the modifier ($p = .001$), while the L2 speakers do not display this preference ($p = .187$).

This study shows that though L2 Spanish speakers generally pattern with the L1 Spanish speakers in displaying a preference for the attachment of both inflectional and derivational affixes to the head of NN compounds, the fact that the preference for attachment to the head was not categorical with the L2 speakers indicates that headedness is not as well established in the L2 Spanish grammar. These findings are in line with the previous findings that have shown that L2 Spanish speakers do not conceptualize the attachment of *-ito* in NN compounds in the same way as L1 Spanish speakers.

(1) un perro policía
a dog police
'a police dog'

(1a) dos perro-S policía
two dogs police
'two police dogs'

(1b) *dos perro policía-S
two dog polices
'two polices dog'

(2a) sill-**ITA** bar
chair_[diminutive] bar
'little bar stool'

(2b) silla barc-**ITO**
chair bar_[diminutive]
'little bar stool'

(2c) sill-**ITA** barc-**ITO**
chair_[diminutive] bar_[diminutive]
'little bar stool'

(3a) silla-**S** bar
chair_[plural] bar
'bar stools'

(3b) silla bar-**ES**
chair bar_[plural]
'bars stool'

(3c) silla-**S** bar-**ES**
chair_[plural] bar_[plural]
'bars stools'

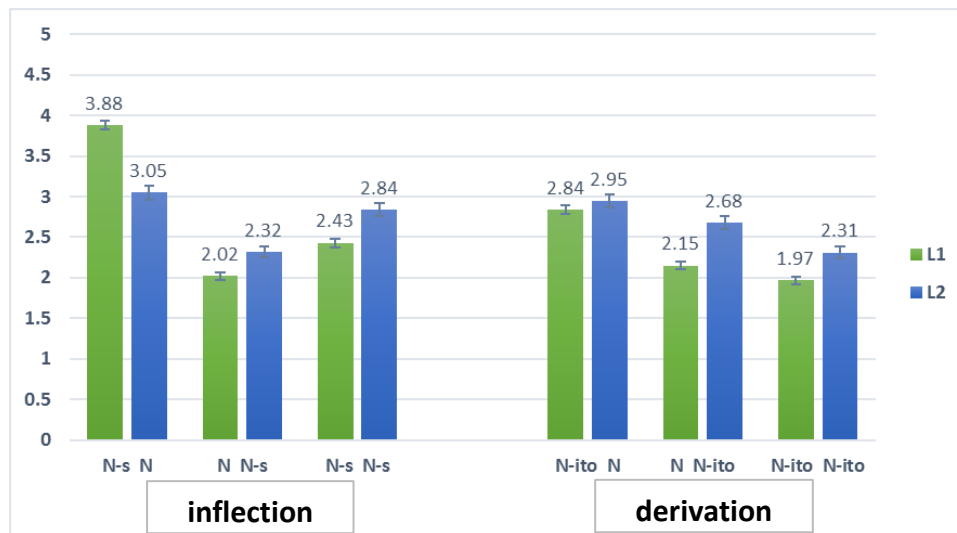


Figure 1. Mean ratings of affix attachment in NN compounds.

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Properties at the discourse-syntax interface have proved problematic in different bilingual domains, including bilingual L1 (2L1) and L2 acquisition. This holds, for instance, for the interpretation and production of subject pronouns in null subject languages. Numerous studies have shown that highly proficient bilinguals, especially those who speak a null and a non-null subject language, overgeneralise overt pronouns to contexts that require the use of null pronouns. Two broad explanations have been proposed for this phenomenon: the *representational* account attributes the difficulties to crosslinguistic influence (Tsimplici et al., 2004), while the *processing* account attributes them primarily to the bilinguals' less-than-optimal processing abilities (Sorace & Filiaci, 2006), treating crosslinguistic influence as a secondary cause. According to the representational account, difficulties should not arise when two grammatical systems have matching inventories of pronominal forms and conditions for their use; according to the processing account, problems should occur in those cases as well.

Supporting evidence for the representational account comes from studies of highly proficient L2 learners of Italian who are native speakers of Croatian, a null-subject language that does not differ from Italian with respect to the discourse-pragmatic constraints on the distribution of null and overt subject pronouns. These studies have shown that child (Kraš, 2016) and adult (Kraš, 2008) L2 learners resolve ambiguous intrasentential anaphora with null and overt subject pronouns in a target-like way in Italian. The current study aims to test the predictions of the two accounts by looking at the same linguistic phenomenon in a different group of highly proficient bilinguals speaking the same language combination, namely simultaneous bilingual speakers of Croatian and Italian.

Two groups of 13-to-14-year-olds, monolingual Italian speakers (n=24) and Croatian-Italian simultaneous bilinguals (n=24), completed a modified version of a picture selection task designed by Tsimplici et al. (2004), also used in Kraš (2008, 2016). The task included ambiguous (experimental) and unambiguous (control) sentences. Ambiguous sentences, illustrated in (1), consisted of a main and a subordinate clause, and they featured a null or an overt pronoun in the subordinate clause; the subordinate clause either preceded (backward anaphora) or followed (forward anaphora) the main clause. Each sentence was accompanied by three pictures (see Figure 1), showing the matrix subject, the matrix object or an extralinguistic referent as the performer of the action described in the subordinate clause. Participants had to choose one picture, thereby identifying the antecedent of the pronoun.

The results revealed that the bilinguals expressed the same antecedent preferences as the monolinguals in all ambiguous conditions apart from the backward anaphora with an overt pronoun (see Figure 2). In this condition, the bilinguals preferred the two non-subject antecedents (the extralinguistic referent more strongly), whereas the preferences of the monolinguals were split between the subject and the object antecedent. Crucially, the bilinguals chose the subject antecedent *less* often than the monolinguals. So, surprisingly, it was the monolinguals, rather than the bilinguals, who showed a tendency to overgeneralise overt pronouns to null pronoun contexts. The same finding was obtained in Kraš (2016). We interpret the bilinguals' target-like performance as additional support for the representational account of the difficulties found at the discourse-syntax interface. To explain the unexpected finding, we propose that the bilinguals might be transferring the discourse-pragmatic constraints on the use of overt pronouns from Croatian, where these are possibly acquired earlier than in Italian.

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Examples

- (1) a. FORWARD ANAPHORA WITH A NULL PRONOUN
Il testimone_i indica l' accusato_j mentre pro_{i/j} entra in tribunale.
 the witness points the accused while pro enters in courtroom
 'The witness points to the accused as he enters the courtroom.'
- b. FORWARD ANAPHORA WITH AN OVERT PRONOUN
Il testimone_i indica l' accusato_j mentre lui_{i/j/k} entra in tribunale.
 the witness points the accused while he enters in courtroom
 'The witness points to the accused as he enters the courtroom.'
- c. BACKWARD ANAPHORA WITH A NULL PRONOUN
Mentre pro_{i/j} entra in tribunale, il testimone_i indica l' accusato_j.
 while pro enters in courtroom the witness points the accused
 'As he enters the courtroom, the witness points to the accused.'
- d. BACKWARD ANAPHORA WITH AN OVERT PRONOUN
Mentre lui_{i/j/k} entra in tribunale, il testimone_i indica l' accusato_j.
 while he enters in courtroom the witness points the accused
 'As he enters the courtroom, the witness points to the accused.'

Figures

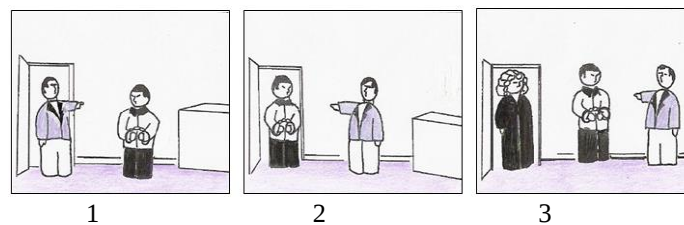


Figure 1. Example of a picture set from the picture selection task

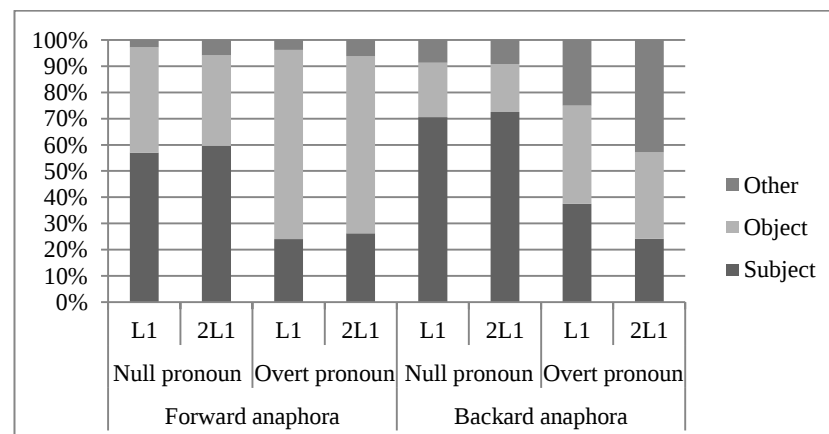


Figure 2. Mean responses in ambiguous conditions

1. Introduction. In this paper we investigate which interpretation L2 Portuguese speakers prefer for null and overt subject pronouns. It is well known that in a null subject language such as Portuguese null subjects tend to recover a subject antecedent, whereas overt subject pronouns tend to recover a non-subject antecedent (Montalbetti 1984, Carminati 2002, Costa, Faria & Matos 1998, Luegi 2012). These effects, which appear to be clear in adult grammars, develop late in L1 acquisition (e.g. Serratrice 2007, for Italian; Papadopoulou et al. 2015, for Greek; Lobo & Silva, 2015, for Portuguese) and in L2 acquisition (Sorace & Filiaci 2006, Serratrice, Sorace & Paoli 2004; Sorace, Serratrice, Filiaci & Baldo, 2009). The interpretation of overt pronominal subjects seems to be acquired later than the interpretation of null subjects. This late development has been linked to processing costs associated to interface phenomena. Following previous studies, we aim at verifying whether: i) the L1 of the participants (null subject language vs. non-null subject language) has an influence on their performance; ii) there is development from beginner to advanced levels; iii) there are differences between forward and backward anaphora contexts and between null and overt subject pronouns.

2. Methodology. *Participants:* We considered two variables: participants' L1 (German L1 – non-null subject language – and Italian L1 – null subject language) and proficiency level (beginner, intermediate, advanced). A control group of Portuguese L1 adults was also tested. See table 1 for details on the participants.

<i>Level</i>	<i>L1 German</i>	<i>L1 Italian</i>	<i>L1 Portuguese</i>
Beginner	30	35	--
Intermediate	18	16	--
Advanced	16	32	--
Total	64	83	35

Table 1. Participants

Method: We applied a picture selection task, where participants had to choose the image that better matched the sentence they heard. The test sentences included an adverbial temporal clause with a subject pronoun. The main clause contained transitive verbs and two potential antecedents for the pronoun: the subject or the object. Two linguistic variables were manipulated: a) type of subject pronoun: null vs. overt; and b) position of the pronoun: anaphoric (right-adjoined adverbial clause) vs. cataphoric (left-adjoined adverbial clause). The task included 4 conditions (see (1)), each with 6 items: 1) null anaphoric subject; 2) null cataphoric subject; 3) overt anaphoric subject pronoun; 4) overt cataphoric subject pronoun. There were two pictures that could match either an interpretation where the pronoun recovered the subject antecedent or the object antecedent. We analyzed the rate of selection of subject or object antecedents in each condition for each group of participants.

(1) Conditions – Example of test items:

- 1) *A mãe cumprimentou a avó quando **pro** entrou na cozinha.*
The mother greeted the grandmother when entered the kitchen
- 2) *Quando **pro** chegou a casa, o avô cumprimentou o menino*
When arrived home, the grandfather greeted the boy
- 3) *O avô fotografou o menino quando **ele** saiu da garagem.*
The grandfather photographed the boy when he left the garage
- 4) *Quando **ela** saiu da garagem, a bruxa molhou a princesa.*
When she left the garage, the witch wetted the princess

3. Results and discussion. In table 2, we present the rates of choice of subject antecedent for each condition in each group of participants.

<i>L1</i>		<i>Anaphoric Null Subject</i>	<i>Cataphoric Null Subject</i>	<i>Anaphoric Overt Subject Pronoun</i>	<i>Cataphoric Overt Subject Pronoun</i>
German	Beginner	59%	76%	43%	64%
	Intermediate	68%	81%	44%	57%
	Advanced	68%	82%	41%	58%
Italian	Beginner	63%	80%	40%	49%
	Intermediate	67%	81%	27%	43%
	Advanced	71%	82%	27%	38%
Portuguese Control group	n.a.	90%	90%	15%	39%

Table 2. Percentage of selection of subject antecedent by group and condition

Both L2 groups distinguish null subjects from overt subject pronouns. Although the L2 speakers do not behave like native speakers, the distinction between null and overt pronominal subjects is already established in the elementary levels. There is however a distinction between the German speakers and the Italian speakers: in the overt subject pronoun conditions the German speakers, whose L1 is not a null subject language, have a higher acceptance of subject antecedents, especially in the cataphoric context. There is some development from the beginner level to more advanced levels, visible in the Italian group mainly for overt pronouns and in the German group for anaphoric null pronouns. Participants distinguish anaphoric and cataphoric contexts and their performance seems to be influenced by processing constraints. For null subjects, there seems to be an earlier convergence with the control group in the cataphoric condition, possibly because the subject antecedent is the closest linear antecedent. Our results are similar to those found in L2 acquisition of Italian by English speakers in Sorace & Filiaci (2006): the syntactic distinction between null and overt subjects is established early, but L2 speakers have problems in determining the preferred interpretation of subject pronouns (especially overt pronouns), since this requires the integration of semantic and pragmatic factors and is clearly an interface area. However, our study has shown that the proximity of the L1 may influence L2 acquisition particularly with respect to the interpretation of overt pronouns.

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Recent research has shown that translations differ from comparable originals in the same language in areas similar to those found to be problematic in L2 acquisition and L1 attrition, in particular phenomena at the interface between different domains, such as syntax and discourse (Sorace & Filiaci, 2006). Moreover, it has been proposed that the translators' internal linguistic system undergoes changes similar to those involved in the attrition process. Specifically, looking at the use of null and overt subject pronouns (a syntax-discourse phenomenon, as the choice is dependent on both syntactic and discourse constraints), Cardinaletti (2005) interpreted the overuse of overt pronouns found in translations from L2 English (a non-null-subject language) to L1 Italian (a null-subject language) as an indication of L1 attrition in experienced translators, attributable to prolonged exposure to the L2.

To experimentally check whether signs of change are indeed present in the translators' L1, we conducted a study on the resolution of intra-sentential anaphora by English>Croatian experienced translators (with an average of around 10 years of translation experience), trainee translators, and a control group of non-translators. Similar to Italian, Croatian is a null-subject language in which null pronouns prefer the subject antecedent and overt pronouns a non-subject antecedent in intra-sentential anaphora (see example (1)). We employed a picture selection task (modified from Tsimpli et al., 2004) that required participants to read sentences containing null and overt pronouns, which either followed or preceded the candidate antecedents (anaphora vs. cataphora; see example (1)), and to match each sentence to one of three pictures; the pictures showed the antecedent as the matrix subject, the matrix object or an extra-linguistic referent (see Figure 1). It was hypothesised that translators, in particular the experienced ones, would select the matrix subject as the antecedent of overt pronouns to a higher extent than the control group, pointing to (incipient) L1 attrition.

The results, shown in Figures 2 and 3, revealed that translators patterned with the controls in the null subject conditions, and that, overall, neither of the translator groups selected the subject as the overt pronoun antecedent more often than the non-translators. Experienced translators did have a slightly higher rate of subject selection in cataphora, but in anaphora it was the controls who selected subjects more often. The statistical analysis (a polytomous logistic regression) found that subject group on its own did not have a significant role in predicting the referent choice; experienced translators were found to select significantly more subjects than the controls in cataphora (with both null and overt pronouns), but even more interestingly, a significant interaction was found between the subject group and pronoun type, showing that trainee and experienced translators were overall *less* likely than the controls to select a subject antecedent for overt pronouns. Such results lead us to the conclusion that evidence of (incipient) L1 attrition in translators is absent at both the training stage and later on. We compare our findings with previous work on other languages (in particular Miličević & Kraš, 2017 on Italian), and discuss the processing differences between anaphora and cataphora, as well as the roles of the mode of language use (translation vs. non-translation), the length of translation experience, and metalinguistic awareness in the translators' interpretation and use of subject pronouns.

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Examples

- (1) a. ANAPHORA WITH A NULL PRONOUN
Odvjetnik_i pomaže klijentuj dok Ø_i potpisuje dokument.
 the lawyer helps the client while *pro* signs the document
- b. ANAPHORA WITH AN OVERT PRONOUN
Odvjetnik_i pomaže klijentuj dok on_{j/k} potpisuje dokument.
 the lawyer helps the client while he signs the document
 ‘The lawyer helps the client while he signs the document.’
- c. CATAPHORA WITH A NULL PRONOUN
Dok Ø_i potpisuje dokument, odvjetnik_i pomaže klijentuj.
 while *pro* signs the document the lawyer helps the client
- d. CATAPHORA WITH AN OVERT PRONOUN
Dok on_{j/k} potpisuje dokument, odvjetnik_i pomaže klijentuj.
 while he signs the document the lawyer helps the client
 ‘While he signs the document, the lawyer helps the client.’

Figures



Figure 1. Example of a picture set from the picture selection task

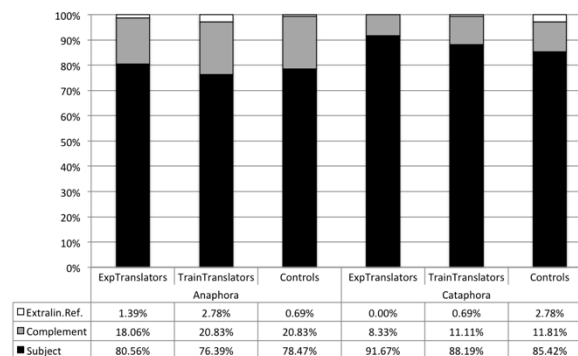


Figure 2. Mean percentage referent choice in the null pronoun conditions

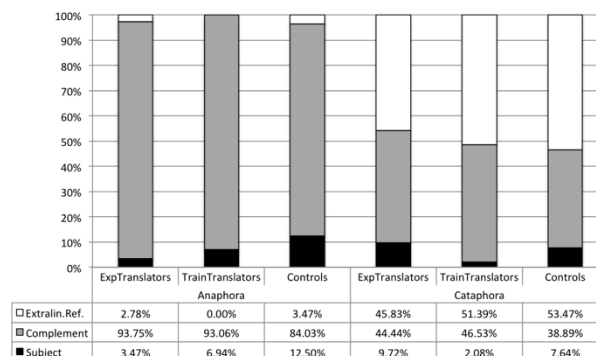


Figure 3. Mean percentage referent choice in the overt pronoun conditions

Input cues for the acquisition of gender marking and agreement in Spanish

Gender marking and agreement are prone to non-native mastery in second (L2) and heritage language (HL) acquisition (Montrul et al. 2008). Visual World paradigm processing studies with auditory input indicate that the determiner is an important cue to gender marking in Spanish for native speakers but not for L2 learners: very young child learners and adult native speakers use the grammatical information in determiners to predict the gender of nouns (Lew-Williams & Fernald 2007a,b) whereas adult L2 learners do not (Grüter et al. 2012, Hopp 2013) because they tend to focus on the ending of the noun. Montrul et al. (2013) found that heritage speakers were more native-like processing gender agreement in Spanish than L2 learners, and suggested that the lexical links between determiners and nouns seem to be stronger in heritage speakers than in L2 learners, probably due to their different language learning experience (Gollan et al.'s 2008 weaker links hypothesis).

We test the hypothesis that determiners are crucial cues for gender assignment in Spanish, and to confirm whether this is mostly true for native speakers and heritage speakers, who were exposed to auditory input in childhood, when determiner-noun lexical connections develop. We designed an experiment to test the acquisition of novel nouns. We created 12 nonce words in Spanish (4 with ending in -a, 4 with ending in -o and 4 with ending in -e or consonant) depicting unusual characters. We presented the 12 words in four input /learning conditions where we manipulated the types of cues to gender marking and the number of gender cues (depending on word ending), in the following manner:

Learning/input condition	Transparent a/o noun	Nontransparent e/cons. noun
1. no cue in determiner or adjective	Su sodo gris	Su jabe gris
2. cue in determiner	La tida azul	El disan azul
3. cue in adjective	Su reco rojo	Su serul roja
4. cue in determiner and adjective	El lafo negro	El chelel negro

Testing is still ongoing. To date, 21 native speakers of Spanish, 22 L2 learners and 23 heritage speakers were trained on 2 of the 4 conditions each (9-13 participants of each group per condition). Participants took The DELE proficiency test and completed a language background questionnaire. The 20-minute training (see next page) included a practice session and exposure to multiple instances of each word in full sentences. Participants were told that the purpose of the study was to test memory and word learning, and were supposed to remember the words. After the training session, all participants completed four tasks, which allowed us to evaluate their learning of the novel nouns: a word naming task, an elicited production task, a grammaticality judgment task, and a comprehension task. At the end there was a debriefing session.

While testing is ongoing, preliminary results indicate that all speakers, regardless of learning background, assign the masculine gender as the default, except to words ending in -a. Noun transparency significantly predicts gender assignment and overall accuracy on all tests. Learning a novel word with a transparent determiner also significantly improves heritage speakers' performance on the elicited production and auditory comprehension tasks. This result approaches significance on the elicited production task for native speakers as well, though native and L2 speakers currently show very different performance on the comprehension task. These results indicate the importance of the determiner to acquiring gender in at least one group of speakers with early childhood exposure to Spanish (heritage speakers).

Learning Session

12 pseudowords x 8 exposures = 96 total training trials

- Each trial consists of one of the 4 carrier sentences followed by a question that the participant answers by repeating the sentence they heard before.
- Participant sees the object and sentence written out, as well as hear the sentence audibly.



After seeing this image, participant is asked ¿Qué trajo María?

- Participant should respond, 'el bure marrón.'

Vocabulary Test

- Participant sees the 12 items (all in white)
- Participant sees item and responds "foda" in 5 seconds (2 second pauses)



Production Test

- 24 items (2 per noun)
- 2 items per noun, 2 nouns per category= 4 items per category
- 4 items in each category are randomly assigned 1 of the 4 transparent color adjectives (blanco, negro, rojo, amarillo)

Production Test

- Participants are given a noun and an adjective and asked to create a phrase using *det, noun, and adjective*
- Given "libro roja"
 - "el libro es rojo" or "el libro rojo"
 - Each noun appears once with F adj, once with M adj

La foda blanca—correct

Types of errors:

El foda blanco—assignment

La foda blanco—agreement

El foda blanca—ambiguous

-5 seconds to respond with 2 second pauses



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Difficulties with the production of object clitics in languages such as French and Italian have been reported for different populations, including child L2 learners (Paradis 2004, Vendler et al., 2016), children with Specific Language Impairment (SLI) (Bortolini et al., 2006; Jakubowicz et al. 1998), and children with Autism Spectrum Disorder and language impairment (ASD-LI) (Tuller et al., in press). Comparative studies have generally compared the L2 context with one other atypical acquisition context (SLI/L2 in Grüter 2005; Paradis 2004, SLI/ASD, Tuller et al., in press). Multiple-context comparative studies are rare, yet they may provide valuable information about the (child L2) acquisition process. Given that in these different contexts, development is delayed, the comparative perspective has the advantage of allowing for direct comparisons between age-matched children (and thus children with the same cognitive maturity), which is impossible to do with typically developing (TD) children learning their L1. In particular, previous results in (a)typical language acquisition have shown the crucial role played by computational complexity in language development (e.g. Friedmann et al., 2009; Hamann, 2006; Jakubowicz, 2011; Tuller et al., 2011). Object clitics have been argued to increase computational costs, as they occur preverbally, (1), thus requiring overt movement (Belletti, 1999). This has been held to be particularly challenging for children whose working memory (WM) resources are limited due to immaturity (young TD children) or to pathology. Assuming that WM capacities are fundamentally intact in (TD) child L2ers and affected in children with language impairment, production of object clitics should be particularly difficult for the latter.

