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## A Novel Feature of the complementizer system in Cabo Verdean Creole

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**Synopsis:** This paper argues that the complementizer system in Cabo Verdean Creole (CVC) is a novel system, which cannot be solely derived from the source languages such as Wolof and European Portuguese (EP), and that the complementizer in CVC is recombined (cf. Aboh 2015; 2020) and becomes a novel functional heads.

**Wolof:** Wolof, which is one of the substrates of CVC, shows what's called the null form *wh*-expressions. Torrence (2013) proposes that null *wh*-phrase moves to the [spec,CP] in Wolof and the distribution of the -u form (complementizer) depends on what kind of *wh*-phrase it is (e.g., animacy) and where it is from (i.e. the syntactic position).

- |   |  |
|---|--|
| <p>(1) K-u ñu gis?<br/>         CL-u 3PL see<br/>         ‘who did they see?’</p> | <p>(2) L-u ñu gis?<br/>         CL-u 3PL they see<br/>         ‘What did they see?’ (Torrence 2013: 164)</p> |
|---|--|

Wolof also shows that the complementizer agreement is obligatory for the highest CP clause, while agreement in the lower CPs is optional (following Torrence (2013), we assume that *k-u* agrees with the null *wh*-element (which is represented as *wh<sub>ki</sub>* in the examples below), whereas *l-a* does not).

- (3) Optional complementizer agreement in Wolof
- |   |   |
|---|---|
| <p>a. [ <i>wh<sub>ki</sub></i> k-u Kumba wax [ne k-u Isaa defe [ne k-u Maryam dóór <i>t<sub>ki</sub></i>]]]?<br/>         [ WH CL-u kumba say [that CL-u isaa think [that CL-u Maryam dóór <i>t<sub>ki</sub></i>]]]<br/>         ‘Who did Kumba say that Isaa thought that Maryam hit?’</p>                               | <p>b. [ <i>wh<sub>ki</sub></i> k-u Kumba wax [ne l-a Isaa defe [ne l-a Maryam dóór<br/>         [ WH CL-u kumba say [that XPL-COP isaa think [that XPL-COP Maryam dóór<br/> <i>t<sub>ki</sub></i>]]]]]?<br/> <i>t<sub>ki</sub></i>]]]<br/>         ‘Who did Kumba say that Isaa thought that Maryam hit?’</p> |
| <p>c. [ <i>wh<sub>ki</sub></i> k-u Kumba wax [ne l-a Isaa defe [ne k-u Maryam dóór <i>t<sub>ki</sub></i>]]]?<br/>         [ WH CL-u kumba say [that XPL-COP isaa think [that CL-u Maryam dóór <i>t<sub>ki</sub></i>]]]<br/>         ‘Who did Kumba say that Isaa thought that Maryam hit?’ (Torrence, 2013, 258,(66))</p> |   |

**The complementizer system in EP:** In the case of a *wh*-object sentence (see (4)), a *wh*-phrase is fronted with a cleft form and the complementizer is realized as *que*. I assume here with Kato (2013) that the *wh*-formation involves a cleft formation, as in (4).

- |   |   |
|---|---|
| <p>(4) O que é que ele disse?<br/>         DEF that is that he said<br/>         ‘What did he say?’</p> | <p>(5) Quem viu João<br/>         who saw John<br/>         ‘Who saw John?’ (Kato 2013)</p> |
|---|---|

In (5), the *wh*-phrase is fronted without a complementizer being realized.

**CVC:** In CVC, *Ma* obligatorily appears after illocutionary verbs, while the other CVC complementizer, *ki* cannot.

- (6) João fra-m ma/\*ki/\*∅ Maria kupra libru.  
 John told+me C Maria bought book  
 ‘John told me Mary bought the book’ (Baptista and Obata 2015: 171, (32))

However, when the *wh*-phrase is fronted, the complementizer is realized as *ki*, not as *ma*.