Conflicting results have been reported regarding whether L2 acquisition shows the same object clitic production patterns as acquisition contexts related to pathology. Some studies have concluded that omission is characteristic of SLI, while production of lexical DPs is typical of L2 (Vender et al., 2016; Bianco & Guasti, 2016, but see Grüter 2005; Paradis 2004). It is not clear whether this result can be generalized to all stages/types of L2 development. Existing studies have usually focused on early L2 or simultaneous bilingual children (ages 5 and/or 6), and they have furthermore been cross-sectional; one open question is thus whether difficulties/error patterns are equally long-lasting/short-lived in the L2 context and in contexts involving language pathology.

A task eliciting production of 1st and 3rd person nominative, reflexive and accusative clitics was administered twice with a one-year interval to three groups of age-matched 6- to 12-year-old children: 20 English-speaking children (*M* age 8;10, *SD* 1;7) who were all sequential learners of French (*M* age of onset 6;8 *SD* 1;2; *M* length of exposure 1;8 *SD* 1;2), 20 children with SLI (*M* age 8;7, *SD* 1;5), and 14 children with ASD-LI (*M* age 8;7, *SD* 2;2; *n* = 7 at second testing). Three French-speaking monolingual TD groups included 4-year-olds (*n* = 14), 6-year-olds (*n* = 12), and 8-year-olds (*n* = 12).

At Time 1 (T1), the L2, SLI and ASD-LI groups patterned alike: lower production for 1st and 3rd person reflexive and accusative clitics, compared to nominative clitics, and to the TD-6 and -8 groups. Accusative clitic production was especially low for 3rd person (Figure 1), confirming previous reports. The three groups also patterned together at T1 in that omission was the most frequent error (Figure 2). Comparing T2/T1 performance, while production of object clitics increased for all children, it was the sharpest in the L2 group; furthermore, omission strongly decreased in the L2 group whereas it remained stable in the two other groups; lexical DPs remained globally similar. Taken together, these results suggest that typical L2 object clitic production is not always distinguishable from object clitic production observed in contexts of language pathology.

- (1) Pierre prend le vase. -> Pierre le prend ____.
Peter takes the vase Peter it takes
'Peter is taking the vase.' 'Peter is taking it.'

Figure 1: Production rate of 3rd person nominative (3Nom), reflexive (3Refl) and accusative (3Acc) clitics

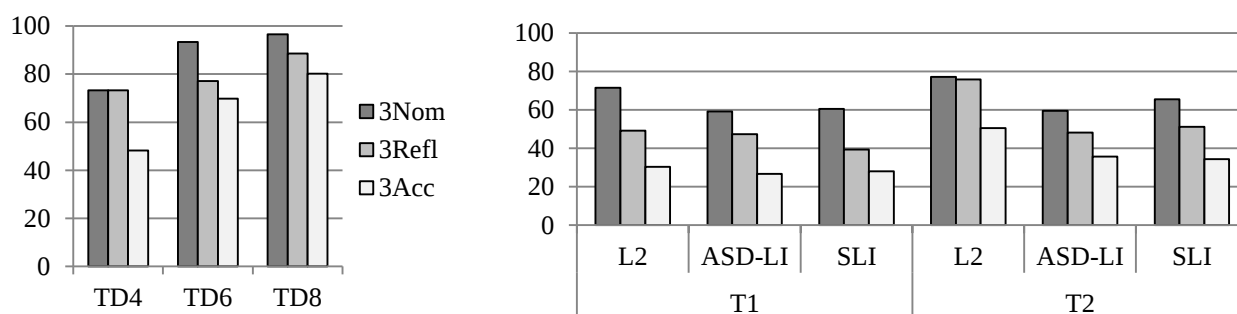
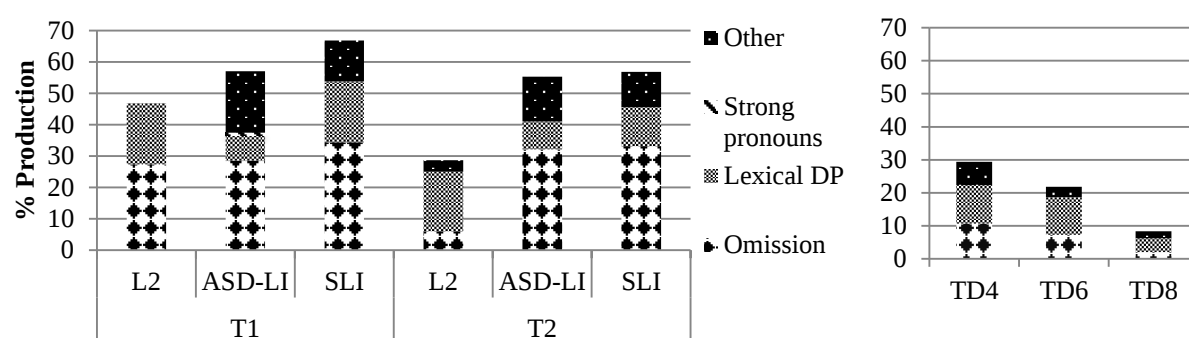


Figure 2: Non-clitic answers produced instead of 3rd person accusative clitics



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We investigate which factors lead to apparent differences between heritage and monolingual grammars, focusing on embedded *wh*-questions in heritage Italian in Germany. In matrix *wh*-questions, Italian and German both require adjacency of the *wh*-phrase (WH) and the inflected verb (see 1). In embedded *wh*-questions, this requirement disappears in German (see 2), while being maintained in Italian. As shown in (3a), adjacency is the unmarked option, whereas lack thereof yields marginal sentences (see 3b). However, structures with a pre-verbal subject like (3b) can be licensed either by subjunctive mood (4a) or if a constituent is left in the VP (4b) (Poletto & Pollock 2000, Rizzi 1996). Embedded *wh*-questions thus display a range of alternative derivations in Italian, but are strictly uniform in German – an asymmetry that may facilitate cross-linguistic influence (CLI) (e.g. Hulk & Müller 2000).

Three factors have been considered: (i) structural complexity – defined as the number of required syntactic operations (Merge, Move and Agree), (ii) overcorrection (Kupisch 2014, Anderssen & Westergaard in prep.) and (iii) language dominance (e.g., Yip & Matthews, 2007, Kupisch et al. 2014). If (i) is crucial, the structure in (3a), involving TP-movement, should be more vulnerable than the structure in (3b), which does not involve TP-movement. If (ii) is crucial, speakers should overuse the structure in (3a), which is the one not shared by the two languages. If (iii) is crucial, only unbalanced HSs with low proficiency in Italian will deviate from monolinguals.

We tested 20 adult HSs of Italian in Germany and 20 Italian monolinguals using a bi-modal acceptability judgement task (AJT). The task consisted of 36 items: 12 test items (2 types), 12 control items (2 types) and 12 fillers. Test items involved embedded *wh*-questions with post-verbal (type #1) and pre-verbal subjects (type #2) respectively. For each type, there were 6 different structural conditions: Verb class (copula, unaccusative, unergative and transitive) and thematic type of WH (argument vs. adjunct) were considered. Only “bare” *wh*-phrases (like *dove* ‘where’) were used. We controlled for lack of interrogative inversion in embedded *wh*-questions with “complex” WHs like *perché* ‘why’ (type #3, see 5) (Rizzi 1996, 2006; Bocci & Pozzan 2014) and *wh*-movement in embedded contexts (type #4, see 6). Fillers were either grammatical (type #5) or ungrammatical (type #6) in both Italian and German.

The results show that the group of monolingual Italian speakers performs significantly better than the group of Italian HSs in type#1 –i.e., the structures with a post-verbal subject like (3a)–, but not in type #2 –i.e., the structures with a pre-verbal subject like (3b). This is consistent with (i), but not with (ii). Language dominance –operationalised as performance on a lexical decision task– showed a significant correlation with the results of the AJT, supporting (iii). Interestingly, both groups were equally sensitive to verb class (the marginal structure was never accepted with copula, whereas it was accepted significantly more often with both unaccusatives and unergatives) and to the argument vs. adjunct distinction.

Overall, our results show that the variation in acceptability of the marginal structure is governed by the same structural factors for both HSs and monolinguals, suggesting that the range of deviation from monolingual norms exhibited by HSs is not arbitrary, but limited by the same constraints found in the monolingual grammar.

Examples

- (1) a. *Cosa* {**Gianni*} *ha* *cucinato* {*Gianni*}?
 what G. AUX.3SG cook-PTCP G.
 b. *Was* {**Hans*} *hat* {*Hans*} *gekocht*?
 what H. AUX.3SG H. cook-PTCP
 ‘What did John cook?’
- (2) *Maria weiß nicht, was Hans gekocht hat.*
 M. knows NEG what H. cook-PTCP AUX.3SG
 ‘Mary doesn’t know what John has cooked.’
- (3) a. *Maria non sa cosa ha cucinato Gianni.*
 M. NEG knows what AUX.IND.3SG cook-PTCP G.
 b. ??*Maria non sa cosa Gianni ha cucinato.*
 M. NEG knows what G. AUX.IND.3SG cook-PTCP
- (4) a. *Maria non sa cosa Gianni abbia cucinato.*
 M. NEG knows what G. AUX.SBJV.3SG cook-PTCP
 ‘Mary doesn’t know what John has cooked.’
 b. *Maria non sa cosa Gianni ha cucinato per cena.*
 M. NEG knows what G. AUX.IND.3SG cook-PTCP for dinner
 ‘Mary doesn’t know what John has cooked for dinner.’
- (5) *Federica si chiede perché Thomas è andato al mare.*
 F. REFL.3S asks why T. AUX.IND.3SG go-PTCP-MSG to-the sea
 ‘F. wonders why Thomas went to the seaside.’
- (6) **Fabio non sa Francesca abita dove.*
 F. NEG knows F. lives where
 intended: ‘Fabio does not know where Francesca lives.’

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Probabilistic models of L2 parameter resetting (Slabakova, 2008; based on Yang, 2003) hold that L1 settings can marginally persevere at advanced proficiency levels of L2 acquisition (see also Amaral & Roeper, 2014). This study examines the nature and extent of such L1 syntactic influence during L2 sentence processing in advanced L1 German late learners of L2 English. We follow previous studies that exploit cross-linguistic conflicts, i.e., structures that are word-by-word translations between a learner's two languages, but with different syntactic structures and different semantic interpretations (e.g., Hopp, 2016; Kaan et al., 2015). We report a visual world eye-tracking experiment on the online syntactic co-activation in the processing of wh-questions by adult German L2 learners of English.

There is partial overlap in surface word order in English and German wh-questions, presenting potential cross-linguistic conflicts for German learners of English. The German word-by-word translations of English simple tense subject questions and perfect tense object questions are ambiguous between subject and object interpretations (see 1 and 2) and could thus license non-target L1-based parses. By contrast, English present tense object and perfect tense subject questions cannot be accommodated by a German syntactic representation and should not admit L1 parses. Research using offline picture comprehension methodology has provided support for persistent L1 activation by identifying L1-influenced interpretations in cross-linguistic conflicts in wh-questions by German-English/English-German learners (Grüter, 2005/6; Rankin, 2014).

Here we investigate the time-course of potential syntactic co-activation in these wh- constructions using a visual world eye-tracking task. 40 intermediate/advanced-proficiency German L2 learners of English and 28 native English speakers responded to spoken wh- questions by selecting one of two scenes depicting pairs of animals carrying out reciprocal transitive actions (Fig.1). Three factors were manipulated: Question-type (subject/object), Tense (present/perfect), and Disambiguation (lexical/syntactic). In lexical-disambiguation trials (Fig.1a) the animal name was a sufficient cue to picture-selection. In syntactic-disambiguation trials, the animal named in the question was depicted as both an agent and patient of the action, requiring attention to syntax to select target pictures. We predicted co-activation to manifest in greater processing differences between syntactic and lexical trials in cross-linguistic conflict conditions than in non-conflict conditions.

L2 learners' picture-selection accuracy on syntactic trials was similar to previous offline findings, showing a significant interaction between Tense and Question-type ($b=1.4$, $p=.02$), driven by lower accuracy in the conflict conditions. This pattern was partially reflected in participants' eyegaze during the processing of these structures, with the L2 group showing greater differences between target fixation rates in syntactic vs lexical trials in conflict conditions than the L1 group (Fig2a), whereas the two groups' fixation patterns differed less in non-conflict conditions (Fig2b). Participants' proportion of looks to the target were subjected to 2(Disambiguation-Type)x2(Group) ANOVAs in 300ms windows in each Tense/Question-type condition. (Marginal) interactions of Disambiguation with Group occur mostly in the conflict conditions, suggesting the L1 syntax is co-activated in on-line processing.

EXAMPLES

- | | |
|---|--|
| <p>(1) Which animal pushes the cat?
Welches Tier schubst die Katze?</p> <p>(2) Which animal has the cat pushed?
Welches Tier hat die Katze geschubst?</p> | <p>[subject-wh-question only]
[ambiguous between subj- and obj-wh-q]</p> <p>[object-wh-question only]
[ambiguous between subj- and obj-wh-q]</p> |
|---|--|

Fig 1a: Lexical trial: Which animal pushes the cat?

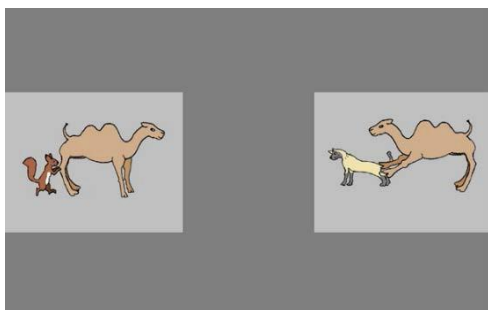


Fig 1b: Syntactic trial: Which animal pushes the cat?

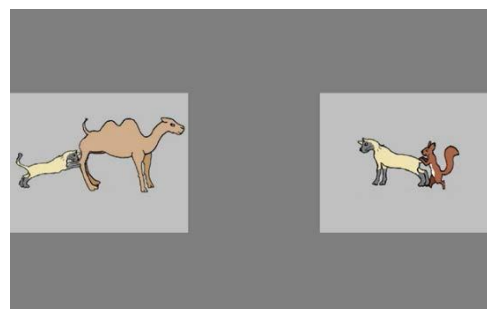


Fig 2a: Eye gaze plots present-subject wh- Qs, lexical- vs. syntactic-disambiguation

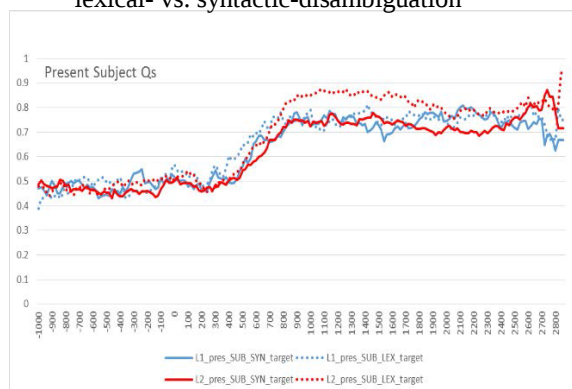
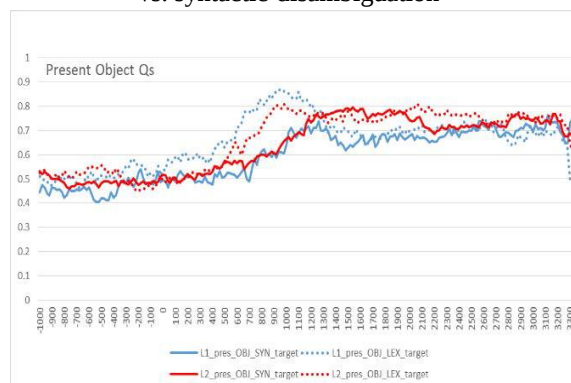


Fig 2b: Eye gaze plots present-object wh-Qs, lexical- vs. syntactic-disambiguation



* 0=ms is the onset of second noun in questions

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The goal of this paper is two-fold. First, it expands the testing ground of the Interface Hypothesis (Sorace, 2006, 2011) through investigating the L2 acquisition of two different domains of object movement in Dutch, which exhibit syntax-discourse or syntax-semantics level properties. I show (1) that non-target behaviour is not attested when the L1 and L2 grammars behave alike and (2) that near-natives correctly restrict L2-syntactic configurations to discourse contexts allowed in the L2. Secondly, including evidence from previous studies, this study discusses which non-native patterns in L2 syntax-discourse mappings could be due to representational, instead of computational, L1-L2 differences.

Object movement in Dutch: In Dutch, the surface position of objects is dependent on discourse constraints, as definite objects prefer to A-scramble across adverbs when they are discourse anaphoric, see (1) (Neeleman and Koot, 2007). Object placement can also be semantically motivated, as A-moved indefinites receive a specific interpretation contrary to in-situ indefinites, which are interpreted non-specifically, see (2-a) and (2-b) respectively. Additionally, discourse constraints can motivate A'-movement to the first position, leading to OSV orders, when the object is in focus (Frey, 2010); see (3), compared to (4). Experiment 1 and 2 investigate A-movement across an adverb in the middle field, either discourse or semantically motivated. Experiment 3 investigates discourse driven movement to the first position. Near-native L1 English learners of L2 Dutch (n=13), L1 German learners of Dutch (n=13) and a native control group (n=15) participated in two Felicity Judgment tasks and a Truth Value Judgment task. German, but not English follows the same syntax-discourse and syntax-semantics mapping as Dutch.

Results: The results of Experiment 1 & 3 show that English near-native speakers of Dutch correctly accept non-canonical OSV orders in object focus contexts and not in wide-scope contexts, but whether they do not show a clear preference for A-scrambled objects when the object has a salient discourse is yet unclear. In Experiment 2 four out of fourteen participants show problems with restricting scrambled indefinites to a specific interpretation. The L1 German group performs on target in all tests.

Conclusion: The target performance of the L1 German group in addition to the finding that L1 English near-native speakers of Dutch do perform on target on some structures pertaining to the syntax-discourse interface, suggest that the syntax-discourse interface is not necessarily problematic in end state grammars, while the mixed performance on the interpretation of scrambled indefinites, suggests that the syntax-semantics interface not necessarily unproblematic. This outcome supports the view that interfaces should not be viewed holistically (White, 2011).

Future work: Including findings from previous studies on object movement in Germanic (Bohnacker and Rosen, 2008; Hopp, 2009), I hypothesize that representational native vs. near-native differences are only attested for L2 learners whose L1 allows the same syntactic structure as the L2, but is constrained by different discourse conditions on the syntax.

Experiment 1 test item

- (1) ‘Will **our old teacher** be coming to the party?’
- a. #Nou, ik heb gisteren onze ouwe leraar een uitnodiging gestuurd.
Well, I have yesterday our old teacher an invitation sent
- b. Nou, ik heb [onze ouwe leraar]_i gisteren t_i een uitnodiging gestuurd.
Well, I have our old teacher yesterday t_i an invitation sent

Experiment 2 test item

For our office parties we always hire the same entertainer. He is a multit talented person. He is not only good at magic and at telling jokes, he also always sings a couple of beautiful songs. What I admire most about him is his wonderful repertoire: after all these years of performing at our company he never repeated the same song.

- (2) a. De entertainer heeft **een paar liedjes** regelmatig gezongen. (**False**)
The entertainer has a few songs regularly sang.
- b. De entertainer heeft regelmatig **een paar liedjes** gezongen. (**True**)
The entertainer has regularly a few songs sang.
‘The entertainer sang a few songs regularly.’

Experiment 3 test item

- | | |
|--|---|
| (3) Object Focus Context
Wat heeft Bas vergeten?
‘What did Bas forget?’
OSV: De vis heeft Bas vergeten.
The fish has Bas forgotten
SOV: Bas heeft de vis vergeten.
Bas has the fish forgotten
‘Bas forgot the fish’ | (4) Wide Focus Context
Wat is er gebeurd?
‘What happened?’
OSV: # De vis heeft Bas vergeten.
The fish has Bas forgotten
SOV: Bas heeft de vis vergeten.
Bas has the fish forgotten
‘Bas forgot the fish’ |
|--|---|

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Is the syntax-discourse interface a locus of permanent optionality? The case of locative inversion in L2 English

At present, there are two main hypotheses on the end-state of L2 acquisition at the syntax-discourse interface. According to one hypothesis, the Interface Hypothesis (IH) (Sorace, 2011; Sorace & Filiaci, 2006), structures involving the interface between syntax and grammar-external domains, like discourse and pragmatics, are a locus of residual, but permanent, optionality, because L2ers are less than optimally efficient at integrating syntactic and contextual information in real-time language use as a by-product of bilingualism (for details, see Sorace, 2011). According to an alternative hypothesis which has recently emerged in work by Domínguez & Arche (2014) and Slabakova (2015), structures at the syntax-discourse interface generate problems at highly advanced levels of proficiency iff their properties are different in the L1 and the L2 and the evidence available in the input is not transparent (e.g. because the structure is rare). We will label this hypothesis the “L1+input hypothesis” (LIH).

With a view to testing the IH and the LIH, the present study investigates the acquisition of locative inversion (LI) in L1 European Portuguese (EP) – L2 English and L1 French – L2 English. This is an appropriate testing ground for these hypotheses for three reasons. First, English LI is a structure at the syntax-discourse interface: it is only admitted when the fronted locative (Loc) is presupposed (Teixeira, 2016), the subject (S) is part of the focus (Birner, 1996), and the verb (V) is informationally light (Levin & Rappaport Hovav, 1995) and unaccusative-like (Culicover & Levine, 2001). More specifically, the V must be either an unaccusative of existence and appearance (e.g. *live*, *appear*) or a redundant unergative, i.e. an unergative that expresses a prototypical activity of the S referent (e.g. *From the flagpole waved a tattered banner* / *??a bearded student*) and behaves like an unaccusative (Mendikoetxea, 2006). Second, LI is infrequent in English. Lastly, this inversion is subject to the same constraints in English and French, but not in EP. Unlike these languages, EP allows LI with all intransitive Vs (Pereira, 1998). Given these facts, the LIH and the IH make different predictions about the performance of EP and French speakers with respect to English LI. The former predicts that French speakers will behave native-like, while EP speakers will not. The latter, in contrast, predicts that both groups of L2ers will display some level of optionality in their performance.

The participants in this study were adult monolingual speakers of English ($n=26$), advanced and near-native French L2ers of English ($n=15$ ADV, 11 NN) and advanced and near-native Portuguese L2ers of English ($n=17$ ADV, 11 NN). Their proficiency was assessed through the same type of screening procedure used by Sorace & Filiaci (2006). By administering 2 untimed drag and drop tasks, 2 speeded acceptability judgement tasks and 1 syntactic priming task to all participants, cf. (1) to (3), we tested, on the one hand, the *type of intransitive V* allowed in LI – unaccusative of existence and appearance vs. unaccusative of change of state vs. redundant unergative vs. non-redundant unergative – and, on the other, the *type of discourse context* in which this inversion is admitted – topic Loc + focus S vs. focus Loc + topic S vs. focus Loc + focus S. Analyses were conducted using mixed-effects models with crossed random effects for subjects and items using the lme4 package of R. As shown in table 1, all groups of L2ers exhibited optionality regarding the type of V and the discourse context compatible with LI at least in one type of task. Crucially, monolingual speakers did not display optionality in any tasks. Our results thus confirm the IH’s prediction. They moreover suggest that L2ers’ efficiency at integrating syntactic and contextual information varies according to 4 factors: i) the load imposed by the task on processing resources (demanding task → less efficiency), ii) the distance between L1 and L2 ($L1 \neq L2$ → less efficiency), iii) the quantity of contextual information the speaker needs to process (many pieces of contextual information, as in the tasks on the discourse contexts compatible with LI → less efficiency), and iv) L2ers’ level of proficiency (higher level of proficiency → more efficiency).

(1) Drag & drop task: Sample item

The bottom of the sea was a mass of brilliant colour, with waving fronds of multicoloured plants and bright seashells everywhere.

many colourful fish

around the plants

swam

[participants were asked to create a minimum of 1 and a maximum of 4 continuations to the sentence presented, by ordering the blocks of words provided to them]

(2) Contextualized speeded acceptability judgement task: Sample item

To the right I could see the top of one of Portland's many bridges, one I may have crossed once but I can't recall. [presented as a block without time constraints]

above / the / bridge / flew / flocks / of / seagulls [presented word by word at a rate of 400 ms per word]

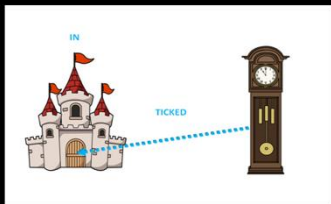
Totally unacceptable * 1 * 2 * 3 * 4 * 5 Totally acceptable

[the scale appeared after the final word]

(3) Syntactic priming task: Sample item

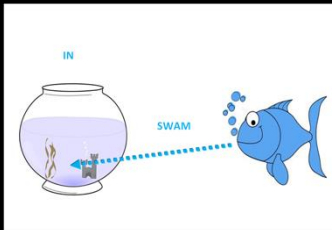
Read out loud:

In the library ticked a clock.



Do the sentence and the scene above match?
Press Y for 'yes' Press N for 'no'

Now, describe this scene out loud.



[Subtasks 1 and 2 had to be done within 4 s, while subtask 3 had to be done within 5 s.]

Table 1 – Summary of the results per task and group

Variable	Task	Near-native L2ers		Advanced L2ers	
		L1 Fr	L1 EP	L1 Fr	L1 EP
Type of intransitive verb	Drag & Drop 1	Near-native	Near-native	Near-native	Near-native
	Priming	Near-native	Indeterminate	Indeterminate	Indeterminate
	Acceptability judgements 1	Optionality	Optionality	Optionality	Optionality
Type of discourse context	Drag & Drop 2	Near-native	Near-native	Optionality	Optionality
	Acceptability judgements 2	Optionality	Optionality	Optionality	Optionality

Legend: *near-native* = LI is produced significantly more in the conditions which are compatible with it than in those which are not, but is sub- or overproduced in at least one condition; *optionality* = within the L2 group there are no significant differences in the level of acceptance/production of LI between the conditions which are compatible with this word order and (some of) those which are not, and the group simultaneously displays a higher level of acceptance/production of LI in the conditions which disfavour inversion than the control group; *indeterminate* = the group exhibits a low level of production of LI across all conditions, including those where the monolinguals allow this word order, and does not differentiate between the conditions which are compatible with this type of inversion and those which are not.

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English articles (*the*, *a*) encode the definiteness/indefiniteness distinction. However, previous research has shown that speakers of article-less L1s form non-target form–meaning mappings of L2 English articles (Ionin et al., 2004; Ko et al., 2008; Cho, 2016). Yet the exact learning task that L2 learners face still remains unclear. The present study aims to offer new insights into the nature of the learning task in the L2 acquisition of English articles through reconsidering the semantics of definiteness and through formulating the acquisition task situated within the Feature Reassembly Hypothesis (henceforth, FRH, Lardiere, 2009) and the cline of difficulty in acquisition of features (Slabakova, 2009). We investigate the L2 acquisition of definiteness in English by article-less L1 Russian and L1 Chinese speakers.

The semantics of definiteness. There is much disagreement in the semantics literature as to what exactly definiteness entails: familiarity on behalf of the speaker and the hearer or uniqueness in a given situation. We follow Birner and Ward (1994) in arguing that both familiarity and uniqueness independently constitute the concept of definiteness. Further support for this claim comes from languages that distinguish between familiarity and uniqueness by employing two definite articles (German and Fering, see Schwarz, 2009). We argue that English maps familiarity as well as uniqueness onto one form of the definite article, making it ambiguous.

The acquisition task. Russian and Chinese mark uniqueness through bare nouns while familiarity can be optionally expressed through demonstratives. We operationalise familiarity and uniqueness as the features [+familiar] and [+unique]. Based on the FRH, the acquisition task consists of reassembling [+familiar] and [+unique] from the way they are realised in Russian/Chinese onto *the* in English. Following Slabakova (2009), we predict that the reassembly of [+familiar] will be easy as L2 learners will reassemble [+familiar] from demonstratives in the L1 onto *the*, while the reassembly of [+unique] from bare nouns onto *the* will be more difficult. We further predict that since both demonstratives and the definite article express the feature [+familiar] in anaphoric (i.e. previous mention) contexts, L2 learners will incorrectly map anaphoric familiarity onto *the* and associate *the* with [+anaphoric] contexts. Moreover, the feature [+unique] will not always be mapped onto *the*.

The study. L1 Russian speakers (beginner (n=7)/intermediate (n=23)/advanced (n=18)), L1 Chinese speakers (intermediate (n=41)/advanced (n=20)) and English controls (n=20) completed two tasks. In the acceptability judgment task (AJT), the participants had to decide whether a sentence is an acceptable continuation of a story; in the written sentence production task (WSPT), the participants were asked to continue a story by making sentences with the words in parentheses. We predicted that, if L2 learners incorrectly map anaphoricity onto *the*, they will be more accurate in preferring *the* in [+anaphoric] as in (1, 2) than in [–anaphoric] (3) definite contexts, but they will also incorrectly allow *the* in [+anaphoric] indefinite contexts (4, 5) compared to [–anaphoric] indefinite contexts as in (6).

The findings. The low proficiency Russian learners showed high levels of omissions (WSPT) and high acceptance (60%) of non-target *the* in the indefinite conditions (AJT), suggesting that the grammatical features were not yet in place in these learners' grammars. However, our predictions were confirmed in the more advanced-proficiency groups. In the definite conditions, the two advanced groups as well as the Chinese intermediate group were more accurate in accepting/using *the* in [+anaphoric] than in [–anaphoric] contexts (Figures 1, 3). These learners also incorrectly accepted/used *the* more often in [+anaphoric] than in [–anaphoric] indefinite contexts (Figures 2, 4). Overall, the results suggest that L2 learners incorrectly map anaphoricity onto *the*, while the feature [+unique] is not always computed. This mapping is manifested as preference for *the* in anaphoric contexts across the board. We discuss reasons for this variability across the learners and across the tasks.

Example test items in the AJT (note: target NPs were not italicised in the actual task)

Definite conditions (target: <i>the acceptable</i>)	Indefinite conditions (target: <i>the not acceptable</i>)
[1] Previous mention: [+anaphoric, +familiar] (the target NP is anaphoric to a direct antecedent) Mary often goes shopping, and last Friday she went to a new shopping mall. She bought <u>a bag</u> there, and she was very happy. She used <i>the bag</i> straight away.	[4] Partitive: [+anaphoric, -unique] (the target NP is anaphoric to a direct antecedent by being its non-unique part) Betty decided to get a kitten, so she went to a pet shop. The pet shop had <u>five kittens</u>, and she played with them for a while. Then she chose <i>the kitten</i>.
[2] Unique bridging: [+anaphoric, +unique] (the target NP is anaphoric to an indirect antecedent by being its unique part) Michael likes going out, so he often goes to parties. Last Saturday he went to <u>a wedding</u>, and he had fun there. He even danced with <i>the bride</i>.	[5] Non-unique bridging: [+anaphoric, -unique] (the target NP is anaphoric to an indirect antecedent by being its non-unique part) Alex is a photographer, and last Saturday he worked at <u>a big wedding party</u>. It was a long day, and he got bored being by himself. So he talked to <i>the guest</i> for a while.
[3] Out-of-the-blue definite: [-anaphoric, +unique] (the target NP does not have an antecedent: it refers to a unique entity in the world) Patrick went camping last summer, but one night he could not fall asleep. He got up, and he did not know what to do. So he watched <i>the sky</i> for a while.	[6] Out-of-the-blue indefinite: [-anaphoric, -familiar] (the target NP does not have an antecedent: it refers to a new referent for the speaker and the hearer) Aaron is a policeman, and last night he was at work. He was tired, and he fell asleep. When he woke up, he was surprised. He saw <i>the mouse</i> in his office

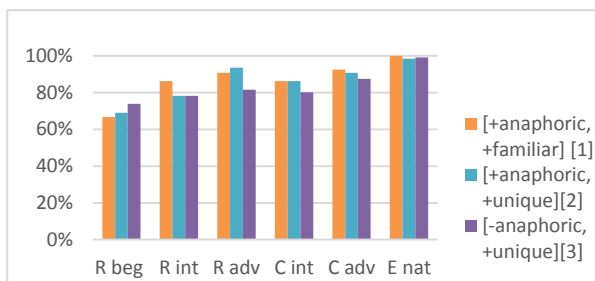


Figure 1: Target acceptance of *the* across the three definite conditions in the AJT

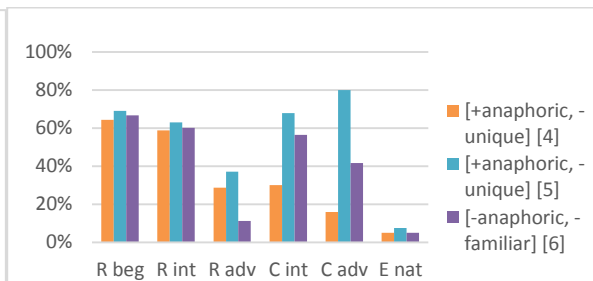


Figure 2: Non-target acceptance of *the* across the three indefinite conditions in the AJT

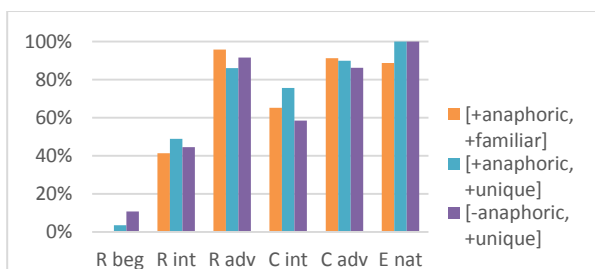


Figure 3: Target use of *the* across the three definite conditions in the WSPT

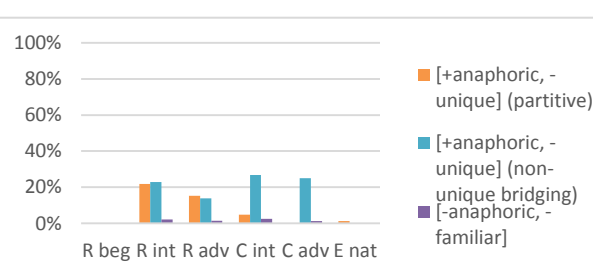


Figure 4: Non-target use of *the* across the three indefinite conditions in the WSPT

References: Birner B. and Ward G. (1994) Uniqueness, familiarity, and the definite article in English. BLS 20, 93-10. Cho, J. (2016) The acquisition of different types of definite noun phrases in L2-English. International Journal of Bilingualism, 1-16. Ionin, T, Ko, H. and Wexler, K. (2004). Article semantics in L2-acquisition: the role of specificity. Language Acquisition 12: 3-69. Ko H., Ionin T. and Wexler K. (2010) The role of presuppositionality in the second language acquisition of English articles. Linguistic inquiry 41: 213-254. Lardiere D. (2009) Some thoughts on the contrastive analysis of features in second language acquisition. Second Language Research 25: 173-227. Schwarz F. (2009) Two types of definites in natural language. Open Access Dissertations: 122. Slabakova R. (2009) Features or parameters: which one makes second language acquisition easier, and more interesting to study? Second Language Research 25: 313-324.

Research question. Previous research has established that bilingual children's language development is related to the relative *amount* of input in that language. More specifically, a number of studies have shown that once exposure reaches a certain threshold, bilingual children perform similarly to monolingual peers (e.g., Cattani et al., 2014; Thordardottir, 2014). Little attention has been paid to the role of input *quality*, even though this varies considerably between children and may impact on language development (e.g., Place & Hoff, 2015). Children's input quality may vary as a result of the language and literacy activities encountered in a given language (Paradis, 2011; Scheele et al. 2010), exposure to native vs. non-native input (Hammer et al. 2009), and in the case of non-native input, the relative proficiency of speakers providing that input (Cornips & Hulk, 2008). This study explores the relationship between input quality and bilingual children's language development by asking to what extent specific qualitative properties of children's language experience can i) predict bilingual children's language development and ii) account for differences and/or similarities between bilingual and monolingual preschoolers in their acquisition of Dutch.

Methods. Fifty bilinguals (age: $M = 41$ months ($SD\ 5.1$); age of onset: < 3 years; various L1s) and 37 age-matched monolinguals were tested using standardised vocabulary and grammar tasks (PPVT-III-NL, CELF-2-NL), semantic fluency and elicited production tasks (verb morphology, articles) and a language-neutral working memory (WM) task (Kaufmann hand movement). Quantitative and qualitative measures of bilingual experience were derived from parental questionnaires assessing children's language history/use (Unsworth, 2013) and their family's language and literacy practices (Mayo & Leseman, 2006). To answer i) children's responses were analysed using linear mixed effect models; to answer ii) a two-stage cluster analysis established which bilingual children patterned similarly to monolinguals (following Cattani et al., 2014) and a generalised linear mixed model with logistic link function (Baayen, 2008; Jaeger, 2008) was subsequently used to determine which factors best predicted cluster membership.

Results. All tasks had a two-cluster solution whereby most – but crucially not all – bilinguals fell in cluster-1 and almost all monolinguals in cluster-2. Preliminary analyses revealed that the following factors best predicted cluster membership: PPVT – amount of Dutch spoken by the child's mother, gender and SES; semantic fluency – WM and family language and literacy practices; CELF sentence comprehension – WM only; CELF active vocabulary – amount of Dutch spoken by child's mother, mother's self-reported proficiency (SRP), plus an interaction between the two whereby amount of input was related to cluster membership when mother's SRP was high; CELF word structure – there was an interaction between WM and mother's SRP whereby WM was related to cluster membership when mother's SRP was high.

Conclusion. Variation in input quantity and quality predicted which bilingual children score similarly to their monolingual peers, but only to a limited extent (cf. e.g. Place & Hoff, 2011). Maternal language proficiency appeared to restrict the relationship between productive skills in vocabulary and morphosyntax, on the one hand, and input quantity and WM, on the other. WM, a variable not often taken into account in previous research, also accounted for much of the observed individual variation. In this paper we explore why some qualitative aspects of bilingual experience appear to be more important than others and why this varies across modalities and domains.

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This study explores the relationship between bilingualism and developmental dyslexia, focusing in particular on morphological awareness. It has been shown that bilingualism can have a positive effect on the subjects' morphological awareness, with bilinguals outperforming monolingual in tasks assessing their ability to apply morphological rules to nonwords (Friesen and Bialystok 2012, Barac and Bialystok 2012, Bialystok et al. 2014). Conversely, morphological abilities are significantly compromised in dyslexia: specifically, dyslexic children show marked difficulties in the inflection of nonwords, performing worse than controls (Joanisse et al. 2000, Vender et al. in prep.).

The goal of our study was to investigate how bilingualism interacts with dyslexia in a task measuring the subject's morphological skills, to check whether the advantage typically found in bilingualism arises also in presence of dyslexia. In our task, we assessed the subject's ability to generate plural inflections of nonwords in five conditions corresponding to distinct declension classes in Italian:

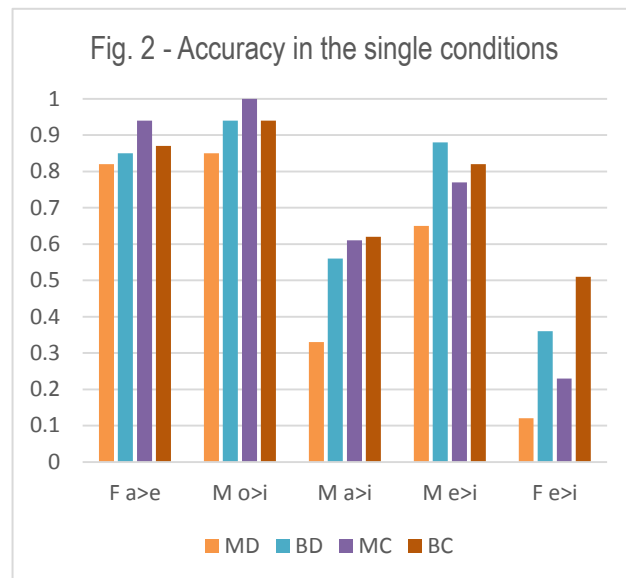
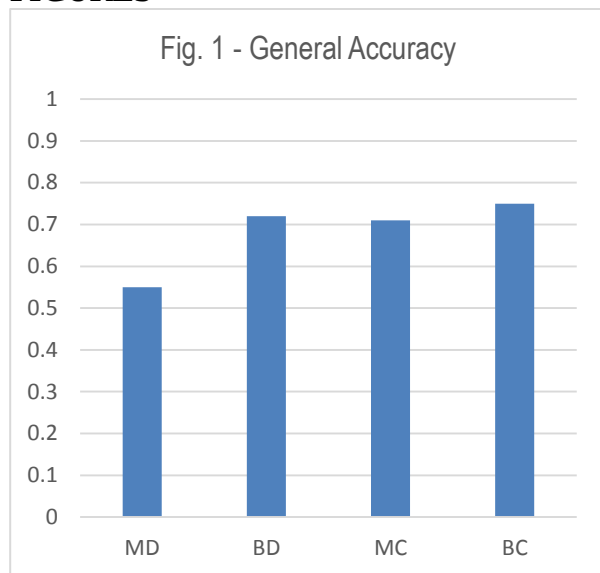
- (i) Feminine nouns in *-a* giving the ending *-e* ($F a > e$): ex. *la port-a > le port-e* 'door'
- (ii) Masculine nouns in *-o* giving *-i* ($M o > i$): ex. *il gall-o > i gall-i* 'rooster'
- (iii) Masculine nouns in *-a* giving *-i* ($M a > i$): ex. *il pirat-a > i pirat-i* 'pirate'
- (iv) Masculine nouns in *-e* giving *-i* ($M e > i$): ex. *il pesc-e > i pesc-i* 'fish'
- (v) Feminine in *-e* giving *-i* ($F e > i$): ex. *la nav-e > le nav-i* 'boat'

These conditions can be distinguished in terms of complexity according to their frequency, productivity and gender opacity: the first and the second are very common and productive, whereas the other three are more challenging, being less common, unproductive and less transparent with respect to gender. An additional complexity is involved in the two gender-mixed classes in *-e*, counting as ambiguous since this ending can be found in both masculine and feminine nouns.

The task was administered to 106 children divided into four groups: 24 Italian monolingual dyslexic children (MD, mean age 10.0 y.o., SD= 1.3), 30 Italian monolingual typically developing children (MC, 10.1 y.o., SD= 1.0), 22 bilingual dyslexic children with Italian as L2 (BD, 10.4 y.o., SD= 1.4) and 30 bilingual typically developing children with Italian as L2 (BC, 10.2 y.o., SD= 1.2). Data were analyzed with a 2x2 ANOVA with bilingualism and dyslexia as fixed factors and performance in the general task and in the single conditions as dependent variables, leading to two important results (see Fig. 1 and 2). First, **monolingual dyslexics** displayed the worst performance, committing more errors than the two control groups; importantly, they **underperformed in comparison to bilingual dyslexics**. Secondly, **bilingual children, both dyslexics and controls, outperformed monolingual children** in the most difficult conditions, where the relevant rules are less frequent, unproductive and opaque for gender.

Summarizing, results confirm the presence of an advantage of bilingualism in the inflections of nonwords and point to a positive effect of bilingualism on dyslexia, showing that bilingual dyslexics have a more sophisticated morphological awareness than monolingual dyslexics, approaching and even outweighing, as in the most difficult conditions, the performance of monolingual unimpaired children.

FIGURES



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ALTERNATE ORAL PRESENTATIONS

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A reaction time study on scalar implicatures in second language acquisition

Sorace's (2011) Interface Hypothesis argues that processing multiple types of information at the interface between linguistic and extralinguistic systems is the main source of persistent difficulties in L2 acquisition due to limitations on L2 processing capacity. The present study investigates L2 processing at the semantics-pragmatics interface by examining L1 Korean learners' online and offline computation of scalar implicatures in L2 English.

Scalar implicature is an additional meaning calculated above the literal meaning for scale items like quantifiers. For example, the statement "some elephants have trunks" is pragmatically infelicitous but logically true since *some* is logically consistent with *all*, i.e., 'some and possibly all'. The implicature 'some but not all' is a pragmatic inference derived by the hearer based on what has been said. The L2 acquisition of scalar implicatures provides an ideal testing ground for the Interface Hypothesis since crosslinguistic variation is held constant (the mechanisms of pragmatic inference are arguably universal). Thus, differences between native vs. non-native speakers with respect to scalar implicatures should be accounted for and by difficulties in processing interfaces.

Previous research on scalar implicatures in L2 acquisition indicates that native speakers are more likely to allow logical interpretations than non-native speakers since allowing the logical interpretation by cancelling the initial pragmatic interpretation is too demanding on the already limited cognitive resources of L2 speakers (Lieberman, 2009; Slabakova, 2010). Previous L2 studies, however, have not examined L2 speakers' online computation of scalar implicatures. Using both online and offline tasks (a self-paced reading task and a sentence judgment task), the present study addresses two research questions: 1) Do native and L2 speakers show online sensitivity to true *all* and infelicitous *some* sentences (e.g., all elephants have trunks vs. some elephants have trunks)? 2) Are native speakers more likely to allow more logical interpretations for infelicitous sentences than L2 speakers, as shown in previous studies?

Methodology: L1-Korean L2-English learners (advanced, $n=40$) and native English speakers ($n=35$) completed a self-paced reading task (SPRT), a sentence judgment task and a proficiency test. Eight target sentences were created per condition (see Table 1) and 8 lists were created using a Latin Square design so that participants saw 8 experimental items (2 from each condition) embedded in 92 controls, distractors and fillers. Reading times (RT) for each segment as well as sentence judgment patterns (Yes or No) were analyzed and compared.

Findings and conclusions: Reading time data were analyzed using linear mixed models (*lme4* under R). As shown in Figures 1 and 2, native speakers start to show sensitivity to pragmatically infelicitous sentences in the critical region and subsequent spill-over regions ($t=1.87$, $p=.06$ in CR; $t=2.1$, $p=.03^*$ in CR+1; $t=2.46$, $p=.015^*$ in CR+2), while L2 speakers show sensitivity only toward the end of the sentence ($t=1.98$, $p=.05^*$ in CR+5). This suggests that the online computation of scalar implicatures is delayed in an L2. As for offline comprehension (measured by sentence judgment patterns), both native and L2 speakers allow logical interpretations over 95% of the time and there is no difference between the two groups ($\chi^2 = 2.704$, $p = .1$). That is, rather than judging informationally weaker sentences like "some elephants have trunks" to be infelicitous, both native and L2 speakers in this study cancelled their initial implicature (some but not all) by inferring that there must be a reason for not using the stronger term *all*. These findings indicate that L2 online computation of scalar implicature is slower than L1 scalar implicature computation but the semantics-pragmatics interface

mechanisms or routes appear to be the same in both L1 and L2 (moving from generating scalar implicatures to cancelling them).

Table 1. Experiment design and self-paced reading task test items (Double slashes indicate region boundaries in moving window)

Conditions	Sample test items
True ‘all’	All zebras // have // stripes // and // legs.
False ‘all’	All books // have // pictures // and // drawings.
Felicitous ‘some’	Some books // have // pictures // and // drawings.
Infelicitous ‘some’	Some zebras // have // stripes // and // legs.