- (7) Kenhi ki fra-m kuze ki/\*ma/\*∅ Maria kunpra?  
 who C told+me what C Maria bought  
 ‘Who told me what Mary bought?’ (Baptista and Obata 2015: 171, (33))

Baptista and Obata (2015) argue that “[t]he complementizer *ma* changes to *ki* iff a *wh*-phrase is interpreted at its Spec position; in other words, if a *wh*-phrase is interpreted in the embedded Spec-CP, then *ki* must appear” (Baptista and Obata 2015: 172). In the matrix clause, the complementizer *ki* is realized for both *wh*-subject/object extraction, as a result of agreement with the complementizer.

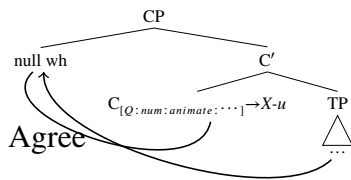
(8) Kenhi ki odja João? who ki see João 'Who saw João' (Baptista and Obata 2015: 158, (1a))	(9) Kuze ki João odja? what ki João see 'What did you say' (Baptista and Obata 2015: 158, (2a))
--	--

	Wolof	CVC	EP
Wh-fronting with a cleft form	yes	no	yes
An agreed complementizer form	<i>k-u/l-u</i> , etc.	<i>ki</i>	<i>que</i>
Agreement optionality	yes (for embedded clauses)	no	no

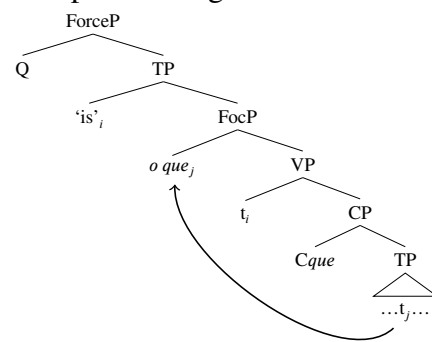
Table 1: The summary of the complementizer agreement system in Wolof, EP, and CVC

**Proposal:** Following Aboh's (2015;2020) approach that features in Creole can emerge through the recombination of features from source languages, we argue that feature recombination takes place on the C head, and CVC develops its own unique complementizer agreement system. Complementizer agreement also present in Wolof, but in CVC an overt wh-phrase has to be in [spec,CP] to agree with the complementizer *ki* (Baptista and Obata 2015). The syntactic structures for Wolof, EP, and CVC are shown below.

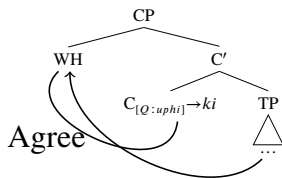
(10) Wolof



(12) European Portuguese



(11) CVC



Wolof, C has more specific features in terms of the number-feature and the animate-feature, and the morphological realization of the complementizer depends on the type of null wh-phrase (and where the wh-phrase is base-generated) where X in X-u represents the variable. In EP, I assume with Kato (2013) that wh-fronting with *que* is a cleft formation where the wh-phrase moves to [spec, FocP] (a part of the left periphery, Rizzi 1997). In this case, it is not clear whether there is an element that agrees with *que*. In CVC, there is less specification of the features on C since the morphological realization of the complementizer is always *ki* whenever an overt wh-phrase is in its [spec,CP], though the phi-features still have to agree with the wh-phrase. The nature C in CVC, therefore, cannot come from solely from Wolof nor EP, which leads us to the idea that the functional head C is recombined, which results in a novel functional feature.

**Selected References:** Aboh, E.O. 2015. The emergence of hybrid grammars: Language contact and change. CUP. || Baptista, M and M. Obata. 2015. Complementizer-Alternation in Creole Languages: New Evidence for Spec-Head Agreement. PAPIA, São Paulo, 25(2), 155-176. || Kato, M.A. 2013. Deriving “wh-in-situ” through movement in Brazilian Portuguese, 175-192. In (eds.) Camacho-Toboada et al. Information structure and agreement, 175–192. Amsterdam: John Benjamins. || Torrence, H. 2013. Clause Structure of Wolof: Insights into the Left Periphery. John Benjamins.