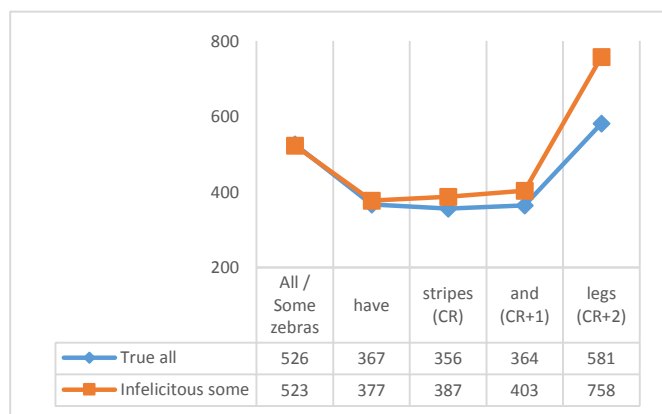


Fig 1. Native speakers' RTs (ms) per segment

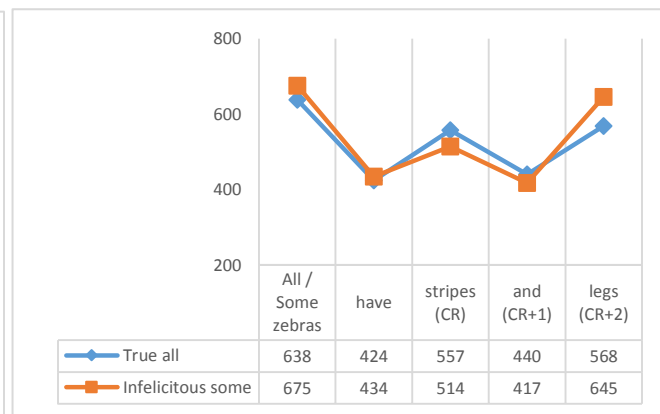


Fig 2. L2 speakers' RTs (ms) per segment

Table 2. Rate (in %) for Logical Responses to infelicitous *some*

Groups	Infelicitous <i>some</i> “Do you agree that <i>some zebras</i> have stripes?”	
	Yes (%)	No (%)
Native controls (n=35)	97.1%	2.9%
L2 learners (adv) (n=40)	95%	5%

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Acquisition of two domains of knowledge of demonstrative pronouns by L1 English speakers of L2 Japanese.

This study investigates applicability of the Interface Hypothesis (henceforth IH, Tsimpli & Sorace 2006) through investigating acquisition of two different domains of knowledge of Japanese demonstrative pronouns by L1 English speakers of L2 Japanese. The IH suggests that external interfaces, such as discourse-syntax interface, are persistently problematic for L2ers because of their limited processing resources, while other domains of knowledge are not problematic. The IH gives an interesting account of optionality at the end state L2 grammar; nevertheless, its applicability has been a matter of debate. Some empirical studies (e.g. Belletti, Bennati & Sorace 2007, Valenzuela 2006) support the IH, while others (e.g. Rothman 2009, Ivanov 2010) do not.

In order to settle this debate, this study focuses on two functions of the Japanese demonstrative pronouns, *so*-series DPs. The first function relates to discourse. The demonstrative *sono* ‘that’ and a following NP refers to an entity which either the speaker or the listener is not familiar with, as shown in (1). In contrast, *ano* ‘that’ and a following NP is used when the referent is known to both the speaker and the listener (Kuno 1973, Hoji 1991). The second function relates to semantics. The *so*-series DPs allow a bound variable interpretation while *a*-series DPs do not, as in (2) (Hoji 1991, Noguchi 1997, Kurafuji 1998).

In Japanese language classrooms, *sono* is introduced as a medial demonstrative and its discourse and semantic functions are not taught. The English demonstrative ‘that’ generally does not have these functions with some exceptions (Elbourne 2005). Therefore, it is interesting to investigate whether L1 English speakers of L2 Japanese can acquire this property. Nevertheless, to the best of the author’s knowledge, no previous study has examined it. If the IH is applicable, acquisition of the discourse function, which is supposed to be syntax-discourse category, can be a persistent problem for L1 English speakers of L2 Japanese. By contrast, acquisition of the semantic function, which is supposed to pure semantics or syntax-semantics category, is not problematic.

The experiment was conducted on L1 English speakers of Japanese (n=26 in total, 14 advanced and 12 intermediate learners) and native Japanese speakers (n=27) to compare their knowledge of the two functions of the demonstrative pronouns. The experiment consisted of (i) an interpretation task to test the knowledge of the discourse function, in which the participants chose either *sono* or *ano* in given contexts and (ii) an antecedent choice task to test the knowledge of the semantic function adapted from Kanno (1997) with modifications. The results so far show delay of the knowledge of the discourse function, suggesting that L2ers have more problems with syntax-discourse category than (syntax-)semantics category. These results are in line with the IH, assuming that the IH is applicable not only to end-state L2 grammar but also intermediate/advanced levels of L2 grammar since the problems with interfaces do not happen out of the blue (White 2011).

- (1) Kinoo Yamada-san to yuu ni aimasita. Sono (*ano) hito, miti ni
 Yesterday Yamada-Mr that call to met that that person road by
 mayotte komattei-ta node, tasukete-agemasi-ta.
 lose have-Pst difficulty since help-give-Pst
 ‘Yesterday, I met a man by the name of Yamada. Since he lost his way and was having difficulties, I helped him.’
- (2) Dono titioya_i-mo sono_{i/j}/ano_{*i/j} itibansita-no musume-o kawaigaru
 Every father- $\forall$ sono/that youngest-Gen daughter-Acc love
 ‘Every father_i loves sono_{i/j}/that_{*i/j} youngest daughter.’

Results

Table 1 Group means (out of 6 tokens) in the interpretation task (discourse function)

	The choice of <i>sono</i> in appropriate contexts Mean (SD)	Comparison between the controls and the L2 group (t-test)	The choice of <i>sono</i> in inappropriate contexts Mean (SD)	Comparison between the controls and the L2 group (t-test)
Controls	5.82 (0.103)	-	1.56 (0.282)	-
Adv. L2ers	4.21 (0.321)	$p < 0.01$	2.88 (0.391)	$p < 0.05$
Inter. L2ers	2.70 (0.376)	$p < 0.01$	4.38 (0.262)	$p < 0.01$

Table 2 Group means (out of 6 tokens) in the picture verification task (semantic function)

	The choice of bound variable use of <i>sono</i> Mean (SD)	Comparison between the controls and the L2 group (t-test)	The choice of disjoint <i>sono</i> in bound variable contexts Mean (SD)	Comparison between the controls and the L2 group (t-test)
Controls	4.02 (0.296)	-	2.96 (0.344)	-
Adv. L2ers	3.90 (0.317)	$p > 0.05$	4.56 (0.297)	$p < 0.05$
Inter. L2ers	3.60 (0.263)	$p > 0.05$	4.14 (0.201)	$p > 0.05$

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POSTERS

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The role of input in the acquisition of English generics by L1 Najdi Arabic speakers.

This paper reports findings from an experimental study examining the effect of explicit and implicit classroom input on the acquisition of English generics by L1 Najdi Arabic speakers. English encodes the semantic generic feature onto three articles *the*, *a*, and $\emptyset$ (Ionin et al, 2011; Slabakova, 2009) while it is expressed in Najdi Arabic by one article *al* (Azaz, 2014). Following the Feature re-assembly hypothesis (Lardiere, 2008) acquisition difficulties are predicted with “indefinite” generics because L1 Najdi Arabic learners of English have to disentangle the [+generic] from the [+definite] feature and re-assemble it with [-definite] and [$\pm$ plural] onto two target articles (e.g. *a Lion*, *Lions*). Based on previous research, the complex re-assembly process, L1 transfer and the availability of enough evidence in the input, the study proposes a difficulty cline with singular indefinite generics expected to be the most difficult context.

The input treatments of this study targeted the difficult contexts to accelerate the re-assembly process and recovery from L1 transfer. The design followed the suggestions of Whong (2007) based on the MOGUL framework (Truscott & Sharwood Smith, 2004) in using “genre analysis” (Swales, 1990) and “focus on form” (Long, 1991) to foster the development of modular and non-modular knowledge. As such, two types of input are tested: a) Implicit input on authentic reinforced texts and b) Explicit input with added focus on form.

The experiment was conducted on three intact groups of L1 Najdi Arabic speakers: explicit instruction ($n=22$), implicit instruction ($n=22$) and an uninstructed ‘control’ group ($n=10$). The experimental groups received 12 hours of instruction engaging them in meaningful authentic texts as examples of the ‘research genre’ on introductions, methods, & results (Swales, 1990). The texts were reinforced with the targeted generic contexts and provided in class with a sound file recorded by a native speaker following a stress pattern that stressed the generics. Then, explicit grammatical rules on the target generics were presented to the explicit instruction group. The instruments were: a) a forced choice task (Ionin et al, 2004), and b) a sentence repetition task (Pierce & Ionin, 2011) as pre-tests, post-tests and delayed post-tests eight weeks after the intervention.

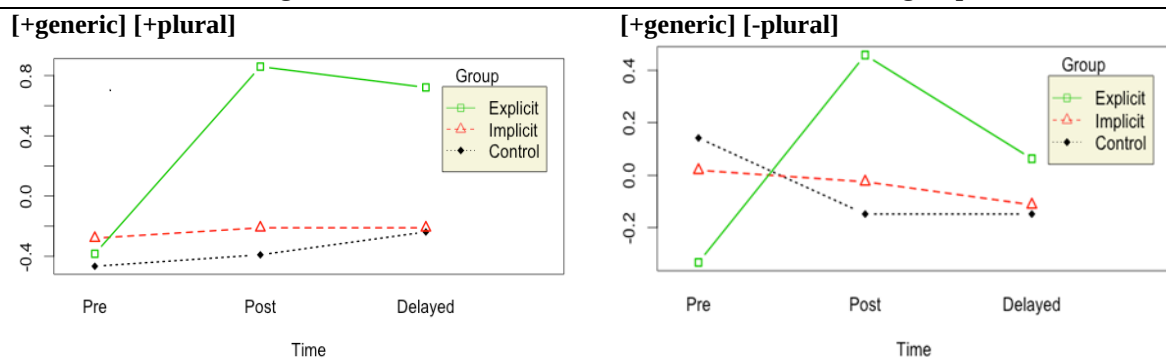
The results of paired sample t-tests show an overall advantage for the two experimental groups as they significantly improved after the intervention: (Forced choice task: implicit $p=.032^*$, explicit $p=.0001^*$, control $p=.26$) (Sentence repetition task: implicit $p=.001^*$, explicit $p=.0001^*$, control $p=.4$). A linear regression model of the interaction between group and time on the forced choice task shows that the explicit instruction group’s accuracy significantly improved from the pre-test in choosing the target articles with the [-definite] [+generic] [$\pm$ plural] features but only sustained that improvement on the delayed post-test of the generic plural (Figure 1). On the other hand, the sentence repetition task shows significant improvement on the indefinite generic singular but this was also found with the other two groups (Figure 2).

Therefore, the findings suggest that the explicit focus on form did affect the acquisition of the indefinite generic “plural” but only when tested by an explicit test. Moreover, the difficulties on the indefinite generic “singular” were not found as predicted by the difficulty cline since the repetition task showed improvement among *all* groups in the post-tests.

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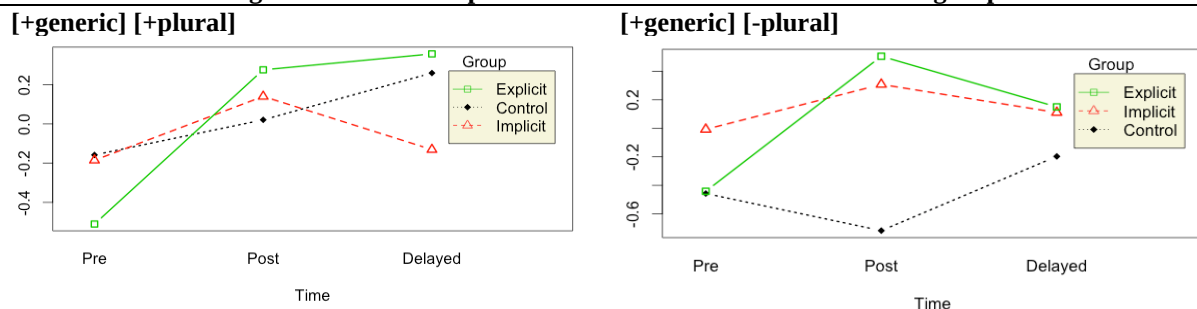
Figure 1: Forced choice task interaction between time & group



*Explicit instruction group $P < 0.01$

*Explicit instruction group $P < 0.05$

Figure 2: Sentence repetition task interaction between time & group



*No significant difference found

*Explicit instruction group $P < 0.01$

Generative SLA research is relevant to the profession of language teaching (Whong et al., 2013). However, generative approaches to L2 acquisition overlooked the role of instruction in acquisition, including articles, while classroom instruction is not guided by theoretical principles. The present study addresses the gap between the two literatures by examining whether instruction alone and instruction accompanied by metalinguistic feedback interact with fluctuation in article use during early L2 acquisition. The Fluctuation Hypothesis (Ionin et al., 2008) assumes that L2 learners whose L1 lacks articles fluctuate between two settings of the Article Choice Parameter; [+/-specific] and [+/-definite]. Whereas those whose L1 has articles, as Arabic, will not fluctuate due to L1 transfer. Fluctuation means that L2 learners use *the* in [+specific] contexts; however, *the* in English is used in [+definite] contexts. Similarly, the definite article *al-* in Arabic is used in [+definite] contexts.

The study involved 93 participants. 15 English-speaking controls and 78 Arabic-speaking EFL participants; the latter were divided into a metalinguistic group (MG) receiving instruction accompanied by metalinguistic feedback (n=26), an instruction group (IG) receiving instruction alone (n=26) and a control group (n=26). They were placed at elementary level, based on the Oxford Quick Placement Test. A six-week intervention followed a pre-test/post-test/delayed post-test design. Testing involved two written tasks: a) a forced-choice elicitation task; and b) a cloze task. The MG and IG received the same 90-minute instruction session on English articles, followed by seven and a half hours of activities on English article semantics; only the MG was corrected and provided with metalinguistic feedback.

The pre-test results countered the Fluctuation Hypothesis, since all the participants fluctuated. The fluctuation surpassed that found by Ionin et al. (2008) in [-article] language speakers; whereby 10 of the 19 participants (53%) fluctuated. Post-test and delayed post-test results revealed that only the MG did not fluctuate, indicating that: a) L1 speakers of [+article] languages fluctuate similarly to [-article] language speakers; and b) instruction alone is not effective in treating fluctuation. Between-group results in the post-test showed that the metalinguistic group statistically significantly outperformed the instruction group in five contexts (out of twelve): [+definite, -specific] plural contexts, [-definite, +/-specific] singular contexts, and [-definite, +specific] plural and mass contexts. It can be noted that the metalinguistic group performed better than the instruction group in four indefinite contexts (three of them were [-definite, +specific] and one was [-definite, -specific]) and one definite context [+definite, -specific]. In the delayed post-test, the metalinguistic group outperformed the instruction group in five contexts: [-definite, +/-specific] singular and plural contexts and [-definite, +specific] mass contexts. These results show that the effectiveness of metalinguistic feedback is more evident in [-definite, +/-specific] contexts since specificity effects are stronger in indefinite contexts. The overall results show that generative SLA provides insights into language pedagogy and vice versa.

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This paper investigates L2 acquisition of Subject and Object Shift (SS, OS) in Norwegian, two phenomena where pronominal subjects and objects typically move across negation, while DP subjects and objects usually remain in situ (1a, b; 2a, b). SS is preferred for all nominal types in embedded clauses (1c), while OS does generally not apply in such structures. Pronominal objects can have *referential* or *non-referential antecedents*. In (2a) the pronoun *den* ‘it’ refers to *eplet* ‘the apple’, and has a *referential antecedent*, but when the pronoun *det* ‘it/that’ refers to a full clause, a VP or a type DP, it typically remains in situ, (2c), and can be described as having a *non-referential antecedent* (Bentzen et al. 2013).

Studies of L1 acquisition reveal that initially, children prefer for all elements to remain unshifted. However, SS is acquired very early, before the age of 3, but is somewhat more delayed in embedded structures (Anderssen & Westergaard 2010; Westergaard 2011). OS is not in place until school age (Anderssen et al. 2012). When children employ OS, it is always target-like; they never shift pronominal objects that do not shift in adult Norwegian. Anderssen et al. (2010, 2012) argue that both SS and OS are initially avoided due to a general dispreference for syntactic movement in early grammars (economy). The difference in acquisition between SS and OS is attributed to very different input frequencies, and is further exacerbated by the fact that some pronominal objects shift, while others do not.

Given the results from L1 acquisition of SS and OS, we expect both to be delayed also in L2 acquisition. We tested 59 L2 learners of Norwegian and 43 native Norwegian controls, who completed a grammaticality judgement task involving variable subject and object placement. The sentences tested the placement of pronominal and DP-subjects in main and embedded clauses and pronominal and DP-objects with referential and non-referential antecedents.

We ask the following questions: (i) Do L2 learners initially prefer all subjects and objects in the unshifted position? (ii) To the extent that they are sensitive to the different placement of pronominal and DP subjects and objects, are they equally target-like with regard to the two, and to what extent is this dependent on their general proficiency in Norwegian? (iii) Are the L2 learners sensitive to the difference between main and embedded clauses when it comes to subject placement? And (iv) to what extent do they distinguish between pronominal objects with referential and non-referential antecedents?

The results reveal that at L2 learners behave differently from children. As shown in Figure 1, the learners prefer for both pronominal ($t(58) = 6.75, p < .001$) and DP subjects to precede negation ($t(58) = 5.10, p < .001$), while the L1 speakers favour pronouns preceding and DPs following negation. Furthermore, the L2 learners have an even stronger preference for both types of subjects to shift in embedded clauses ($p < .001$ for both sentence types). As can be seen from Figure 2, the situation is very different for OS, as L2 learners have a significant preference for *all* objects in situ (unlike native controls). Thus, the learners clearly distinguish between subjects and objects, but largely fail to distinguish between nominal types. For SS, the acceptance rate of shifted pronominal subjects rises with increasing proficiency, while the same is not true of unshifted DP subjects. For OS, there is a significant correlation between increased proficiency and a higher rating of unshifted DP objects ($p < 0.05$); a similar but not quite significant correlation is found between proficiency and OS with referential pronouns. Interestingly, with increasing proficiency the learners also erroneously rate shifted pronouns with non-referential antecedents more highly, suggesting that as they realize that referential pronouns shift, they also assume that non-referential ones do.

Thus, while children are sensitive to small distinctions in the language and gradually

implement SS and OS, the L2 learners make more sweeping generalizations, and at all points in the development make distinctions bigger than what is required in the target grammar.

- (1) a. Idag spiste han ikke maten sin. b. Idag spiste ikke Per maten sin.
 today ate he not food his today ate not Per food his
 'Today he/Per didn't eat his food.'
- (2) a. Han spiste det ikke. b. Han spiste ikke eplet.
 he ate it not he ate not the apple
 'He didn't eat it/the apple.'
- c. Spiste han eplet? Nei, han gjorde ikke det [=spiste eplet]
 ate he the apple no he did not it [=eat the apple]
 'Did he eat the apple? No he didn't.'

Figure 1 Acceptance for shifted and non-shifted pronominal and DP subjects in main and subordinate clauses, L1 (N=43) and L2 (N=59).

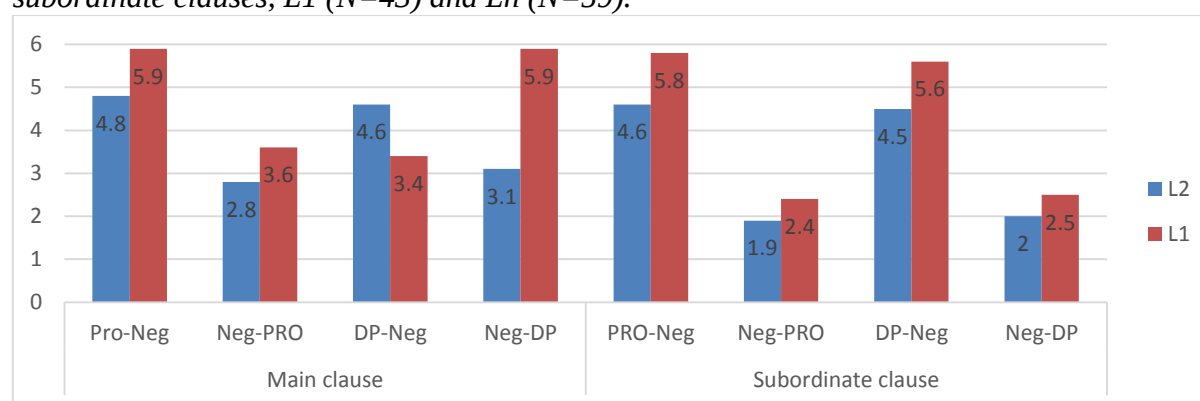
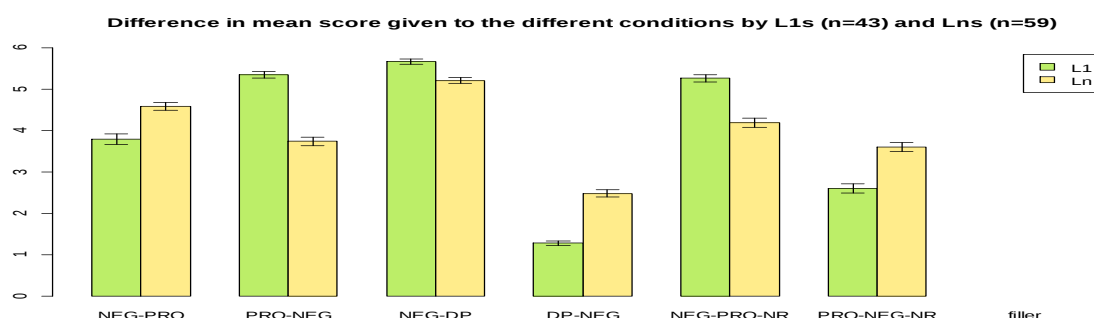


Figure 2 Acceptance for shifted and non-shifted pronominal and DP objects, L1 (N=43) and L2 (N=59).



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There is a rich literature on how second language learners from a variety of languages acquire the WH properties of various target languages. Most of this work has been done within a framework which assumed that the difference between languages like English (+WH movement) and Japanese (-WH movement) was in the domain of syntactic features. English was thought to have [strong] features while Japanese [weak]. A more recent claim by Richards (2010; 2016) argues that there are two strategies to achieve *contiguity*:

- (a) **English:** linear adjacency of C (+Q) and WH achieved by WH movement
- (b) **Japanese:** (i) phonetic compression on the WH element, and
(ii) lack of prosodic boundaries between WH and +Q in sentences like (1) compared with (2) where we compare **bolded** objects, and *italicized* minor phrases.

1) Naoya ga nanika o <i>nomiya de nonda</i> . ナオヤが、何かを飲み屋で飲んだ。 Naoya drank something at the bar.	2) Naoya wa nani o <i>nomiya de nonda</i> no? ナオヤは、何を飲み屋で飲んだの？ What did Naoya drink at the bar?
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Following the tradition of language learnability research, we adopt a model of what the native speaker knows, and look to see whether the non-native speaker acquires it. While other interfaces have been central to the field of SLA (White, 2011; Montrul, 2011; Sorace, 2012; Goad & White, 2004), the phonology/syntax interface has received less attention. In this poster, I report on the results of a study to see if advanced non-native speakers of Japanese have acquired the target phonetic properties of Japanese WH questions.

Operational Research Question: Do advanced L2 speakers have a phonological grammar with no prosodic boundaries between the WH word and the Question complementizer ([+Q]) to properly license WH *in situ* as would be the case if Richards' (2010) Contiguity Theory holds for Interlanguage Grammars?

Methods

I recorded 16 non-native speakers of Japanese reading a variety of declarative and interrogative sentences out loud. Seven self-identified as Intermediate proficiency while nine self-identified as Advanced. They were allowed to rehearse the sentences and each sentence was recorded using Audacity. Using, PRAAT, the pitch profiles of the sentences were extracted to see whether there were (a) differences between WH and DP pitch levels, and (b) pitch plateaus (indicating the lack of prosodic boundaries) between the WH word and the Complementizer (C).

The results suggest that the non-native speakers do not manifest significantly different pitch levels on their WH words (e.g., *what*) compared to DP objects (e.g., *book*).

All subjects's DP direct objects average pitch	208 Hz
All subjects' WH direct objects average pitch	201 Hz

However, the results show that 83% of the Advanced non-native speakers (though not the Intermediate) implemented a pitch profile on the phonological phrases between WH and C consistent with the plateaus reported for native speaker patterns.

Subject #	nanio WH	nomiya-de	nonda	no [+Q]
1	141 Hz	103 Hz	108 Hz	140 Hz
15	327 Hz	242 Hz	242 Hz	280 Hz

This is also true for multiple WH sentences such as *Dare ga nani o kaimasita ka?* (Who bought what?) where eight of nine advanced subjects showed nativelike prosody. The following table shows the averages across all advanced subjects.

WH1 227 Hz	WH2 200 Hz	Verb 175 Hz	C 159 Hz
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This nativelike pattern (with no boundaries between WH and C) demonstrates the learnability of L2 prosodic phonology.

Conclusion

Consistent with Elfner (2015), these L2 prosodic domains appear to be derived directly from the syntactic structure. Thus, these data suggest that IL grammars respect the principles of Match Theory (Selkirk, 2011).

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Research on the L2 acquisition of consonant clusters (Carlisle, 1998, 2006) shows that if the L1 lacks clusters that a developmental path emerges in which certain clusters are acquired before others. Cardoso et al. (2007), Cardoso (2007) argued that Brazilian Portuguese (BP) learners of English *produce* the less marked cluster ([sn]) most accurately but *perceive* the most frequent cluster ([st]) most accurately. In this study we report on a case where subjects --whose L1 lacks onset clusters-- are able to acquire *all* of the tested [sC] clusters with a high level of accuracy. Persian does not allow onset clusters (Karimi, 1987), however, complex codas with varying sonority distances are common. These include strings which violate the sonority-sequencing principle (in monosyllabic, monomorphemic forms) with *rising* sonority. Some examples are:

<i>xætɪm</i> ‘funeral’	<i>qæbr</i> ‘grave’
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According to the redeployment hypothesis (Archibald, 2005), Persian speakers should be able to redeploy this knowledge of sonority-sequencing-principle-violating sequences (i.e., marked coda strings) into the acquisition of English onset clusters such as [st], [sn] and [sl] which also include sonority-sequencing-principle-violating (i.e., *marked*) strings. Furthermore, the fact that the L1 licenses sonority violations in the (marked) coda position should allow the L2 learners to acquire new grammatical strings in the L2 (unmarked) onset position.

Fifteen native Persian speakers were given both production and perception (both discrimination (ABX) and identification ("did you hear [es]C or [s]C?") tasks (following Boudaoud & Cardoso, 2009). Their perception accuracy was significantly higher than production accuracy ($p=.004$). For the production task there was no significant difference between the performance on different clusters ($p=.368$). The average accuracy score on perception was a very high 28.87/30 (with no correlation between accuracy and proficiency level ($p=.170$)). Even the Beginner students scored 75% accuracy (compared with Cardoso's BP Beginner's who performed at chance, and Matthews & Brown's (2004) Thai subjects who made 60% errors). Thus, we note that the Persian subjects are very accurate in perceiving the L2 sC onsets even though they continue to epenthesize (as they do in loanwords (Shademan, 2002) in L2 production (mean score 14/30 accurate). Studies from a number of L1s (Japanese (Dupoux et al., 1999; Matthews & Brown, 2004); Korean (Kabak & Idsardi, 2007; Durvasula & Kahng 2015); Thai (Matthews & Brown, 2004) reveal the perception of illusory vowels. We argue that the Japanese, Thai & BP subjects do *not* have the building blocks to redeploy to handle L2 sC onsets, and as a result, illusory vowels occur. This suggests that the 'illusory' vowel is part of the stored representation. The Persian subjects, on the other hand, have the L1 building blocks to redeploy and quickly learn that the illusory vowels are not part of the stored representation.

Thus, the predictions of redeployment are largely borne out for the perception tasks (with the exception of [sl] being the most difficult). However, the *production* of epenthetic vowels suggests a articulatory issue more than a grammatical reflex (Abrahamsson, 2003). There is also some connection between these issues and recent neurolinguistic work (e.g Blanco-Elorrieta, E., & L. Pylkkänen, 2016) which reveals a close relationship between language control and general cognitive control in production but not in comprehension. Language control in production recruits *domain-general* regions while perception recruits *language-specific* regions. What this suggests is that the perceptual illusions (or accuracy) are part of *grammar* while the produced epenthetic vowels are under executive control

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Japanese learners of English (JLEs) produce ungrammatical *be*-passive sentences in English as in (1) (Izumi and Lakshmanan 1998). (1a) and (1b) are ungrammatical; (i) the subject is Experiencer affected by the event described, and (ii) Theme remains in the base position. The facts in (1), however, become grammatical when translated into Japanese passive known as indirect passive (Kuno 1973, Kuroda 1979), as in (2). Izumi and Lakshmanan (1998) attributes the incorrect acquisition of English *be*-passive by JLEs to their association of Japanese indirect *-rare*-passive with English *be*-passive, and argue that negative evidence is crucial in acquiring English *be*-passive. This study shows that it is the knowledge of *have*-causative that plays an important role for JLEs in acquiring *be*-passive in English.

Chomsky (1965) has pointed out that *have*-causative in English is ambiguous between causative and passive. In the passive reading of (3), the subject represents Experiencer affected by the event. This causative-passive ambiguity of causative constructions is not restricted to *have*-causative in English, but has been observed in other languages such as French, Korean, Kyrgyz and Japanese (Kayne 1975, Washio 1993, Pylkkänen 2002, Aoyagi 2007, Yoda 2016). Concerning *have*-causative with a passive reading in English, Emonds (2005) regards it as indirect passive in English. Although English *have*-causative with a passive reading is restricted in its productivity in comparison with Japanese indirect *-rare*-passive, it is plausible to claim the parallelism between (i) the two kinds of passive in Japanese and (ii) *be*-passive and *have*-causative in English, as shown in (4).

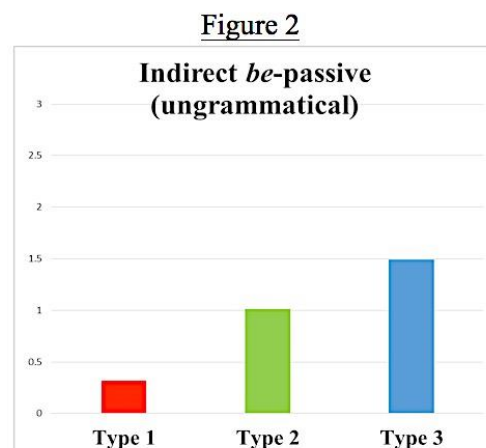
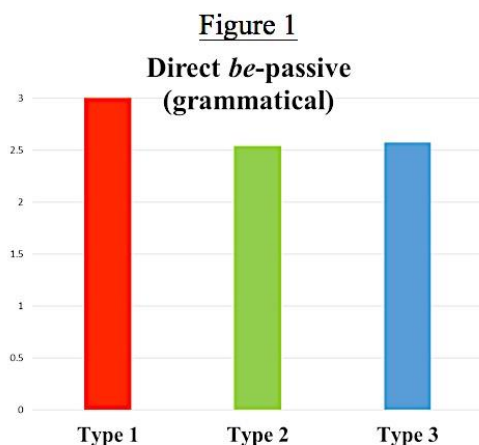
It follows from the parallelism in (4) that JLEs should dissociate Japanese indirect *-rare*-passive from English *be*-passive once they acquire *have*-causative as indirect passive in English. In order to explore this possibility, we conducted an experiment, using a translation task and a judgement task. The translation task contained 12 passive sentences in Japanese: 4 direct passive sentences (2 transitive and 2 ditransitive) and 8 indirect passive sentences (2 transitive, 2 ditransitive, 2 unergative and 2 unaccusative). Consider two of the target sentences given in (5) and (6). In order for each underlined target sentence to be felicitous, an appropriate context is provided. The judgement task contained 12 passive sentences in English: 4 grammatical direct *be*-passive sentences (2 transitive and 2 ditransitive) and 8 ungrammatical indirect *be*-passive sentences (2 transitive, 2 ditransitive, 2 unergative and 2 unaccusative), on a 4-point scale (0 – anomalous, 3 – good). Sample target sentences are shown in (7) and (8). An appropriate context is provided in Japanese, in order for each target sentence be felicitous. 35 first-year students at a Japanese university, all of whom are native speakers of Japanese, participated in the experiment.

The results from the translation task show that (i) 2 translated 25% of the Japanese indirect *-rare*-passive in total into *have*-causative, and most importantly, none of them translated them into indirect *be*-passive (Type 1 learners), (ii) 19 subjects did not translate the Japanese indirect passive sentences into *have*-causative sentences, nor did they translate them into indirect *be*-passive (Type 2 learners), and (iii) 14 subjects did not translate the Japanese indirect passive sentences into *have*-causative, and translated 33.9% of them in total into indirect *be*-passive (Type 3 learners).

Figures 1 and 2 in (9) show the results from the judgement task. In judging the grammatical direct *be*-passive, Type 1 learners performed better than the Type 2 and 3 learners. Also, the Type 1 learners did better than the Type 2 and 3 learners in judging the ungrammatical indirect *be*-passive sentences.

The findings from this study lend support for our hypothesis that the knowledge of associating Japanese indirect *-rare*-passive with English *have*-causative is a key to the acquisition of English *be*-passive for JLEs.

- (1) a. *Mr. Tanaka was stolen stereo.
b. *I was eaten final cake by friend.
- (2) a. Tanaka-san-ga sutereo-o nusum-are-ta.
Tanaka-Mr-NOM stereo-ACC steal-PASS-PAST
“Mr. Tanaka was stolen stereo.”
b. Watasi-ga tomodati-ni saigo-no keeki-o tabe-rare-ta.
I-NOM friend-NI last-GEN cake-ACC eat-PASS-PAST
“I was eaten the final piece of the cake by a friend of mine.”
- (3) a. I had a book stolen.
b. We had a thief burgle our house.
- (4)
- | | Japanese | English |
|------------------|---------------|--------------------------|
| Direct passive | -rare-passive | be-passive |
| Indirect passive | -rare-passive | have-causative (passive) |
- (5) **Direct passive (transitive)**
Eri-wa haha-kara moratta kabin-o kiniitteita, nanoni, kabin-wa musuko-ni warareta.
 (“Eri was fond of the vase given by her mother, but it was broken by her son.”)
- (6) **Indirect passive (transitive)**
Eri-wa banana-no nioi-ga totemo nigatedatta, nanoni, Eri-wa Shota-ni banana-o menomae-de taberareta. (“Eri didn’t care for the smell of bananas, but a banana was eaten by Shota on Eri right in front of her.”)
- (7) **Direct be-passive (transitive)**
Mary-wa John-ni oisii chocolate chip cookie-o yaiteageta (“Mary baked John the delicious chocolate chip cookies”). But the chocolate chip cookies were eaten by John’s brother.
- (8) **Indirect be-passive (transitive)**
Bob-wa natto-no nioi-ga totemo nigatedatta (“Bob disliked the smell of natto”). But Bob was eaten “natto” in front of him by Ellie.
- (9) **Judgement task results** - mean rate (4-point scale (0 - anomalous, 3 - good))



Research in the second language (L2) acquisition of futurity in English by francophone learners is scarce compared with the plethora of studies on past tense and aspect (*e.g.* Ayoun & Rothman 2013 for a review). But the fact that it encompasses both temporality and modality (possibility, probability, intention and desire or volition; Bybee et al. 1994) makes it particularly interesting to investigate. Both French and English have various ways to express futurity (*e.g.*, adverbials, lexical, periphrastic, synthetic futures) with some similarities, but also clear differences (*e.g.*, English instantiates a progressive future that is not grammaticalized in French) (Achard 2002; Larreya 2000) leading to learnability difficulties for L2 learners.

We adopt the Minimalist program in which TAM features are construed as interpretable semantic features (Adger 2003; Borer 2005) and assume that Universal Grammar constrains L2 grammars allowing the acquisition of functional categories and features. However, because of their inherent complexity, we hypothesize that TAM systems are not fully acquired until very advanced proficiency levels. We further hypothesize that because modality is at the interface of morpho-syntax and pragmatics, learners in a naturalistic setting (our ESL group) will outperform learners in a foreign language setting (our EFL group).

This study is part of a larger longitudinal study investigating the acquisition of TAM systems by French native speakers as advanced English learners in: a) a foreign language setting for participants living in France (EFL, $n=9$); b) a second language, naturalistic setting for participants living in the United States (ESL, $n=5$). American English native speakers ($n=10$) served as controls. The small number of participants allows for in-depth qualitative and quantitative analyses. The computerized data collection consisted in five sessions with two different elicitation tasks per session targeting present, future and past temporalities, the subjunctive, the conditional and modal auxiliaries.

We are reporting on the two tasks of the third session that targeted future temporality: a 22 item cloze test and a personal narrative. Statistical analyses revealed significant differences between groups on the cloze test (Pearson $\chi^2=23.610$, $df=4$, $p<.000$) with the ESL group (77.3% accuracy) clearly outperforming the EFL group (55.7% accuracy). The data were also analyzed by lexical class and indicate that again the ESL group obtained significantly better results than the EFL group and that both groups perform better on states than activities and telics (94.4%, 71.4%, 73.3% for the ESL group, Pearson $\chi^2=4.467$, $df=4$, $p=.346$; 58.3%, 53.6%, 54.2% for the EFL group, Pearson $\chi^2=3.113$, $df=4$, $p=.539$). A post hoc Tukey test revealed a significant difference between the EFL and ENS groups, but not between the ESL and ENS groups, suggesting that given the appropriate context, English learners eventually acquire a target-like representation of futurity. The personal narratives are still being analyzed (quantitatively and qualitatively). Two preliminary conclusions are: a) EFL learners lack the appropriate exposure to pragmatics that ESL learners benefit from (Cho 2003); b) EFL learners would need a more explicit instruction focusing on aspect and modality that is typically lacking in traditional settings (Norris & Ortega 2015). Learnability implications will be discussed.

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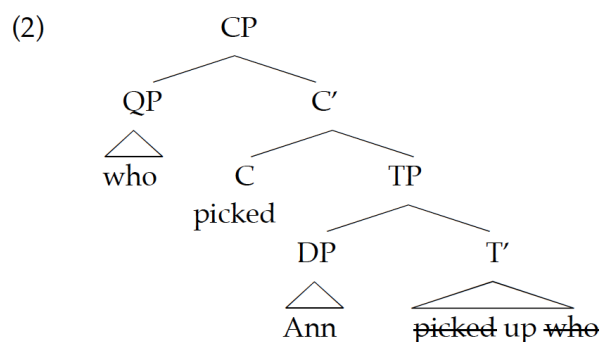
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Grammar competition in second language acquisition: the role of V2 for L2 learners of English with L1 German/Norwegian/Dutch.

Grammar competition (GC) is a concept that was suggested in diachronic research on historical linguistics (Kroch & Taylor 1997) and in first language acquisition Roeper (1999). The basic idea is that optionality in a given language boils down to a competition between two (or more) potentially contradicting sub-rules in the grammar of this language, one of which may be productive and the other lexicalized (e.g. for English: *realize subjects overtly* and *do not realize subjects overtly in topic-drop contexts like: Where's Jack? __ went home*). This paper investigates the implications of GC in SLA contexts. The hypothesis is that if GC is real in monolingual diachronic and synchronic contexts we should expect to find it in SLA contexts too.

In order to test this we examined the role of L1 V2 word order in SLA contexts. German, Norwegian and Dutch are robust V2 languages. English, however, is a residual V2 language (Rizzi 1990). Under the assumption that GC theory (Roeper 1999) plays a role in SLA (Amaral & Roeper 2014), it is to be expected that native speakers of a generalized V2 language apply V2 also in second language residual V2 contexts. This study investigates with a free choice answer task (32 questions) in how far very advanced (university level) L2 speakers of English with a proficiency level of C1/C2 in English with L1 German/Norwegian/Dutch use generalized V2 in English in questions of the form in (1). If GC in the form of generalized V2 is observable in L2 English, it is expected that in (1a) *Ann* is interpreted as the subject, with the main verb moved across the subject position to the V2, i.e. C°, position (cf. (2)), which is a licit operation in German, Dutch and Norwegian but crucially not in English. Our results (350 speakers tested) show that L2 speakers of English with L1 generalized V2 interpret the questions in (1) as instances of verb movement into C° and thus as an object question rather than a subject question. The effect is highly significant in the conditions in (1a) and (1c). It is most significant in (1c), where the preference for an object interpretation for the *wh*-phrase is even higher because the *wh*-phrase cannot be disambiguated by additional overt case marking (*who/whom*). In (1b)/(1d) in contrast error rates decrease significantly (cf. also Rankin 2014 for similar results from studies on *wh*-questions without particles). This, we argue, can be explained by the fact that particle pied-piping is not an option in Germanic. However, we do find a significant effect between Dutch vs. German vs. Norwegian speakers, which, we argue, can be linked to small but significant cross-linguistic differences in V2 languages. Overall, particle pied-piping provides the relevant cue for the L2 grammar and a generalized V2 interpretation is dispreferred. We additionally find that generalized V2 in *wh*-+particle questions persists in highly proficient L2 speakers, which leads us to the conclusion that this provides additional evidence for a representational conflict in terms of grammar competition rather than a processing problem because otherwise we would expect error rates for the conditions in (1a/1c) to drop at least to the levels we see in (1b/1d) in highly advanced speakers.

- (1)
- a. Who picked Ann up?
 - b. Who picked up Ann?
 - c. Which one picked Ann up?
 - d. Which one picked up Ann?



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This study investigates the acquisition of overt subjects (OS) and null subjects (NS) by L3 Chinese learners, to show that L3 transfer is guided by the underlying structural similarities between the previously acquired languages and the target language (TL). Current discussions are concerned with the source of L3 transfer, predicting L1-only transfer (e.g. Na Ranong & Leung, 2009), L2-only transfer (Bardel & Falk, 2007) or transfer from the L1 or L2 (Flynn et al, 2004; Rothman, 2015; Westergaard et al, 2016; Slabakova, 2016). In addition, studies explore the conditions which determine the source of L3 transfer. The Typological Primacy Model (TPM) (Rothman 2010, 2011, 2013, 2015) predicts that the typological similarity between the background languages and the TL is vital, claiming that learners fully transfer from the language which is more similar to the TL. The Linguistic Proximity Model (LPM) (Mykhaylyk et al, 2015; Westergaard et al, 2016) builds on the main TPM claims, but predicts that L3 transfer is determined by similarities in the specific linguistic property being acquired. Furthermore, the LPM challenges the assumption that L3 transfer is wholesale at the initial stages (see also the Scalpel Model of Slabakova, 2016). However, it is not always clear how ‘typological’ and ‘structural’ similarity should be defined and how these terms apply to the acquisition of typologically unrelated languages.

The study reports on the acquisition of subject pronouns by 25 L3 Chinese learners completing a Written Production Task and a Pronoun Interpretation Task. The learners are divided into two groups; i) L1 English-L2 Spanish-L3 Chinese learners (referred to as the [+SP] group) (n=15) and ii) L1 English-L2 non-null subject language-L3 Chinese learners (referred to as the [-SP] group) (n=10). In addition, there is a Chinese control group (n=20) and a Spanish control group (n=20). For the learners, neither of their background languages are typologically related to L3 Chinese; however, for the [+SP] group, there are some structural similarities related to subject pronoun realisation. As a result, transfer is possible from either the L1 or the L2 and cannot be based solely on typological distinctions.

In terms of NS, English is a non-null subject language whilst Spanish and Chinese both allow NS in finite clauses. Spanish is a typical null subject language with rich verbal agreement morphology in which *pro* moves to [Spec, IP] for syntactic licensing. On the other hand, Chinese is a topic-drop language with no verbal agreement morphology in which the NS moves to [Spec, CP]. As a result, although Spanish and Chinese both allow NS in finite clauses, there is a key difference in the syntactic licensing that may be crucial for the L3 learners. In terms of OS,

English and Chinese both allow an embedded overt subject to refer to a quantified antecedent in the preceding clause which is blocked in Spanish (i.e. the OPC principle). It is predicted that if the [+SP] and [-SP] learners perform differently in the tasks (especially for NS), this shows that the [+SP] learners are influenced by their L2 Spanish. However, if the two learner groups perform similarly, this suggests transfer from the same background language (i.e. L1 English).

The results show that the [+SP] group outperform the [-SP] group in acquiring NS, suggesting that previous experience of Spanish is helpful in acquiring NS in L3 Chinese. Furthermore, both learner groups find the acquisition of OS problematic which is taken to show transfer from the same background language (i.e. L1 English). In summary, the data shows transfer from both the L1 and L2 depending on the property being acquired (i.e. no support for L1-only or L2-only predictions). Importantly, these findings cannot be related to the general typological similarity between the languages and suggests that we should consider the specific linguistic property being acquired (LPM claim) and that L3 transfer is not always wholesale (LPM, Scalpel Model).

Laurent Dekydtspotter, Kate Miller, Charlene Gilbert, Michael Iverson, Tania Leal, Kyle Swanson and Isaiah Innis, *Indiana University., UIPUI and University of Nevada, Reno*
Representations, computations, and neural activity: An event-related Potential (ERP) investigation of domain-specific derivational cycles in (L2) French.

We investigate ERP correlates of cyclic-movement with the integration of noun-complements (1a,c) vs. NP-modifiers (1b,d) during anaphora resolution as complementizer *que* ‘that’ is encountered. Despite similar referential possibilities, N-complements (1a,c) are represented across movement cycles ; NP-modifiers (1b,d) are not (Lebeaux, 1988; Chomsky, 1995). (1a) supports syntactic binding of *lui* by antecedent *Paul*; (1b) does not: *le* is valued through discourse coreference.

- (1) a. Quel message à propos de lui_i est-ce que Paul_i a dit **que** Chloé avait reçu avec plaisir?
b. Quel message le_i concernant est-ce que Paul_i a dit **que** Chloé avait reçu avec plaisir?
c. Quel message à propos de lui_i est-ce que Chloé a dit **que** Paul_i avait reçu avec plaisir?
d. Quel message le_i concernant est-ce que Chloé a dit **que** Paul_i avait reçu avec plaisir?
‘Which message about/regarding him did Paul/Chloé say that Chloé/Paul received with pleasure?’

(1a-d) illustrate a structure*antecedent design where a pronoun finds a matching antecedent early or late, and can be bound or not as the complementizer *que* ‘that’ crucially introduces a new cycle of computations for the embedded clause. Stimuli included 100 experimental items, presented visually in four randomized blocks, each word appearing for 300ms followed by a 250ms blank slide. Participants accurately responded to true-false queries after one-half of stimuli (NSs: 89%; L2ers: 91%). On a 50-item C-test, NSs and L2ers had very similar results (NSs: 49.5/50; L2ers: 47.5/50).

EEG was recorded via a 64-electrode EGI system with 50 kΩ maximal impedance and a Net Amps 300 amplifier. Standard EEG procedures were followed: 1000 S/S sampling rate, average mastoids reference, .05-100.5-Hertz band-pass filter, cleaning of artefacts via epoch/channel rejections and two Independent Component Analyses, 200ms baselines preceding critical word *que*. 87% of NS and 86% of L2 trials were retained.

ERPs time-locked to *que* ‘that’ might correlate with anaphoric processes of binding vs. coreference as displaced constituents are differentially represented at the clause edge. Following Niewland and van Berkum (2008) and Gabriele, Fiorentino, and Covey (2015), visual inspection of the data showed that all respondents seemed sensitive to the possibility of binding, producing significant voltage deflections in anaphora conditions (1a,b) vs. non-anaphora base conditions (1c,d), resulting in negativities for binding in most participants (see Figure). In 24 NSs, interactions ($ps < .001$) were found at 300-400ms and 450-550ms on 17 left-hemisphere electrodes. 18 advanced L2ers produced a similar left-lateralized effect, with $ps < .05$ and on 9 left-hemisphere electrodes.