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## A Parameter-free Underspecification Approach to Complementizer Agreement

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**Synopsis:** The issues of linguistic variation and parametric variation have not been explored comprehensively in Minimalism (see e.g. Chomsky 1995; Chomsky et al. 2019). Two partially distinct central views of linguistic variation in Principles & Parameters/Minimalism are (i) variation comes from the lexicon (aka the Borer-Chomsky conjecture, cf. Baker 2008) or (ii) variation is spelled out through externalization (the Berwick-Chomsky conjecture, Berwick and Chomsky 2016). In this paper, we explore a third view of linguistic variation, invoking underspecification of rule ordering in narrow syntax, based on Obata et al. (2015) and related work. We compare three languages: Brazilian Portuguese (BP) and two Romance-based creoles, Haitian Creole (HC), Cabo Verdean Creole (CVC), regarding complementizer (C) realization in *wh*-questions, which has been analyzed as related to C agreement. Whereas HC and CVC require an overt complementizer in *wh*-questions in some cases, BP shows a pattern of widespread optionality. We argue that the varying systems can be accounted for by rule-ordering underspecification in the grammar.

**The complementizer *ki* in HC and CVC:** In HC and CVC, the realization of the complementizer *ki* varies depending on the type of *wh*-question. *ki* in HC is blocked with object *wh*-movement (2), but required with subject *wh*-questions (1) (Takahashi and Gračanin-Yuksek 2008, henceforth T&Y).

- |   |                                    |
|---|------------------------------------|
| (1) <i>wh</i> -subject extraction in HC (2) | <i>wh</i> -object extraction in HC |
| Kilés *(ki) te wé Mari?                     | Kilés Mari (*ki) te wé?            |
| who COMP ANT see Mari                       | what Mari ANT see'                 |
| 'Who saw Mari?' (T&Y:229,(14b))             | Who did Mari see?' (T&Y:231,(16a)) |

T&Y propose that *when the complementizer agrees with a single goal in both wh- and phi-features, the complementizer ki is morphologically realized*. Thus, in (1), C agrees with the *wh*-subject in both *wh* and *phi*-features. In (2), on the other hand, C agrees with the subject only in *phi*-features, but with *wh*-object in *wh*-feature (assuming standard probe-goal c-command locality and interventions.)

Obata et al. (2015) assume that CVC follows T&Y's generalization, though the pattern of morphological realization of *ki* is different from HC, in that *ki* in CVC is morphologically realized in both overt *wh*-subject and *wh*-object movement, as shown in (3)-(4).

- |  |   |
|--|---|
| (3) <i>wh</i> -subject extraction in CVC | (4) <i>wh</i> -object extraction in CVC   |
| Kenhi *(ki) odja João?                   | Kuze *(ki) nhos odja?                     |
| who COMP see João                        | what COMP you see                         |
| 'Who saw João?' (Obata et al. 2015:5)    | 'What did you see?' (Obata et al. 2015:6) |

Obata et al. (2015) argue that this is because the rule ordering in CVC is different from HC; the timing of Agree is crucial. In (3), the pattern is the same as HC in (1); C agrees with the *wh*-subject with respect to both *wh*- and *phi*-features. However, in the case of object *wh*-movement (4), the rule ordering is different from HC in (2); (i) The *wh*-object first moves to the edge of the *v*-phase and (ii) due the *wh*-object being the closest goal in the edge of *vP*, C agrees with the *wh*-object in both *wh*- and *phi*-features, which results in the realization of *ki*. Thus, the *wh*-object moves first and becomes the closest goal when C undergoes Agree.

**The optionality of complementizer agreement in Brazilian Portuguese (BP):** Unlike CVC, BP shows another relevant pattern. The complementizer is optionally realized in both subject and object overt *wh*-movement questions.

- |   |  |
|---|--|
| (5) <i>wh</i> -subject extraction in BP | (6) <i>wh</i> -object extraction in BP |
| Quem (que) viu o João?                  | Quem (que) você viu?                   |
| Who (COMP) saw the João?                | who (COMP) you saw                     |
| 'Who saw João?'                         | 'Who did you see?'                     |

Two derivations are possible in each case in BP: in the *wh*-object extraction case (6), either (i) C probes down and agrees only in phi-features with the subject in [Spec, TP] and with the lower *wh*-object in *wh*-feature (so, there is no overt realization of the complementizer, the same as the HC pattern in (2)); or (ii) C agrees with the *wh*-object at the edge of the *v*-phase in both *wh*- and *phi*-features, before subject raising to [Spec, TP], leading to the realization of *que*; this matches the CVC pattern in (4). Thus, BP can vary between both the HC and CVC derivation patterns. When *wh*-subject extraction takes place in BP (5), there are also two possible derivations: either (i) subject *wh*-movement to [spec,TP] takes place first, followed by Agree with C, yielding the same overt C pattern as HC and CVC subject overt *wh*-movement (1-3); or (ii) subject *wh*-movement takes place to the *v*-phase edge, then feature inheritance takes place that splits the phi-features below the *wh*-phrase, which results in no realization of *que*, since C agrees with the subject only in *wh*-feature.

**Extension 1: *wh in-situ* in BP** the approach we propose also explains the lack of overt complementizer *que* in *wh in-situ* in BP.

- (7) Você viu quem?  
 you saw who  
 ‘Who did you see?’ (Kato 2013: 178,(7b))

In an object *wh*-in-situ question, C finds the subject to value the u-phi-features, so C agrees with the object *wh*-phrase only regarding *wh*-feature, which again results in non-realization of the complementizer (subject *wh*-in-situ is a variation of the *wh*-subject pattern in (5)).

**Extension 2: *wh*-adjuncts in BP** also show the optional complementizer *que*.

- (8) Desde quando (que) você gosta dele?  
 Since when (that) you like him  
 ‘Since when do you like him?’

However, *wh*-adjuncts do not have phi-features. We propose this modified generalization that accounts for this and the previous patterns:

- (9) *When C only agrees with a single element (meeting the requirement that it will agree in all features with a single goal), C will be morphologically realized.*

Based on this generalization, two derivations are again possible in BP: either (i) C agrees with the subject in terms of phi-features, and C agrees with the *wh*-adjunct only in *wh*-feature, yielding no realization of *que*. or (ii) phi-feature inheritance takes place from C to T, and C agrees directly only with the *wh*-adjunct (in *wh*-feature), satisfying generalization (9), therefore *que* is overtly realized.

Interestingly, CVC also shows a pattern in which the realization of *ki* with adjunct-*wh* words is optional, similar to BP, but unlike all argument *wh*-questions in CVC (3-4).

- (10) Undi (ki) bu bai?  
 where COMP you go  
 ‘Where did you go?’ (Obata et al. 2015: 5, fn8)

The derivations for both CVC options in (10) follow the same pattern as BP *wh*-adjuncts (8), so we do not go over detailed steps here.

Given the analyses above, different patterns of obligatory realization, obligatory omission as well as optionality in the realization the complementizers are accounted for under a rule-ordering approach to C agreement that does not invoke parameters, lending support to this alternative approach to syntactic variation.

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## A PUZZLING CONSTRAINT ON ITALIAN ADJECTIVES

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**§1. Background.** Cinque (2010) provided evidence that the main partition for adjectives is that between predicative and non-predicative adjectives: “predicative adjectives” are those that can serve as predicates of copular sentences, whereas “non-predicative adjectives” are those that cannot do so: e.g., *misteriosi* but not *principali* is a predicative adjective in Italian, given the contrast between \**I personaggi del romanzo sono principali* and *I personaggi del romanzo sono misteriosi* (‘The characters of the novel are \*main/ <sup>ok</sup>mysterious’).