L2 brain responses, though diminished with respect to NSs, nevertheless show the same distinctions in the left hemisphere, prima facie evidence of domain-specificity.

Figures

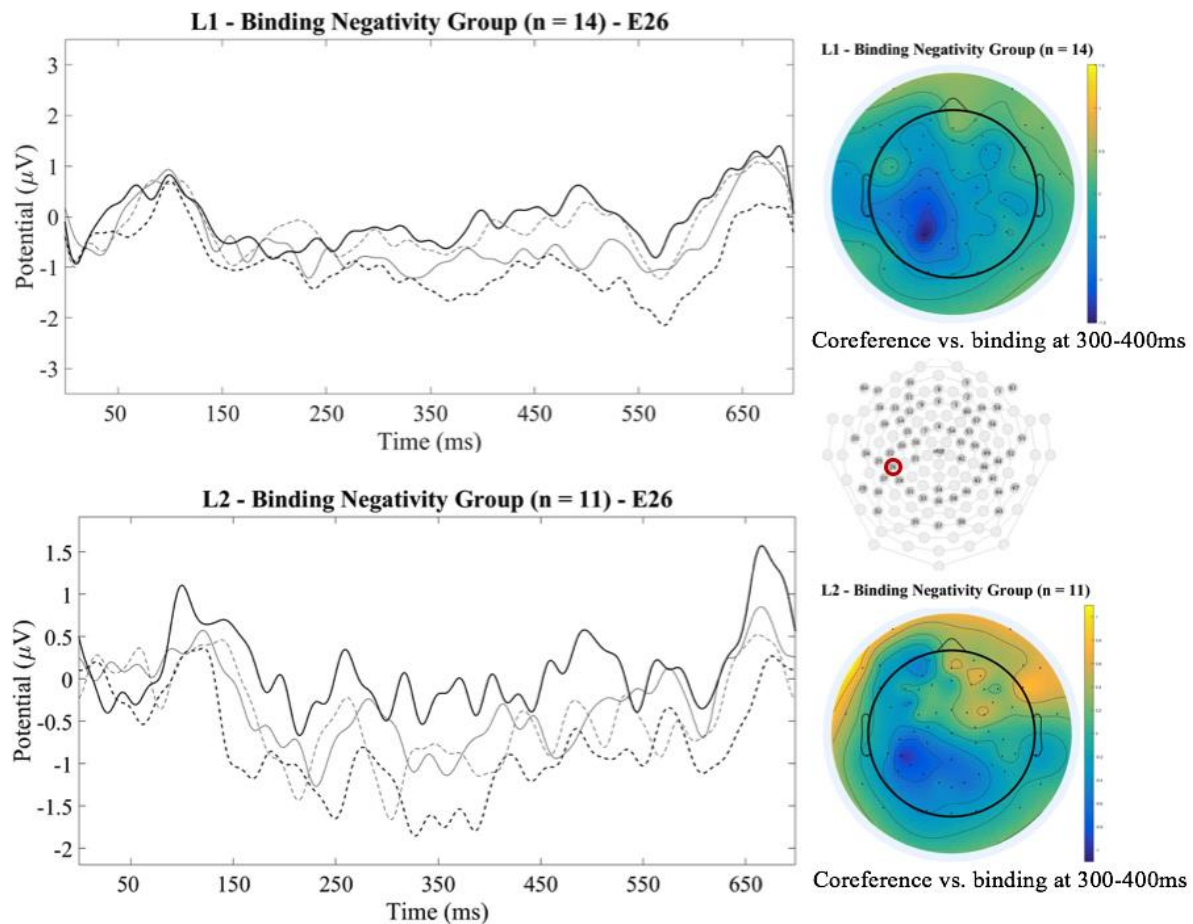


Figure. Grand mean ERP waveforms at parietal E26 for (1a-d) in NSs (top) and L2ers (bottom) showing a binding-related negativity for most participants: N-complement, early match (1a, dashed dark line); NP-modifier, early match (1b, solid dark line); N-complement, late match (1c, dashed light line); NP-modifier, late match (1d, solid light line). Time = 0 is onset of critical word *que* ‘that.’ Scalp topographies for voltage differences between (1a) allowing binding and (1b) requiring coreference show clear left-lateralized effects.

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In Spanish, the selection between Preterit (see 1) and Imperfect (see 2) is not arbitrary, but involves the aspectual notion of perfectivity (Leonetti 2004, Zagona 2007). It has to be distinguished from lexical features such as telicity (Comrie 1976).

Germanic languages as English and German, do not encode perfectivity by the same means; while English possesses only basic aspectual features such as the progressive, German has no grammatical aspect at all (Heinold 2015, Salaberry & Ayoun 2005, Schwenk 2012). Theoretical explanations diverge in characterizing this difference: Slabakova & Montrul (2003) consider habituality as a crucial part which bundles together with one-time events in English, and with progressive events in Spanish, Domínguez et al. (2011) see the difference in distinguishing continuity from progressivity. In both approaches, however, the contrast can be described by a parametric difference in how the feature [$\pm$ perfective] is encoded. While in Spanish, contextual features interact with the morphosyntactic marking in a higher phrase (AspP, see Rothman 2008, Slabakova & Montrul 2008), the same phrase has not the same relevance in Germanic languages.

With reference to Second Language Acquisition (SLA), the mastery of the contrast between Preterit and Imperfect is known to be very difficult for learners whose L1 does not have grammaticalized aspect (Comajoan 2013). However, current research has shown that advanced learners of L2 Spanish can attain native-like knowledge of associated semantic entailments (Montrul & Slabakova 2003, Slabakova & Montrul 2003, Rothman 2008).

Contributing to this research, our study compares the interpretation and use of Preterit and Imperfect by advanced English learners of L2 Spanish (N=12) with monolingual natives (N=13). We present data from two tasks, one production task and one aural grammaticality judgement task, involving various combinations of (im)perfectivity, (a)telicity and different adverbials. Particularly the effect of adverbials is shown to be relevant for speakers of Germanic languages who have shown to adhere to trigger words. Evidence comes from recent research on German learners of Spanish who in contexts with triggers contrast significantly with native speakers, while in contexts without such adverbials the groups tend to resemble each other (Diaubalick & Guijarro-Fuentes 2016).

Results show significant differences in items with a non-prototypical combination of lexical aspect, a temporal adverb and contextual features (see item 3 which was accepted by the native speakers, but partially rejected by the non-natives), whereas in other contexts the learners behaved native-like. We argue that such target-deviant L2 performance can be attributed to two competing linguistic systems, that is the system of learned pedagogical rules vs. the acquired competence, supporting the Competing Systems Hypothesis (Goodin-Mayeda & Rothman 2007, Rothman 2008). In line with Slabakova & Montrul (2008), a near-native competence is therefore not impossible, but not guaranteed. Pedagogical rules may complicate the arguably difficult transition from the L1's feature configuration to the L2.

However, some results remain unexplained: we also found a significant difference in the Grammaticality Judgment of one-time events involving telic predicates which is unexplainable through pedagogical rules. E.g., item (4) was rated significantly better by the L2 learners than by the control group. We therefore suggest to extend the Competing Systems Hypothesis by proposing that learners may create their own rules which, although they might be based on similar rules learned through instruction, do not appear in text books (see Cadierno 2000 for a similar observation, concerning *durante* 'during'). Thus, the adverbial *a los 16 años* 'with 16 years' might be interpreted as trigger word for the imperfect by learners.

Examples

- (1) *Alba leyó la carta. (perfective context, Preterit)*
'Alba read the letter'
- (2) *Alba leía la carta. (imperfective context, Preterit)*
'Alba was reading the letter'
- (3) *Era un poeta de verdad, siempre escribió cartas tan bonitas.*
'He was a real poet, he always wrote such nice letters.'
(atelic predicate, *siempre* as temporal marker for the Imperfect, but Preterit)
- (4) *A los 16 años, Enrique se trasladaba a estudiar música a Salamanca.*
'With 16 years, Enrique moved to Salamanca to study music'
(telic predicate, one-time event, but Imperfect)

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Lardiere (2008) proposes the Feature Reassembly Hypothesis (FRH) which views L2 acquisition as a process of re-assembling features of functional categories and mapping them onto morphological elements of the target language. Employing this feature-based approach, Cho (2016) examines L1-Korean L2-English speakers in terms of English definite article acquisition. Schwarz (2013) differentiates between two types of definites—anaphoric and non-anaphoric. Korean, as an article-less language, uses a demonstrative *ku* ‘that’ to encode only anaphoric definite NPs, thus *ku* carries the features [+anaphoric,

+definite]. The English definite article, on the other hand, encodes both types of definite NPs and carries the features [+definite, +/-anaphoric]. This feature mismatch between the Korean *ku* and the English *the* is expected to influence Korean learners’ acquisition of the English definite article, leading Korean speakers to be less accurate in interpreting articles in non-anaphoric contexts. This prediction was confirmed by intermediate level learners. Advanced learners seemed to have overcome L1 influence but still had difficulties with the use of definite NPs in non-anaphoric contexts that require presuppositional inferences.

By replicating Cho (2016), this study examines L1-Mandarin L2-English learners’ acquisition of the English definite article *the*. Unlike Korean *ku* ‘that’, Chinese demonstrative *na* ‘that’ carries the feature combination ([+definite, +/- anaphoric]) that fully corresponds to that of the English definite article. My Chinese native informants (n = 16) also confirmed that *na* can be used in all contexts where ‘the’ can be used. **According to the FRH, Chinese speakers are expected to map the feature set of the L1 morpheme onto the L2 morpheme.** If Chinese speakers can carry over the L1 feature set of *na* to that of the English *the* directly, they are expected to show a contrast between acceptable definite NPs vs. unacceptable indefinite NPs in all definite contexts regardless of anaphoricity.

The participants for this study were 15 advanced L1-Chinese L2-English learners. All participants completed three tasks: a brief language background questionnaire, a paper-based acceptability judgment task and a proficiency test. The native control data are from Cho (2016).

The results show that the advanced Chinese learners rated acceptable definite NPs significantly higher than unacceptable indefinite NPs in all three anaphoric contexts, but unexpectedly only a marginally significant difference in the non-anaphoric context ($p = 0.055$). Bonferroni tests further revealed that there was no statistical significance in the non-anaphoric context. These findings suggest that there is ‘something else’ to acquire in addition to having target-like formal features in comprehending this particular type of definite NPs. What appears to be the problem for both Korean and Chinese advanced learners is their inability to integrate linguistic knowledge (formal features) and pragmatic knowledge at the interface level. For example, interpreting “the bride” in “John went to a wedding. He danced with the bride.” requires the pragmatic knowledge that stereotypically there is only one bride at a wedding. In conclusion, the findings of the study and Cho (2016) suggest that processing the interface between semantics and pragmatics presents more difficulties than reassembling formal features.

Table 1. Acceptability judgment (pairwise comparisons) in four definite contexts.

	DirectAnaphoric	Taxonomic Anaphoric	AnaphoricBridging	Non-anaphoric Bridging
NS (n=26) ¹	$p < .001 *$	$p < .001 *$	$p < .001 *$	$p < .001 *$
Korean Adv L2 (n=15) ¹	$p = 0.06 *$	$p = 0.012 *$	$p = 0.14$	$p = 0.072$
Chinese Adv L2 (n=15)	$p < .001 *$	$p < .001 *$	$p = 0.003 *$	$p = 0.055$

¹Data of native speakers and Korean advanced speakers are from Cho (2016).

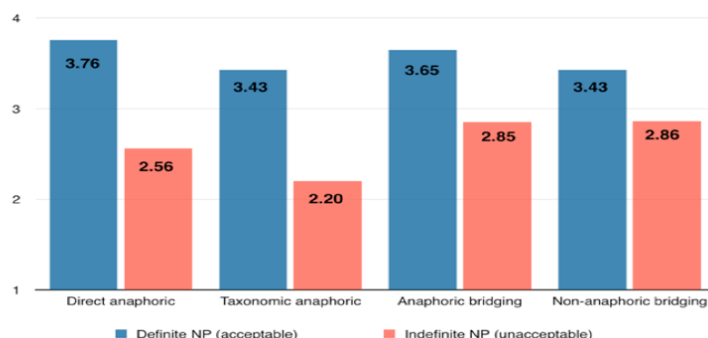


Figure 1. Mean acceptability ratings for definite and indefinite NPs of advanced L1-Chinese L2-English learners in four contexts.

Table 2. A sample AJT test of the four definite contexts.

Direct anaphoric definite context	Jackie made <u>a cake</u> for the party. She served <u>the cake</u> with coffee and tea. [1 2 3 4 I don't know.] Kevin ordered <u>a cake</u> from the grocery store. #He went to pick up <u>a cake</u> but it was not ready. [1 2 3 4 I don't know.]
Taxonomic anaphoric definite context	Lydia's family purchased <u>a dessert</u> . They ate <u>the cake</u> after dinner. [1 2 3 4 I don't know.] Marianne and her daughters shared <u>a dessert</u> . #They enjoyed <u>a cake</u> . [1 2 3 4 I don't know.]
Anaphoric bridging definite context	Tori <u>baked</u> for her office this morning. Her co-workers enjoyed <u>the cake</u> . [1 2 3 4 I don't know.] Rachel <u>baked</u> for her husband. #He enjoyed <u>a cake</u> . [1 2 3 4 I don't know.]
Non-anaphoric bridging definite context	It was Sophie's first <u>birthday</u> . She smashed <u>the cake</u> with her hands. [1 2 3 4 I don't know.] Patrick celebrated his <u>birthday</u> with his friends. #They enjoyed <u>a cake</u> . [1 2 3 4 I don't know.]

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This paper investigates L2 acquisition of bare wh-indeterminates in Korean, by L1- Japanese and L1-English speakers. Bare wh forms in Korean function both as wh- interrogatives and as existential quantifiers, as in (1). The interpretation is determined by intonation (1) or morphology. For example, with declarative (2) or conditional (3) morphology, the bare wh can receive only an existential interpretation (Suh 1989; Aoun & Li, 2003; Choi 2009; Gil & Tsoulas, 2013, among others). This differs from both English and Japanese: English has distinct forms for wh-interrogatives (*what*, *who*, etc.) and existential quantifiers (*something*, *anything*, etc.); whereas Japanese uses wh- indeterminates for both senses, but in the existential interpretation, the wh-indeterminate bears a disjunction suffix *-ka* (e.g., *dare* ‘who’, *dare-ka* ‘someone’).

Previous research on knowledge of wh-indeterminates in L2 Korean by Choi (2009) found that lower proficiency L1-English speaking learners knew only the wh- interrogative and not the existential interpretation. However, by advanced level they were at least 60% accurate on existential interpretations. Choi accounts for this acquisition path in terms of Feature Reassembly (Lardiere 2009). The present study builds on this research, and asks whether, given the morphological similarity between Japanese and Korean, Japanese learners of Korean will be more target-like in their interpretation of bare wh in Korean than English learners of Korean.

Thirty-four English-speaking and 49 Japanese-speaking learners of Korean participated in the study. An ANOVA run on scores of a 40-blank cloze test confirms that the two groups were of equal proficiency ($F_{(1,81)} = 1.82, p = .18$). They completed an acceptability judgement task that included 20 items containing bare wh in four different existential contexts (2–5). A follow-up interpretation task included the same test sentences, each presented with three translation alternatives (in English or Japanese, as appropriate): the correct one, with bare wh translated as an existential; and two impossible alternatives: one with a wh-interrogative interpretation, and one, a filler. Together, these tasks test first whether the learners accept bare wh in contexts that allow only the existential interpretation, and second, whether they indeed interpret bare wh as existentials in those contexts, or whether an “accept” response in the AJT could have been based on an impossible wh-interrogative interpretation.

Mean accuracy scores out of 5 were calculated for each Type and each Group (Table 1). A Repeated Measures ANCOVA was run for each task on these accuracy scores, with Type and L1 as the experimental variables, and cloze test score as covariate. For each task, there was a significant main effect of cloze score, meaning that accuracy increased with overall proficiency. On both tasks, there was a significant interaction of Type with L1, and on the AJT only, there was a significant main effect of L1 (Table 2).

The rate of acceptances on AJT items that a given participant then also interpreted correctly in the second task was 66–86% across the different types. Though not uniformly high, we take this to show that when learners accepted bare wh in the AJT, they did so with an existential interpretation. In terms of our research question, the fact that the English group’s AJT scores were significantly higher than those of the Japanese group, suggests that the similar morphology of Japanese and Korean is not, in fact, advantageous for acquisition of bare wh interpretation. We discuss this result in terms of Feature Reassembly, and argue, drawing on Watanabe (2004) that micro- parametric variation between Japanese and Korean leads to a more difficult acquisition problem for Japanese learners of Korean, despite the greater morphological similarity.

1. Nwu-ka cha-lul masiko iss-nayo?
who-NOM tea-ACC drink PROG-Q
'Is anyone drinking tea?' / 'Who is drinking tea?'
2. **Episodic declarative:** Chelswu-ka ece nwukwu-lul mannassta.
Chelswu-NOM yesterday who-ACC met
'Chelswu met someone.'
3. **Conditional:** Nwu-ka sen-ul nemu-myen, kispal-ul tul-era.
who-NOM line-ACC cross-COND flag-ACC raise-IMPERATIVE
'If anyone crosses the line, raise the flag.'
4. **Nonfactive biclausal:** Minsoo-nun Youngja-ka mwues-ul ilheperyessta-ko saenghak hanta.
Minsoo-TOP Youngja-NOM what-ACC lost-COMP think does
'Minsoo thinks that Youngja lost something.'
5. **Semantically negative bicl.:** Swumi-nun pam nuckkey mwues-ul mekun-kes-ul hwuhuy hayssta
Swumi-TOP evening late what-ACC ate-NMZ-ACC regret did
'Swumi regretted that she had eaten anything late at night.'

Table 1: Mean scores out of 5 (SD) on the AJT and Interpretation Tasks

	AJT				Interpretation task			
	Epis	Cond	Nonfact	Sem Neg	Epis	Cond	Nonfact	Sem Neg
English	3.94 (1.254)	3.29 (1.088)	3.06 (1.254)	2.85 (1.395)	3.68 (1.838)	4.18 (1.314)	3.56 (1.709)	3.06 (1.740)
Japanese	2.71 (1.555)	2.98 (1.436)	2.88 (0.927)	2.69 (1.461)	3.71 (1.291)	4.00 (1.307)	3.31 (1.084)	3.78 (1.343)

Table 2: RM ANCOVA Results (selected results only, for purpose of abstract)

	F	df	p	partial η^2	power
AJT					
Cloze	7.42	1, 80	.008	.09	.77
L1	7.08	1, 80	.009	.08	.75
Type x L1	4.88	3, 240	.005	.05	.87
Interpretation Task					
Cloze	4.49	1, 80	.037	.05	.55
L1	<.01	1, 80	.98	.00	.05
Type x L1	5.96	3, 240	.001	.07	.96

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This paper seeks to elucidate the status of L1 grammatical attrition within formal generative models of the language faculty. While traditional Principles & Parameters models preclude L1 attrition, the possibility of morphosyntactic changes in mature L1 grammars has been extensively reported in language contact situations, in the event of partial – or even full – replacement of native input by another language. We aim to provide a generative model that accounts for such L1 attrition, unifying an approach to the relationship between Input, Intake, and grammatical restructuring proposed by Putnam and Sánchez (2013) for heritage grammars with a broader model of the Language Acquisition Device proposed for L1 acquisition by Lidz and Gagliardi (2015).

To our knowledge, there is currently no generative model of L1 grammatical attrition. While attrition has been incompatible with mainstream generative models based on the assumption of Principles and Parameters (the latter being set early, and once only), Domínguez and Hicks (2016) highlight that more recent feature-based models of the grammar (e.g. Chomsky 2000; 2001) encode classical parameters as differences in the feature specifications of lexical items: for example, Domínguez and Hicks report that the distinction between null subject and non-null subject languages relates to the feature specification of the functional head T(ense), following Sheehan (2006). Since the lexicon must remain flexible beyond the primary years of language learning, changes in certain morphosyntactic properties – of the kind attested in grammatical attrition – should then in principle be available, given appropriate input conditions. However such an avenue for accommodating L1 attrition within formal models (and, we suggest, for *any* principled account) faces a significant paradox: namely, if the model allows for changes to a mature L1 grammar, the question arises why attrition is then both so heavily constrained and so apparently rarely attested.

The resolution to the attrition paradox, we claim, lies not in the grammar *per se*, but in the processes by which the L2 input is manipulated. Putnam and Sánchez (2013) present a model of heritage language grammars which seeks to accommodate non-targetlike L1 grammatical knowledge in heritage speakers within a generative feature-based framework. In this paper we extend Putnam and Sánchez’s model to the general case of L1 attrition in late sequential bidialectal speakers. Putnam and Sánchez posit a distinction between Input and Intake, the latter a psycholinguistic process consisting of the “acquisition and manipulation of Input” which influences any potential restructuring of the heritage grammar, leading to potentially varied outcomes for L1 grammatical competence in heritage speakers. A model that elucidates this process of Intake is the Language Acquisition Device proposed by Lidz and Gagliardi (2015), according to which linguistic input is manipulated by a process of perceptual encoding, and the linguistic representations that make up perceptual intake (feeding into the acquisitional intake and ultimately the developing grammar) are then determined not only by the existing state of the grammar itself but also by parsing and by ‘extralinguistic’ factors (such as memory and pattern recognition).

We contend that in cases of replacement of L1 input, this combination of factors serves to sharply restrict the input that eventually feeds through to acquisitional intake, and hence grammatical restructuring. However, we also propose a set of conditions that may heighten input sensitivity and hence favour perceptual encoding in such a context, relating this to attested cases where attrition obtains, specifically for that of null and postverbal subject use in late sequential bidialectal speakers of Spanish in the US, where in the context of prolonged exposure to dialectal variation in Spanish within the community frequency changes in the input between grammatical

variants which are available in both varieties engenders a reconfiguration of formal feature specifications (Domínguez and Hicks, 2016).

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The very existence of intra-word codeswitching—of the type [w M_{L1} + M_{L2}]; *[eat]_{eng} + [-iendo]_{spanish}—has long been a point of contention in the language mixing literature (Poplack, 1980; Myers-Scotton, 1992). However, recent work by Alexiadou et al (2015) and Grimstad, Lohndal and Afarli (2014) has documented a number of empirical examples of such codeswitching in an American community of Heritage Norwegian-English speakers—crucially, in these examples, the lexical elements are English lexical roots and produced using English phonological rules but the suffix (i.e. morphology) attached to the lexical items is syntactically Norwegian—these clear and unambiguous examples of intra-word codeswitching will be the focus of investigation.

MacSwan (2005) has argued that intra-word codeswitching is prohibited due to the inability of the human computational system to merge hierarchically ordered phonological systems from two or more languages; a prohibition characterized in his PF Disjunction Theorem. More recently, Gonzalez-Vilbazo & Lopez, 2011; Alexiadou et al., 2015 have challenged the PF disjunction theorem and the ban on intra-word codeswitching it entails. It will be argued that this prohibition of intra-word language mixing may be overcome by appealing to a cognitive processes perspective (Sharwood-Smith & Truscott, 2014).

A MOGUL processing perspective (Sharwood-Smith & Truscott, 2014) will be used to build upon previous approaches to language mixing in order to account for intra-word codeswitching. The modular architecture adopted by MOGUL allows for a molecular view of a lexical item; each module (i.e. phonological module, syntax module, conceptual module) produces a representation for a given form which is then interfaced to neighboring modules; the result is a chain of representations (i.e. PS + SS + CS) which constitutes a lexical item. Additionally, MOGUL incorporates several extra-linguistic cognitive mechanisms which play a role in language mixing. Of particular interest are the notions of executive control and cognitive context. Following recent work by Green & Abutalebi (2013), the Adaptive Control Hypothesis will be adopted which allows for various control processes (i.e. response inhibition, opportunistic planning, etc.) to be mediated by an individual's cognitive context; cognitive context is taken to be the mentally internalized representation of an individual's current environment as well as representing various perspectives, goals, opinions, etc., an individual has regarding their environment (Van Dijk, 1997).

To situate intra-word codeswitching into a MOGUL framework, much of MacSwan's Minimalist account will be adopted, (i.e. codeswitching is the union of grammar X and Y; formally: {G_x ∪ G_y}) while rejecting the PF Disjunction Theorem and, instead, adopting elements of Distributed Morphology (i.e. late insertion). It will be argued that cognitive context configures various executive control process (i.e. dense-code switching mode) to allow for the union of phonological systems between L_x and L_y. This analysis builds upon a larger body of language mixing research by synthesizing a Minimalist account of codeswitching with a cognitive processing framework to account for intra-word codeswitching; the MOGUL framework allows for these disparate elements to be coalesced.

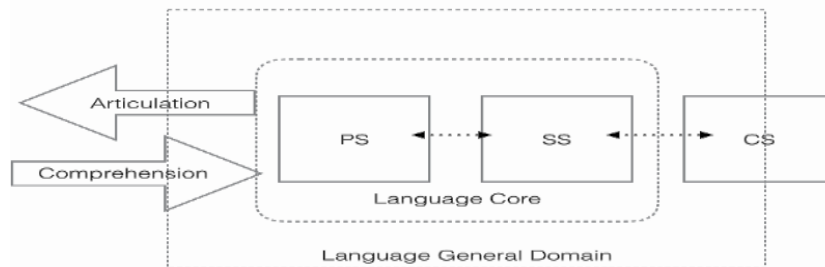
Examples of Data:

1) den **field**-a
that field – DEF.F
‘that field’

2) den **track**-en
that track-DEF.M
‘that track’

(Alexiadou et al., 2015)

MOGUL Sketch:



(Adapted from Sharwood-Smith & Truscott, 2014)

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In recent decades, the research paradigm of generative approach to second language acquisition has been focusing on the acquisition of features. Researchers hold different opinions towards what an end-state L2 grammar is. Prominent hypotheses such as the Failed Functional Features Hypothesis (FFFH; Hawkins & Chan, 1997) and the Interpretability Hypothesis (IH; Tsimpli & Dimitrakopoulou, 2007) claim that convergence is not possible, as L2 learners will not be able to acquire certain features which are not available in their L1. On the other hand, the Feature Reassembly Hypothesis (FRH; Lardiere, 2008, 2009) claims that convergence is possible. The FFFH/IH stress the acquisition of “additional” features in L2 while the FRH emphasizes the reassembly of features that exist both in L1 and in L2. The third context, where the features are available in L1 but not available in L2, has been neglected in the literature. Therefore, this study aims to address this issue to bridge the gap.

The acquisition of L2 relative clauses (RC) in Chinese by English-speaking learners provides a good ground to investigate this topic. Three features are associated with C in English RCs, namely [*uwh*] (Hawkins, 2005), [Λ] and [ID] (Adger & Ramchand, 2005). The [*uwh*] feature triggers movement of *wh*-phrases or null operators to the position of Spec of CP. The [Λ] feature abstracts predicates from RCs. The [ID] feature associated with the *wh*-phrase as a relative marker is interpretable and is checked by the phi features carried by the *wh*-phrase; on the other hand, the [ID] feature associated with *that* as a relative marker or zero relative marker is uninterpretable and is checked by the [Λ] feature. In Chinese, the obligatory relative marker *de*, which heads an nP (Zhang, 1999), is only associated with the [Λ] feature (Cheng & Sybesma, 2006). Therefore, in order to acquire Chinese RCs, English learners need to “inhibit” the [*uwh*] and [ID] features.

The issue of L2 feature inhibition was investigated with a speeded Acceptability Judgment Test (AJT) and a Syntactic Priming Comprehension and Production task (SPCP). The data of 44 English L2 learners of Chinese (intermediate level or above) were analysed at three levels: receptive knowledge, comprehension and production. The results show that L2 learners have difficulty inhibiting L1 features in L2. The failure to acquire indirect object/oblique RCs with an RP in Chinese can be regarded as evidence that English learners of Chinese have difficulty inhibiting the [*uwh*] feature. In addition, in the SPCP production task, the advanced learners produced significantly fewer grammatical indirect object/oblique RCs than the native speakers and the number of grammatical indirect object/oblique RCs, i.e. with an resumptive pronoun (RP), that the advanced learners produced was the same as that of ungrammatical indirect object/oblique RCs without an RP. This optionality can be regarded as evidence of failure to inhibit the [ID] feature.

The results of the current study show that, if the L2 feature configuration involves inhibiting unnecessary feature(s) from the L1 configuration, it cannot be acquired. As discussed in Montrul and Yoon (2009), it is easier to learn or add a feature than to unlearn or subtract a feature from a syncretic complex. In the terms of Modular On-line Growth and Use of Language (MOGUL; Sharwood Smith & Truscott, 2014), the [*uwh*] and the [ID] features in the syntactic system have a high resting level due to L1 transfer. However, the lack of L2 input associated with the [*uwh*] feature and the [ID] features lower the current level of these features. Nonetheless, their activation level will not be down to zero since the learners still use their L1 at the same time. With both theoretical and empirical support, we therefore propose a Feature Inhibition Hypothesis: L2 learners are not able to inhibit the functional features in L2 that are present in their L1.

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The Bottleneck Hypothesis in L2 acquisition: Norwegian L1 speakers' knowledge of syntax and morphology in English L2.

We present results from a study testing the Bottleneck Hypothesis (Slabakova 2008; 2013) in L2 acquisition of English by Norwegian learners. According to this hypothesis, functional morphology is the bottleneck of L2 acquisition, and consequently, the most challenging part for L2 learners to acquire. We tested two constructions that do not match in English and Norwegian: Subject-verb agreement and obligatory verb-second (V2) word order (in the L1). The former represents knowledge of functional morphology and the latter knowledge of syntax.

Norwegian is a V2 language where the finite verb moves to second position in non-subject-initial declaratives; see example (1a). In English, on the other hand, there is no verb movement out of the VP (except in certain exceptions) (1b). Hence, the learning task for Norwegian speakers of English is to unlearn the V2 rule. Westergaard (2003) has shown that this is a major challenge for Norwegian learners at an early stage. With respect to functional morphology, English marks overt agreement: present simple tense verbs receive the suffix *-(e)s* when the subject is 3rd person singular. This is in contrast to Norwegian, where there is no subject-verb agreement; see examples (3)–(6). Both constructions are very frequent in the input and they are focused on in L2 English classroom instruction.

The Bottleneck Hypothesis predicts that Norwegian learners should make fewer errors with syntactic operations than with functional morphology, and that knowledge of syntax would improve faster than knowledge of functional morphology, as the speakers become more advanced.

Two experimental conditions related to syntax tested non-subject initial declaratives with auxiliaries and lexical verbs; see examples (2)–(3). Four other conditions tested functional morphology and included subject-initial declaratives with plural and singular subjects, as well as local and long-distance agreement; see examples (3)–(6). The participants were asked to rank these sentences on a 1 to 4 Likert scale in an untimed acceptability judgement test, where 1 meant completely unacceptable and 4 completely acceptable. The web-based test was carried out with Survey Gizmo.

Sixty native speakers of Norwegian in two age groups (11–12 and 16–18) participated. All had Norwegian as their only L1 and English as their second language. They were divided into three levels of proficiency on the basis of a 40-item standardized test. Proficiency scores ranged from low intermediate to advanced.

Our results show that the participants had more problems with agreement than with word order in English L2, as they usually accepted both grammatical and ungrammatical agreement. In contrast, they rejected ungrammatical word order and accepted grammatical word order, illustrated in figures (7)–(10). In addition, the adjusted R^2 for the results in (7) and (8) are 0.4688 for ungrammatical word order and 0.2227 for ungrammatical agreement, which means that there was a higher correlation between word order and proficiency than agreement and proficiency. This suggests that learners develop considerably faster in their knowledge of English word order than of agreement. We conclude that our findings lend support to the Bottleneck Hypothesis.

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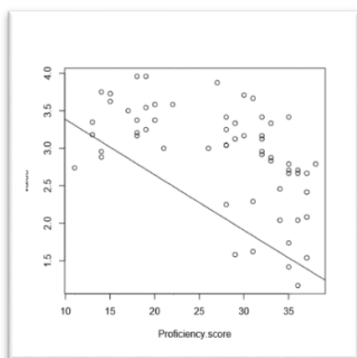
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Examples

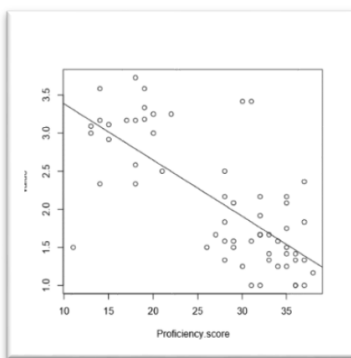
- (1) a. *I går gikk læreren til butikken*
yesterday went teacher.DEF to shop.DEF
b. Yesterday the teacher went to the shop
- (2) a. *Hver dag bør elevene ta med seg bøkene sine på skolen*
every day should students.DEF take with them books.DEF their on school.DEF
b. Every day the students should bring their books to school
- (3) a. *Den brune hunden leker med den gule fotballen*
the brown dog.DEF plays with the yellow football.DEF
b. The brown dog plays with the yellow football
- (4) a. *Lærerne gir elevene sine masse lekser*
teachers.DEF give students.DEF their a lot homework
b. The teachers give their students a lot of homework
- (5) a. *Huset med gule og hvite dører ser fint ut*
house.DEF with yellow and white doors looks nice out
b. The house with yellow and white doors looks nice
- (6) a. *Guttene i den svarte bilen ser veldig skumle ut*
boys.DEF in the black car.DEF look very scary out
b. The boys in the black car look very scary

Results

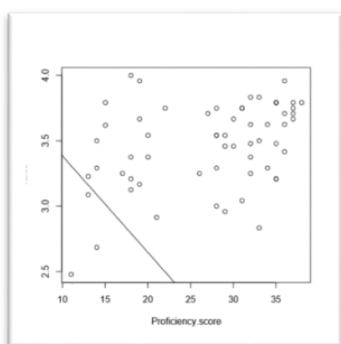
(7) Ungrammatical sentences, agreement



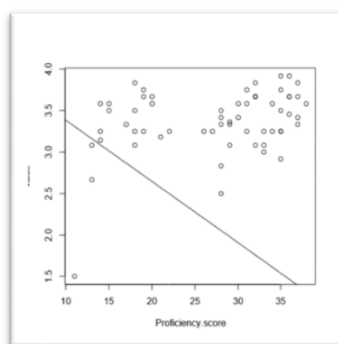
(8) Ungrammatical sentences, word order



(9) Grammatical sentences, agreement



(10) Grammatical sentences, word order



Note: The y-axis shows the Likert scale (1-4), and the x-axis shows the proficiency scores (10-40).

Can bilingual children who use appropriate subject expressions in one language do so in the other?

The present study examines the Japanese-English simultaneous bilingual children's production of subject expressions; namely the choice of noun expressions (i.e., proper name; common noun; null pronoun; overt pronoun) in both of their languages. When constructing a narrative, the speaker must choose an appropriate subject, depending on the level of shared knowledge with the listener. For example, an introduction of a new character must be expressed with a full NP, while maintenance of a character involves the use of null or overt pronouns. Due to such difficulty in integrating pragmatic and linguistic information, studies have found monolingual children to produce ambiguous or inappropriate subject expressions (Clancy 1992; Guerriero, Oshima-Takane, & Kuriyama 2006; Hendriks, Koster, & Hoeks 2014; Wong & Johnston 2004). Moreover, when compared to monolingual peers, bilingual children use more pragmatically inappropriate subjects. In specific, bilingual children tend to overuse overt pronouns in maintenance contexts, where the use of null pronouns is most appropriate (Serratrice 2007; Sorace, Serratrice, Filiaci, & Baldo 2009). These studies, however, have focused on comparing the linguistic behaviour of monolinguals to bilinguals. Further investigation is necessary to reveal whether there are any differences in regards to the use of subject expressions between the two languages within a bilingual.

The present study aims to fill in this gap by investigating the referential strategies in simultaneous bilingual children's two languages: Japanese and English. Twenty simultaneous Japanese-English bilingual children in the age range of eight to twelve, who lived in UK, participated in a production task. They described six picture-based stories, all featuring two characters of the same gender. The story included three contexts: introduction of a first and second characters, maintenance of the first and second characters, and reintroduction of the first character. Participants were reminded several times that the researcher could not see the pictures, in order to avoid establishment of mutual information. Half of the participants first told the story in English and the other half in Japanese, with an interval of a week between the two sessions. The task was audio-recorded and then transcribed into CHAT format. In addition to the narrative task, the participants' parents completed a language background questionnaire. The finding showed a significant correlation between the productions of appropriate subject expressions in their two languages for all three contexts. In other words, children who were able to produce appropriate subject expressions in English were also able to do so in Japanese, when the age factor was controlled. However, the correlation coefficient for the reintroduction context was significantly lower than the others, suggesting that the relationship may be context specific. Despite the fact that the participants in the present study received significantly more English input, the finding shows a significant correlation between the production of appropriate subject expressions in English and Japanese. This result suggests that development of referential functions in bilinguals may be universal and not language specific.

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Whereas child L2A in immersion and bilingual instructed environments has been extensively studied within GenSLA (Haznedar and Gavruseva, 2008, Rothman et al., 2016, a.o.), child foreign language acquisition in minimal input instructed contexts remains rather unexplored and yet it is one of the most frequent contexts of non-native acquisition. A number of studies have recently started to address how GenSLA can be applied to classroom contexts and how classroom research can inform theories of language development (see Whong et al. 2013) but most of these studies explore adult non-native acquisition and not children who receive limited and often poor quality input in formal instruction contexts. Since these children are exposed to minimal input and hardly ever produce any foreign language output, clear instances of acquisition are rare.

Among the many linguistic phenomena studied in GenL2A, subject omission in early grammars of English learners whose L1s are null-subject languages is one of the most widely studied, particularly in adult L2 English and to a lesser extent in child L2 English (see Hilles, 1991; Lakshmanan, 1994; Pladevall-Ballester, 2012; 2016). However, these studies have focused on one type of data and to the best of our knowledge, no studies have reported on subject omission data from child foreign language acquisition contexts. The present study attempts to address this gap by analysing and comparing production, comprehension and judgement data on subject omission by the same group of young learners of English in a context where acquisition is not particularly fostered. More specifically, we seek to examine whether null subjects are transferred and to what extent this is reflected in the different types of data. Two research questions are entertained:

- (1) When child foreign language acquisition takes place in a minimal input instructed context, is there any evidence for transfer of an L1 null subject grammar?
- (2) If evidence for transfer is found, is it instantiated to the same extent in production, comprehension and judgement data?

Thirty-eight Catalan/Spanish bilingual children learning English as a Foreign Language in a Primary School in Barcelona participated in the study. Upon data collection, children were aged 9-10 and had English as a Foreign Language lessons two hours a week. They had accumulated around 300 hours of exposure over five academic years. Three experimental tasks were carried out, namely a production task (spot-the-differences task), a comprehension experiment (a Truth-Value-Judgement task adapted from Orfitelli and Hyams, 2012) and a Grammaticality Judgement Task (GJT). The percentages of null subjects in production, null subject interpretation and null subject acceptance were calculated and statistically compared. Tables 1-3 show the descriptive data for the three tasks.

Production data reveal very low percentages of null subjects (both expletive and referential), as has been attested in previous research, but comprehension and judgement data suggest there is optionality of null and overt subjects in the grammar of these learners. A RM ANOVA with the within-factors (Production*Comprehension *Judgements) confirmed that there are asymmetries in the data depending on the type of data ($F(1.46, 55.11) = 41.57, p > .001$). A pairwise comparison revealed that there were significant interactions across conditions (see Figure 1), thus, showing that the learners produced fewer null-subjects than interpreted or accepted them. Production results will be discussed in relation to the formulaic nature of these children's speech whereas comprehension and judgement data are more indicative of transfer, which suggests that acquisition might be triggered even in a minimal input learning context.

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DATA

Table 1. Percentages of production of subjects (mean) for the group of child L2 learners (n=38)

	Mean % (SD)
Production of null subjects	12.71 (13.55)
Production of overt subjects	87.28 (13.55)

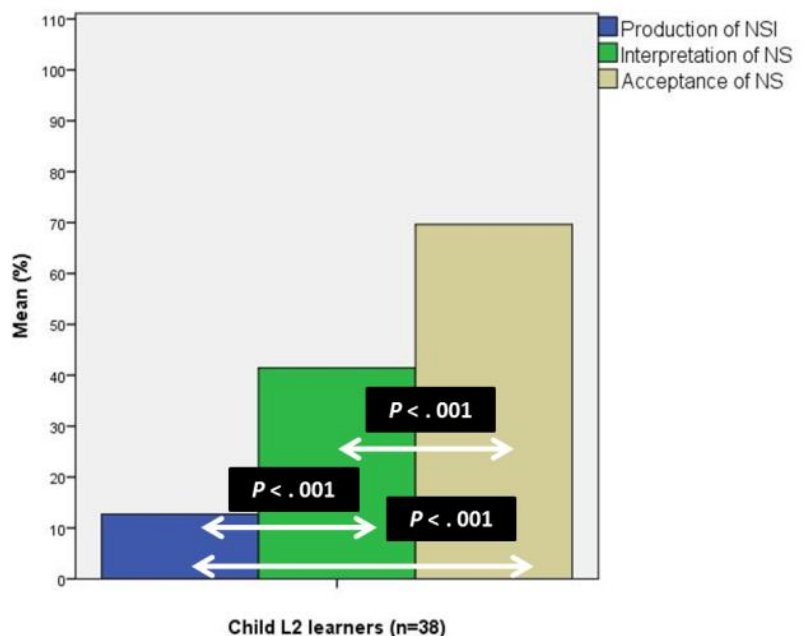
Table 2. Percentages of null subject interpretation in imperative and declarative sentences for the group of child L2 learners (n=38)

Condition	Mean % (SD)
Imperative without please	57.84 (37.7)
Declarative no subject (critical)	53.19 (38.87)

Table 3. Percentages of acceptances of null and overt subjects for the child L2 learners (n=38)

	Mean % (SD)
Acceptance of null subjects	69.64 (17.10)
Acceptance of overt subjects	73.90 (20.72)

Figure 1. Post-hoc analysis of the comparison between the percentages of production, interpretation and acceptance of null subject sentences



Spanish HSs (SpHSs) studied in the US have typically been shown to differ significantly from monolinguals across a wide range of grammatical properties (see Montrul 2008, 2016 for review). In the case of the US SpHSs, language dominance virtually always falls in the direction of English and, therefore, it's unclear whether majority language dominance is the cause or the by-product of these differences. In the present study, we examine an atypical group of SpHSs precisely because they have managed to remain dominant in the L1, Spanish, despite growing up in an environment where Spanish is not the majority language. These SpHSs are children of two Spanish parents from Southern Spain growing up in rural, central Catalonia. Different from Spanish in the US, Spanish in Catalonia has a more prestigious status and is also one of the languages used in Catalan education. Nevertheless, like in the US, Spanish is not the native, majority language of the society. Because of access to Spanish in the Catalonia context (mainly in the classroom in rural, central Catalonia) and the prestige of Spanish, many SpHSs retain dominance in Spanish despite inevitably becoming highly proficient in their L2, Catalan. Examining these SpHSs with Spanish literacy, unlike in the US, we can assess the relative weight of language dominance and the role of minority language literacy in HS outcomes independently (cf. Kupisch and Rothman, 2016).

We investigate the co-occurrence of the Sentential Negative Marker (SNM) and Negative Concord Items (NCIs) in pre-verbal position, which is allowed in Catalan (1a-2a) and disallowed in Spanish (1b-2b), as well as Differential Object Marking (DOM), which is not allowed in Catalan (3a-4a) but obligatory in Spanish (3b-4b). These two phenomena have been claimed to be sensitive to variation in the adult grammars of childhood bilinguals. In an effort to assess the relative weight of language dominance in an atypical case of SpHSs, that is, whether retaining Spanish dominance would make them less vulnerable to differences than SpHS in the US, we tested a group of early Catalan/Spanish bilinguals who are SpHSs ($n=22$) in both Spanish and Catalan to see whether there was crosslinguistic influence in a bidirectional way. We implemented both online and offline tasks to see whether there was a mismatch in the online and offline data as has been shown in, for example, Villegas (2014). A Grammaticality Judgement Task (GJT) and Self-Paced Reading (SPR) task were used. In both tasks, there were four key conditions (8 items per condition): a) *NCI+SNM*, b) *NCI+V*, c) *+DOM*, d) *-DOM*. The GJT consisted of a 6-point likert scale. For the SPR data, we looked at the RTs for the regions of interest (R1, R2 and R3), which correspond to the three words after the critical part of the sentence (absence or presence of SN and absence or presence of the accusative marker *a*).

The results from the online and offline tasks revealed no cross-linguistic influence in the NCI conditions in either of the languages. However, the results of the offline DOM conditions, (c) and (d), show the SpHS group over-accept ungrammatical sentences in the sentences with DOM in the GJT, thus, they show divergence from the expected performance, reflecting influence from Catalan. This is not so surprising given that the domain of DOM has been shown to be especially vulnerable in heritage language acquisition (e.g., Montrul, Bhatt and Griju, 2015). However, their online data show clear sensitivity to the morphosyntactic violation in this same condition. When the SpHSs are tested in Catalan, they also show non-target-like behaviour in conditions with DOM in the offline data, but again they show appropriate sensitivity in the online task in the same conditions. Taken together, the results show a clear mismatch related to methodology used. We will discuss the implications these results yield more generally, both in terms of the role dominance potentially plays in the competence of our SpHS as well as the offline-online mismatch (see also Villegas, 2014). Offline data alone might lead to premature conclusions regarding HS representations.