**§2. The puzzle.** When a PP contains an NP qualified by an AP, AP can be freely omitted, as in (1a) (where the NP *personaggi* is qualified by the AP *misteriosi*), or can be a non-predicative adjective, as in (2a). Consider now the syntactic construction which, in traditional grammars, is known as the “complement of quality”; an example of this construction is *dai personaggi misteriosi* in (1b). Indeed, when an AP is embedded within the complement of quality, that AP cannot be omitted, and must be a predicative adjective. This point is illustrated in (1b) and (2b).

- |   |           |
|---|-----------|
| (1a) Sono spaventato dai personaggi (misteriosi).<br>am scared <i>da</i> .the characters mysterious (= ‘I am scared by mysterious characters’).         | [Italian] |
| (1b) Il romanzo <u>dai personaggi</u> *(misteriosi).<br>The novel <i>da</i> .the characters mysterious (= ‘the novel whose characters are mysterious’). | [Italian] |
| (2a) Sono spaventato dai personaggi principali.<br>am scared <i>da</i> .the characters main (= ‘I am scared by main characters’).                       | [Italian] |
| (2b) *Il romanzo <u>dai personaggi principali</u> .<br>The novel <i>da</i> .the characters main.  | [Italian] |

Thus, despite being superficially identical to run-of-the-mill PPs headed by the preposition *da*, the Italian complement of quality contrasts with run-of-the-mill PPs in that the adjective contained in the complement of quality is more constrained. Where does this more constrained nature of the complement-of-quality-internal adjective come from?

**§3. Structural representation.** From the semantic point of view, the complement of quality *dai personaggi principali* ((1b)) consists of a nominal qualificand (*personaggi*) and an adjectival qualifier (*misteriosi*); moreover, *romanzo* ‘novel’ is interpreted as the possessor of *personaggi* ‘characters’ in (1b): (1b) is saying that some characters are zonally included in, or part of, a given novel. Following den Dikken (2006:10-12), I take the semantic notions “qualificand” and “qualifier” to be equivalent to the syntactic notions “subject” and “predicate”, respectively. In this way, *personaggi* is a subject, and *misteriosi* is a predicate in (1b). Accordingly, *romanzo* results as being the possessor of the complement-of-quality-internal subject *personaggi* in (1b). Now, the relations of predication and possession are translatable into configurational terms. Thus, the possessor-possessum relation corresponds to a phrase whose head is the possessum, and whose specifier is the possessor, such as in [<sub>NP</sub> your [<sub>N'</sub> [<sub>N°</sub> book]]] (see den Dikken 2015 for a more refined configurational codification of possession). On the other hand, the subject-predicate relation corresponds to a small clause (SC; see Moro 2019). In this way, the complement of quality *dai personaggi misteriosi* – in which *misteriosi* is the predicate, *personaggi* is the corresponding subject, and *romanzo* is the possessor of the subject *personaggi* – is structurally represented as in (3) at the beginning of the derivation.

- (3) [<sub>SC</sub> [<sub>NP\*</sub> romanzo [<sub>N\*</sub> [<sub>N\*°</sub> personaggi]]] [<sub>AP</sub> misteriosi] ].

In accordance with the theory of Dynamic Antisymmetry (Moro 2000) and the Labeling Algorithm (Chomsky 2013), (3) may yield two different structures, one of which is (4), where Spec-LP is filled by the complement-of-quality-internal predicate *misteriosi*.

- (4) [<sub>LP</sub> [<sub>AP</sub> misteriosi]<sub>i</sub>] [<sub>L'</sub> L° [<sub>SC</sub> [<sub>NP\*</sub> romanzo [<sub>N\*</sub> [<sub>N\*°</sub> personaggi]]] <sub>t<sub>i</sub></sub> ]]].

I take  $L^\circ$  to be a silent linking element with verb-like properties. In order to capture the fact that *romanzo* is not contained within the complement of quality *dai personaggi principali* in (1b), I assume that *romanzo* moves from NP\* (i.e., the phrase headed by *personaggi*) to an LP-external position in the course of the derivation leading from (4) to *dai personaggi misteriosi*. What exactly triggers this movement is left open for discussion: this movement may be enforced by the Labeling Algorithm, which requires any specifier of a non-criterial head to be empty (Rizzi 2016), or may be related to Case, since *personaggi* fails to be Case-marked in Spec-NP\* (no structural Case is assigned to Spec-NP\* in (5)). Whatever the trigger for this movement, *romanzo* moves to the specifier of the preposition *da*, which merges with LP, as indicated in (5) (I am abstracting away from the determiner *il* ‘the’ which introduces *personaggi* in (1b))

(5) [<sub>PP</sub> [<sub>NP</sub> *romanzo*]<sub>j</sub> [<sub>P'</sub> *da* [<sub>LP</sub> [<sub>AP</sub> **misteriosi**]<sub>i</sub> [<sub>L'</sub>  $L^\circ$  [<sub>SC</sub> [<sub>NP\*</sub>  $t_j$  [<sub>N\*</sub> [<sub>N\*</sub> *personaggi*]]]  $t_i$  ]]]]]].

Ordinarily, *da* translates English *from* and *by* and conveys the meaning “zonally included in” or “part of”, notated as “ $\subseteq$ ” (Manzini 2017; Rugna and Franco 2022). However, in (1b), *da* clearly does not convey the meaning that the novel at stake is included in some mysterious characters; on the contrary, the novel includes (“ $\supseteq$ ”) those characters in (1b). Rather than taking *da* to convey two contradictory values (i.e., “ $\subseteq$ ” as well as “ $\supseteq$ ”), I submit that *da* has no semantic load in (5) (along the lines of den Dikken 2006; Moro 2000:52-53), the possessive relation between *romanzo* (possessor) and *personaggi* (possessum) being structurally codified by base-generating *romanzo* in the Spec of *personaggi*. I take (5) to be the structural representation of *il romanzo dai misteriosi personaggi*. The order in (1b), namely *dai personaggi misteriosi*, is derived from (5) via the movement – typical of Romance syntax (Cinque 2010) – of a noun (*personaggi*) across an adjective (*misteriosi*). Both *il romanzo dai personaggi misteriosi* and *il romanzo dai misteriosi personaggi* are well-formed in Italian.

**§4. Subjacency à la Cinque.** The contrasts in (1)-(2) can be derived by applying the Subjacency Condition (“Subjacency” for short) to the structural representation in (5). Consider how. As shown by Moro (1997: Ch. 2), a consequence of Subjacency à la Cinque (1990:40-43) is that extraction from a SC-internal subject  $\alpha$  is only possible when  $\alpha$  is in the domain of a verb-like head that is in a local relation with the selector of  $\alpha$ . Moro illustrated this point by means of the contrast between \**Which wall do you think the cause of the riot was a picture of?* ((6)) and *Which wall do you think there was a picture of?* ((7)). The DP subject *a picture of* is in the domain of the copula (a verb-like head) in (6)-(7), while *there* and the NP *cause of the riot* are the selectors (qua predicates) of the DP subject. Crucially, the copula is in a local relation with *there* in (7), but not with the NP *cause of the riot* in (6). Therefore, the extraction of *which wall* from the DP subject violates Subjacency à la Cinque in (6), but not in (7).

(6) ... [<sub>DP</sub> *the* [<sub>NP</sub> **cause of the riot**]]  $T^\circ_{\text{copula}}$  [<sub>SC</sub> [<sub>DP</sub> *a picture of t* ] ...

(7) ... [**DP there**]  $T^\circ_{\text{copula}}$  [<sub>SC</sub> [<sub>DP</sub> *a picture of t* ] ...

**§5. Conclusion.** Going back to (5), *misteriosi* is the selector (qua predicate) of the SC-internal subject NP\*; moreover, the relation between *misteriosi* and  $L^\circ$  in (5) is as local as that between *there* and the copula in (7). Therefore, NP\* results as being in the domain of a verb-like head ( $L^\circ$ ) that is in a local relation with the selector of NP\* in (5). However, when *misteriosi* is dropped or replaced with a non-predicative adjective like *principali*, there is no longer a selector of NP\* with which  $L^\circ$  may enter a local relation (selection of subjects being the preserve of predicates; see Moro 1997:115; 2000:112). Thus, the extraction of *romanzo* from NP\* complies with Subjacency when *misteriosi* is present, but violates Subjacency when *misteriosi* is dropped or replaced with *principali*. In this way, the contrasts in (1)-(2) are reduced to Subjacency.