Linguistic Data

	NCI+SN	NCI+V	-DOM	+DOM
Catalan	YES (1)	YES (3)	YES (5)	NO (7)
Spanish	NO (2)	YES (4)	NO (6)	YES (8)

- 1) Ningú no menjarà pomes
 - 2) *Nadie no comerá manzanas
 - 3) Ningú Ø menjarà pomes
 - 4) Nadie Ø comerà manzanas
- Nobody (not) eat.FUT apples
'Nobody will eat apples'

- 5) La Maria veurà Ø la Marta
 - 6) *Maria verá Ø Sara
 - 7) *La Maria veurà a la Sara
 - 8) Maria verá a Sara
- Mary see.FUT Acc.Mark Sara
'Mary will see Sara'

GJT Data

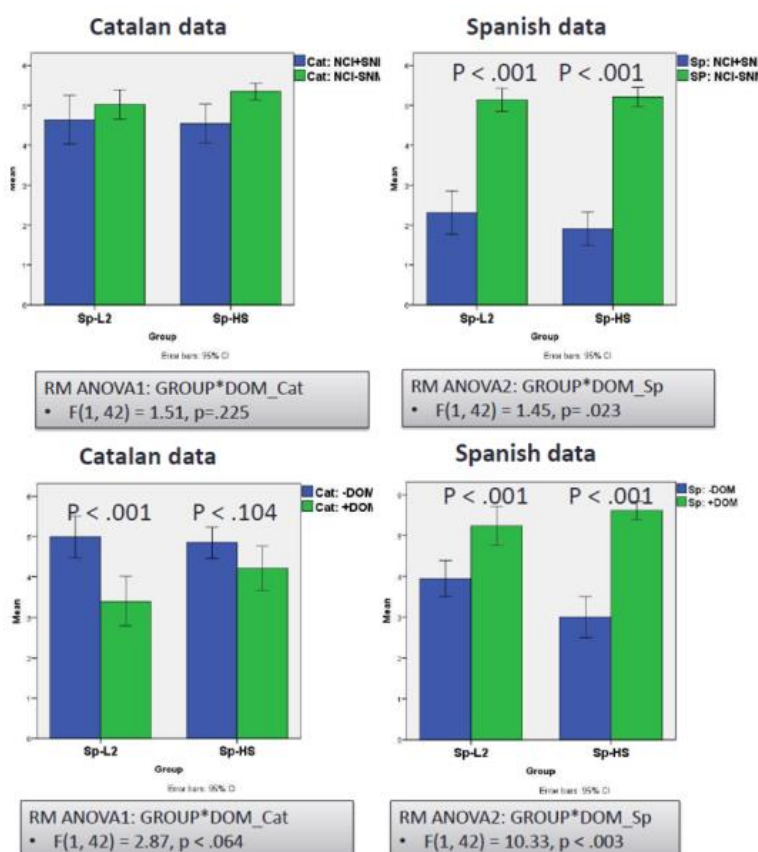
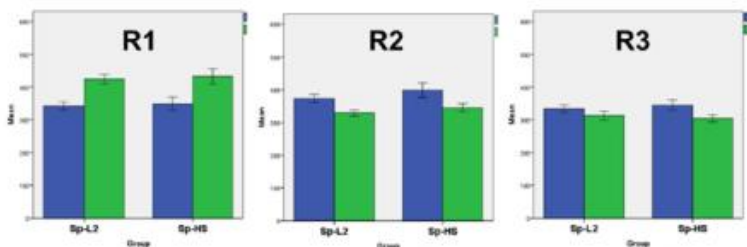


Figure 1-4: Means of acceptability scores in all the conditions

SPR Data

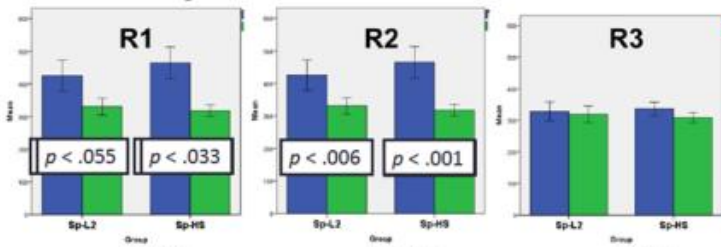
Catalan NCI conditions



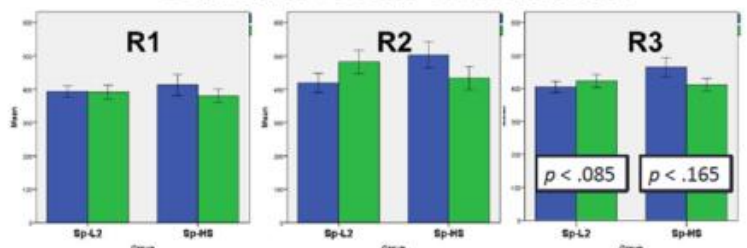
*Blue bar represents the NCI+SN conditions and the green bars de NCI+V one

Figure 5 – 10: Bar graphs of RTs (ms) in the regions of interest in the NCI conditions in Catalan

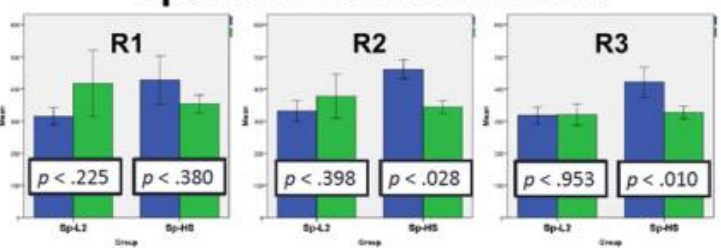
Spanish NCI conditions



Catalan DOM conditions



Spanish DOM conditions



*Blue bars represent the -DOM condition and the green bars de +DOM one

Figure 11 – 16: Bar graphs of RTs (ms) in the regions of interest in the DOM conditions in Catalan

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This study investigates the influence of L1 Dutch and L2 English on L3 French in different stages of development. The goal is twofold: 1) We investigate the influence of L1 Dutch and L2 English in the acquisition of two verb placement constructions that are not present in L3 French: V-to-C movement, also known as the V2-rule (present in Dutch, but not in French) and no V-to-T movement (present in English, but not in French) and 2) we examine how the roles of the background languages develop over time.

There is an extensive literature on L3 modelling proposing that transfer depends on (perceived) typological resemblances (Kellerman, 1979; Rothman, 2010, 2015), structural resemblances (Mykhaylyk et al. 2015) or on the special status of L2 (Hammarberg, 2001, 2009; Bardel & Falk, 2007). Furthermore, both SLA and TLA literature show that the influence of background languages may change over time in the learning process. With regard to the V2-rule, several studies pointed out its developmental decrease. Westergaard (2003) found that Norwegian school children massively transfer the V2-rule in the first stages of acquisition before adapting the X-S-V English word order, and in a study of L2 French by L1 Dutch secondary school students, Hulk (1991) found that the incorrect acceptance of V2 decreases dramatically in the first three years of secondary school. Moreover, several L3- studies show a positive effect of L2 proficiency (Jaensch, 2009; Hammarberg, 2009) and L2 exposure (Tremblay, 2006) in L3 learning.

This study investigates transfer from L1 Dutch and L2 English in different stages of L3A development. We concentrate on declarative root sentences (1) containing a manner/frequency adverb and (2) in which the V2-rule applies in Dutch.

1.	Manon	sometimes	goes	to the zoo.	ENGLISH
	Manon		va	parfois	FRENCH
	Manon		gaat	soms	DUTCH
2.	Today		John	goes	ENGLISH
	Aujourd'hui		John	va	FRENCH
	Vandaag	gaat	John	naar Parijs	DUTCH

The participants of this study are 63 Dutch secondary school English immersion students who are in different grades: 23 first year (Y1) students (age range 11-13), 16 third year (Y3) students (age range 13-15) and 12 fourth year (Y4) students (age range 14-16). We report data from a grammaticality judgment task (testing the receptive knowledge) and a gap- filling task (testing the guided production). Both word order constructions were equally represented in the tests. Although the L3 proficiency increases in the three years of education that we tested, the tasks were very simple and all students were familiar with the vocabulary. On the basis of the L2 and L3 literature, we hypothesized (1) that the L2 influence develops over time, so that the L3 learners will show an increasing amount of negative transfer from L2 English with regards to V-to-T movement and (2) that L1 influence decreases over time meaning that in Y1 there will be considerable transfer of the V2-rule, whereas in Y3, and even more in Y4, the V2-rule will be used to a smaller extent in L3.

As predicted, we found that the effect of the V2-rule decreases significantly in both tasks (GJT: Y1 – Y3, $p < 0.001$; Y3 – Y4, $p = 0.027$ and Gap-Filling task: Y1 – Y3, $p < 0.001$; Y3 – Y4, $p < 0.001$). With respect to “no V-to-T”, the results show that in the GJT, the increase is not significant (GJT: Y1 – Y3, $p = 0.088$; Y3 – Y4, $p = 0.099$). However, in the Gap-Filling task, there is a developmental increase in the use of L2 English from Y1 to Y3 ($p = .005$) and from Y1 to Y4 ($p = .017$). However, the use of the L2 is relatively stable between Y3 and Y4 (resp. 21,4% and Y4: 29,2%, $p = 0.837$).

In sum, this study shows that students who are in the beginning of their immersion education, lean a lot on their L1 Dutch. In Y4, however, the students barely make any mistakes on

the basis of Dutch. Interestingly, whereas the role of the L1 in the L3 decreases, we found that the use of L2 English in L3 is stable in the Gap-filling task from Y3 to Y4 and in the GJT across all years.

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The present study investigates how three semantic universals – definiteness, specificity and partitivity – are encoded in Kuwaiti Arabic, and to what extent they can account for L2 English article misuse by L1 Arabic speakers. The use of English articles has long been identified as problematic in L2 English acquisition, with learners overusing ‘the’ with indefinite NPs and ‘a’ with definite NPs, omitting articles in obligatory contexts, or overusing the definite article where English allows a gap, as in ‘My friend loves __ cats’. Previous research (Ionin et al. 2004, Ionin 2006, Ko et al. 2008) has shown that misuse of English articles can be explained by the semantic features of definiteness, specificity and partitivity.

Studies by Ionin et al. (2004) and Ionin (2006) show that English L2-learners with article-less L1 overuse ‘the’ with specific indefinites and ‘a’ with non-specific definites. Similarly, some studies have indicated an effect of the partitivity feature on L2 English article choice, namely the overuse of ‘the’ with partitive indefinites (Kaneko 1996, Ko et al. 2008).

Both the English and the Kuwaiti Arabic (KA) article systems mark definiteness but not specificity. While English exhibits a three-way contrast (*a*, *the*, and ‘zero’ article), Arabic has a two-way contrast (the definite article *al* and the indefinite ‘zero’ article). KA differs from English in marking its partitive NPs by the definite article. Kuwaiti L2 English learners are predicted to transfer the definiteness setting of the Article Choice Parameter into their L2 English but are expected to oversupply the definite article in partitive conditions due to transfer. They are also predicted to omit articles in indefinite non-partitive contexts due to transfer.

The current study presents the results of an experiment on the L2 acquisition of the English article system by KA speakers (N=102) at three proficiency levels. The test consisted of forty-eight items in six conditions targeting definiteness, specificity, and partitivity with singular and plural NPs. The results show near native use of the definite article in [+d] and of the indefinite article in [-d, -s] conditions by the advanced group. However, the advanced group overuses *the* in indefinite specific contexts (which could be attributed to fluctuation in the setting of the definiteness and specificity parameters) and in partitive contexts (due to non-facilitative L1 transfer). Despite the availability of the zero article in Arabic, L2 learners erroneously supply the definite article, especially with plural NPs. Thus, the mapping of the L1 Arabic two-way contrast onto the L2 English three-way contrast is problematic even for advanced learners, with the three semantic features only partially accountable for the observed patterns in the interlanguage grammar.

Examples of test items in six conditions:

1. [-definite, -partitive], target *a*
There were five apples and three oranges on the table. Ali picked *a*/**the* pear.
2. [-definite, +partitive], target: *a*
There were five apples and three oranges on the table. Ali picked *an*/**the* apple.
3. [-definite, -specific], target: *a*
I want to marry *a*/**the* rich guy, and I don’t care what he might look like.
4. [-definite, +specific], target: *a*
I visited *a*/**the* friend from high school when I went to Dubai. His name is Ali.
5. [+definite, -specific], target: *the*
I want to find **a*/*the* person who broke the mirror of my car.
6. [+definite, +specific], target: *the*
I met **an*/*the* author of this book. She is terrific.

Fig.1. Accuracy of L2 English article choice in singular contexts in 6 conditions.

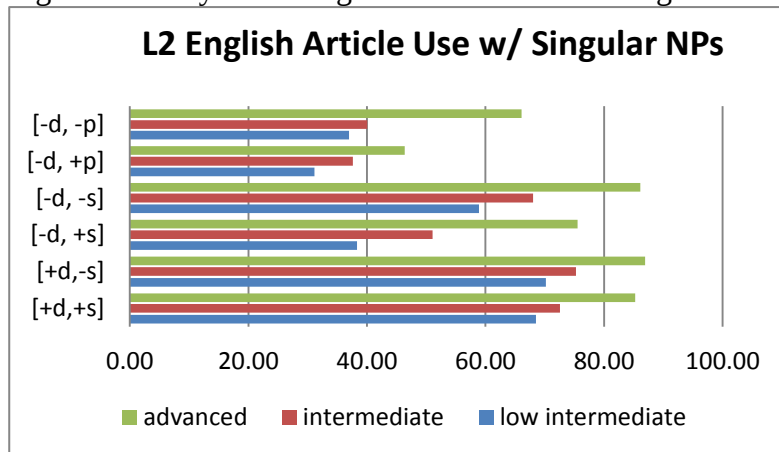
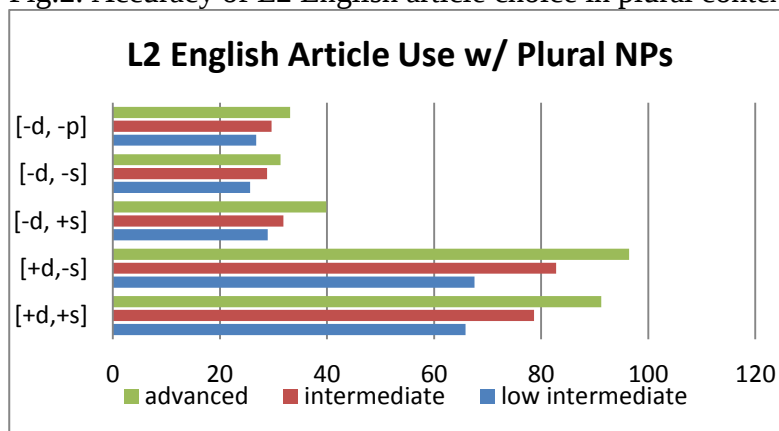


Fig.2. Accuracy of L2 English article choice in plural contexts in 5 conditions.



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A heritage language is a minority language acquired within a majority language environment through naturalistic exposure in the home context (Rothman, 2009). Due to a shift in dominance toward the majority language during childhood, heritage speakers usually end up with adult grammars diverging from the monolingual norm in several respects. However, the majority of research focuses on the end state of heritage language acquisition. Relatively little is known about the developmental path leading toward this endstate. This study aims to shed more light on the question of heritage language development by comparing three different age groups: 9-year olds, 13-year olds and adults.

The topic under consideration is subject position. The literature generally mentions two factors determining subject position in Spanish: The first factor concerns verb type: subjects tend to follow unaccusative predicates but precede unergative predicates (examples 1 and 2) (Suñer, 1982). The second factor relates to focus (Zubizarreta, 1998): in narrow presentational focus, the subject is placed after the verb, regardless of predicate type (example 3). However, as attested by Roggia (2011), other factors such as verbal aspect, animacy, heaviness and definiteness of the subject also play a role and are often overlooked. Its complex nature makes word order a notoriously vulnerable phenomenon for adult heritage speakers of Spanish in the US (Zapata et al., 2005; de Prada Pérez & Pascual y Cabo, 2012). However, less is known about knowledge of word order by heritage speakers of Spanish with dominant languages other than English, or by bilingual children, whose heritage language is still developing.

A contextualized scalar acceptability judgment task was administered to 18 adult monolingual speakers of Spanish and 17 adult heritage speakers with Dutch as their dominant language. The test included unergative and unaccusative verbs, in broad and narrow focus, with definite and indefinite subjects. Two child speaker groups (15 9-year olds and 15 13-year olds) performed an adapted version of the task: an oral preference task with pictures.

Mixed effects models were run on each participant group. As expected, the adult monolinguals significantly distinguished between unergative and unaccusative verbs ($p < 0.05$) broad and narrow focus ($p < 0.001$) and definite and indefinite subjects ($p < 0.01$). The adult heritage speakers demonstrated accurate knowledge of the effects of verb type ($p = 0.01$) and focus ($p < 0.05$), but not definiteness ($p = 0.31$). Both the 9-year-old and 13-year-old groups significantly distinguished between verb types ($p < 0.001$; $p < 0.05$) and definiteness ($p < 0.001$; $p < 0.05$). However, neither group seem to have knowledge of focus.

Interestingly, both monolingual and bilingual speakers tend to prefer postverbal subjects to a higher degree as age increases. However, this pattern is more extreme in bilinguals than in monolinguals. We propose that this higher preference for postverbal subject might be accounted for by the occurrence of postverbal subjects Dutch due to V2.

- | | | |
|-----|--------------|--|
| (1) | UNACCUSATIVE | <i>Llegó un chico.</i>
Arrived the boy |
| (2) | UNERGATIVE | <i>Un chico gritó</i>
The boy screamed |
| (3) | NARROW FOCUS | <i>¿Quién gritó? Gritó el chico.</i>
Who shouted? Shouted the boy |
| (4) | DEFINITE | <i>El chico llegó.</i>
The boy arrived |
| (5) | INDEFINITE | <i>Llegó un chico.</i>
Arrived a boy. |

Figure1: Mean ratings and produced orders across conditions in *monolinguals*

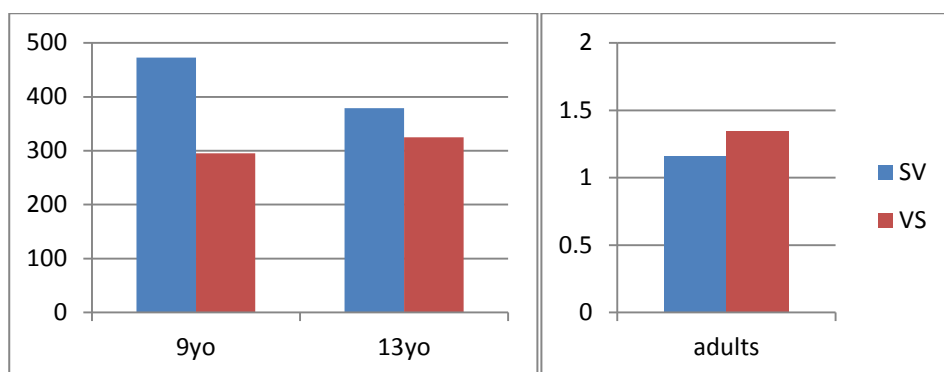
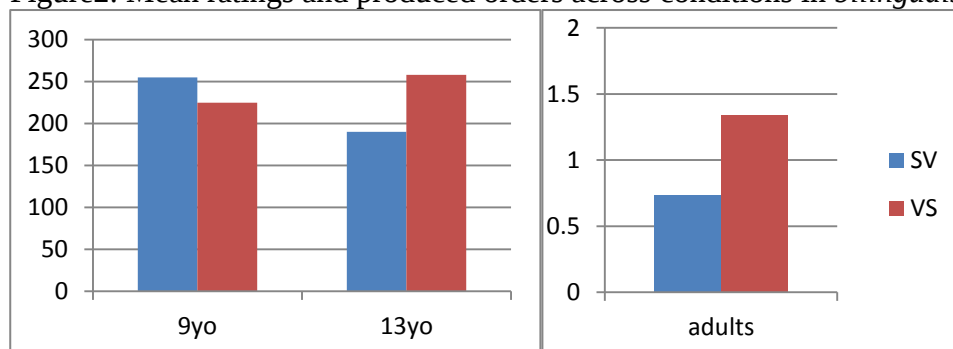


Figure2: Mean ratings and produced orders across conditions in *bilinguals*



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The issue: Is the long-distance interpretation of anaphors acquirable in an L2 (Chinese), if ruled out by the L1 (English)? We investigate sensitivity to two types of cue which determine anaphor resolution of the Chinese simple reflexive *ziji* (self): context and verb type. Chinese features 3 relevant semantic verb types: introverted/self-oriented verbs (henceforth VT1, e.g. *tanbai* in (1-a)) only allow local binding of *ziji* (Lisi in (1-a)); extroverted/other-oriented verbs (VT2, e.g. *huida* in (1-b)) only allow long-distance binding (*Zhangsan* in (1-b)); ambiguous/context-dependent verbs (VT3, e.g. *zhaogu* in (1-c)) allow both interpretations (local or long-distance: *Lisi* or *Zhangsan* in (1-c)), depending on the discourse context. In native speakers, contextual information has no impact on the interpretation of *ziji* with VT1 and VT2 [1]. Under a parametric approach assuming Full Transfer/Full Access to UG [2], Variational Learning [3] predicts that learners should converge faster on the target value of the relevant parameter if the input provides reliable cues. Only VT2 provides unambiguous cues for long-distance binding: VT1 matches the L1 setting, and VT3 allows both local and long-distance binding. This predicts protracted acquisition of the long-distance interpretation.

Questions: (i) Are English learners of Chinese sensitive to the semantic restrictions imposed by the selecting verb? (ii) Do they allow a long-distance interpretation in contexts that require it? (iii) Do the verb's semantic restrictions over-rule contextual requirements in non-native speakers (NNS), as they do in native speakers (NS)?

Methods: 25 NS and 29 NNS read two-sentence sequences consisting of a context sentence (2) and a test sentence (1-a), and indicated their chosen antecedent for *ziji* by a forced-choice task. There were 90 sentence pairs by condition, based on crossing Verb Type (VT1, VT2, VT3) and Context (Local, Long-distance). There were 90 distractors with the non-anaphoric pronoun *ta*. NNS' proficiency ranged from low intermediate to high intermediate, measured by a HSK Chinese proficiency test (Levels IV and V).

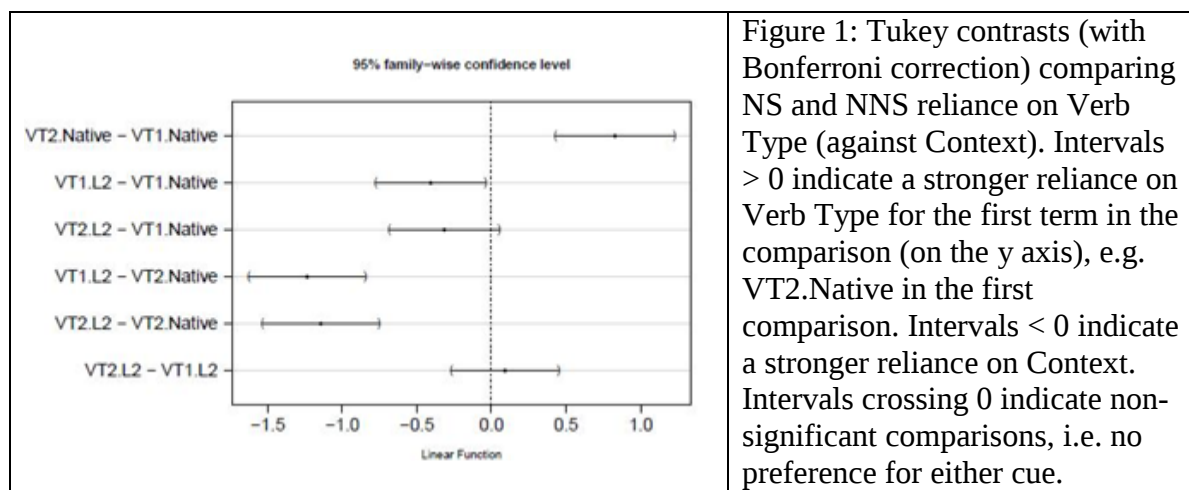
Results: Analysis was by Generalised Linear Model. (i) Like NS, NNS allow long-distance binding more with VT3 compared with VT1 ($z = 2.86$; $p = 0.004$) and more with VT2 compared with VT3 ($z = 7.99$; $p < 0.0001$). (ii) NNS also allow long-distance binding more in contexts that require it ($z = 14.24$; $p < 0.0001$). However, long-distance binding is allowed less by NNS than NS ($z = -6.77$; $p < 0.0001$), and this only improves moderately with proficiency ($z = 1.83$; $p = 0.067$). To investigate question (iii), we modelled Cue Choice as a dependent variable (i.e. Context or Verb Type) as a function of Conflict (i.e. long-distance interpretation required by the verb but local interpretation required by the context, or vice versa). VT3 was excluded as it does not impose verb type restrictions. As shown in the Figure and the Table, NS rely significantly more on Verb Type than Context (most markedly with VT2). NNS rely more on the context with both verb types.

Conclusion: NNS are sensitive to both cues, and able to allow a long-distance interpretation at least some of the time. However, at the proficiency levels investigated here, they remain more sensitive to contextual cues than verb-semantic cues. The results are compatible with a probabilistic approach to parameter resetting.

- (1) a. Zhangsan_i rang Lisi_j tanbai ziji_{i/*j}.
 NAME ask NAME confess self
 ‘Zhangsan asks Lisi to confess himself.’
 b. Zhangsan_i rang Lisi_j huida ziji_{i/*j}.
 NAME ask NAME answer self
 ‘Zhangsan asks Lisi to answer him.’
 c. Zhangsan_i rang Lisi_j zhaogu ziji_{i/j}.
 NAME ask NAME take care of -self
 ‘Zhangsan asks Lisi to take care of him/himself.’
- (2) Lisi dui Zhangsan yinman zhenxiang.
 Lisi to Zhangsan conceal fact
 ‘Lisi conceals a fact to Zhangsan.’

Verb Type	Cue	Native	Non-native
VT1	Context	48%	58%
	Verb Type	52%	42%
VT2	Context	28%	56%
	Verb Type	72%	44%

Table 1: Cue choice in case of conflict between the two cues



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