Chomsky 2013 *Lingua* 130. Cinque 1990 *Types of  $\bar{A}$ -dependencies*. Cinque 2010 *The syntax of adjectives*. den Dikken 2006 *Relators and Linkers*. den Dikken 2015 In É. Kiss, Surányi and Dékány, eds. Manzini 2017 In LaCara, Moulton, and Tessier, eds. Moro 1997 *The Raising of Predicates*. Moro 2000 *Dynamic Antisymmetry*. Moro 2019 *Phil Trans R Soc B* 375(1791). Rizzi 2016 *The Linguistic Review* 33(1) Rugna and Franco 2022 *Isogloss* 8(5).

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## A sociolinguistic approach to bilingual adaptations: Patterns of variation in bidialectal Italian communities

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In the last 100 years, bilingualism has been the focus of an ever-growing stream of research, with studies inquiring about both its pure linguistic dimension and its cognitive outcomes. Regarding the latter, a strong debate is still ongoing and concerns whether speaking (or signing) more than one language could be advantageous or disadvantageous for our cognitive domains (Feldman & Shen, 1971; Paap et al., 2015, 2021; Bialystok & Craik, 2022 *inter alia*). However, although research on bilingualism has continued growing, some aspects of this complex experience, such as the role of specific social or sociolinguistic factors, have been less examined. Additionally, most research has focused on bilingual populations of standard languages, with non-standard varieties and minority languages remaining relatively understudied (Garraffa et al., 2017; Leivada et al., 2013 *inter alia*).

With respect to non-standard varieties, Italy provides a breeding ground of investigation. Indeed, besides the so-called “Standard Italian”, the Italian linguistic landscape is characterized by a multitude of non-standard linguistic varieties, among which Italian dialects play a major role. From a structural point of view, these dialects are independent from Standard Italian, since they developed directly from Latin and present their own formal features (Loporcaro, 2009). However, historical and social developments have led to a situation of diglossia where, from the 19th century onwards, Italian dialects tend to be used in limited communicative settings, while Standard Italian has the linguistic monopoly (Berruto, 1987).

The present study aims to contribute to research on bilingual language processing, focusing on Italian bidialectal populations. Our experiments use an acceptability judgement task to compare three linguistic groups in spotting Subject-Verb agreement attraction errors. The three groups include Italian monolingual speakers (n=27), Italian-Pavese bidialectal speakers (n=26), and Italian-Agrigentino bidialectal speakers (n=25). Pavese and Agrigentino are two Italian dialects spoken in Lombardy and Sicily respectively, which present huge differences in terms of structural properties, geographical distribution, and sociolinguistic features. Studying bilingual speakers of non-standard languages could uncover the role of specific social and sociolinguistic factors in the bilingual experience by doing justice to unstudied bilingual populations. Our main research questions are the following: (i) Do monolingual and bidialectal speakers present any difference in the processing of Subject-Verb agreement attraction errors? (ii) Do bidialectal speakers process the linguistic input differently depending on the language in which it is presented? (iii) If there are any between-group differences in monolingual and bidialectal language processing, can they be traced back to specific social and sociolinguistic factors?

To answer these research questions, we asked our three linguistic groups to perform a timed auditory acceptability judgement task. Experimental stimuli consisted of ungrammatical sentences with Subject-Verb agreement mismatches where subject and verb were disrupted by plural NPs distractors. The same experimental stimuli were presented in Standard Italian to monolinguals and bidialectals, but Italian-Pavese and Italian-Agrigentino participants completed the exact same task also in their own dialects. Acceptability judgements (AJs) were elicited on a 5-point Likert scale and reaction times were recorded. Besides the AJs task, participants completed a granular sociodemographic questionnaire (a modified version of LSBQ, Anderson et al. 2018) where detailed

demographic information was asked, enabling us to compile a fine-grained depiction of their linguistic profiles (i.e., in terms of language use, language proficiency, language trajectory, etc.) and of their linguistic attitudes towards their spoken languages. Preliminary results show statistically significant differences both in the between-group and within-group comparisons. Monolinguals showed a higher percentage of selecting the lowest value of the Likert scale (1) for judging ungrammatical stimuli compared to the bidialectal groups. Italian-Pavese respondents, in turn, recorded higher rates of the lowest value with respect to Italian-Agrigentino bidialectals. Interestingly, regarding the maximum value (5) recorded for ungrammatical stimuli, the opposite tendency was observed: Italian-Agrigentino speakers reported the highest rates, followed by Italian-Pavese bidialectals and monolinguals. In general, for the bidialectal groups, rates of ungrammatical stimuli appeared distributed in medium-low values of the Likert scale, while monolinguals' AJs were polarized into the minimum value, showing less tolerance for grammatical errors. Concerning within-group comparisons, both bidialectal groups tended to accept ungrammatical stimuli more easily in their own dialects than in Italian, recording lower percentages of the minimum value (1) and higher percentages of the maximum value (5) for ungrammatical sentences in dialect.

Initial findings attest to the impact of bilingual experience on language processing. Besides differences between monolinguals and bidialectals, further variation characterizes the two Italian bidialectal groups. This result underscores the importance of describing the bilingual/bidialectal experience by providing as many social and sociolinguistic details as possible. Linking experimental results to detailed sociolinguistic profiles can only be achieved by considering the intricate mosaic of sociolinguistic variables which shape different bilingual experiences.

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INTRO: Work on allocutive agreement (ALLAGR) patterns has shown significant variability with respect to several aspects related to clause type, agreement restrictions, and the general nature of obligatory implementation. In this abstract, I propose a novel Agree-based account for ALLAGR in Galician (GALLAGR). Taking an *interaction/satisfaction* model approach (Deal 2015, 2021, *a.o.*), I show that constraints on ALLAGR may be syntactically predicted based on the fact that GALLAGR may not surface if an addressee [ADDR] feature surfaces on a DP in the c-command domain of the probe (above TP). I claim that valuation of this feature prohibits its spell-out at PF and that GALLAGR surfaces as a Last Resort strategy only after valuation has failed.

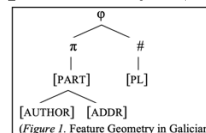
DATA: Galician ALLAGR shares the same morphological identity as 2<sup>nd</sup>-person datives in both singular and plural forms (*che*, *vos*), as well as 3<sup>rd</sup>-person ‘formal’ forms (*lle*, *lles*). Unlike most ALLAGR phenomena (Antonov 2015), Galician does not show a specification for gender. Galician pairs with Tamil (McFadden 2020) in the fact that it may appear in both matrix and embedded clauses (1), unlike Basque (Haddican 2018) and Korean (Pak 2017). It may also appear in both clauses within the same utterance, owing to a one-agreement-morpheme-per-clause restriction (2). Within the Galician clitic paradigm, GALLAGR distinguishes itself from other dative uses in that it may combined with any verb type (even those ruled out with ethical datives; cf. 3a-b). It may also combine with any number of argumental and non-argumental clitics, showing no PCC effect (4).

- (1) a. Non **vos** son a mellor persoa pra isto  
NEG ALLAGR be.PRS.1SG the best person for this  
‘I’m not the best person for this.’  
b. Xurastedes que **che** tiña xeito  
swear.PST.2PL COMP ALLAGR have.IMPF.3SG manner  
‘You swore that it made sense.’
- (2) Sabía-**lles** que **lles** era importante cando **lles** veu.  
know.IMPF.1SG-ALLAGR COMP ALLAGR be.IMPF.3SG important when ALLAGR come.PST.3SG  
‘I knew that it was important when he came along.’
- (3) a. Hai-**che** unhas moi boas  
be.EXIST.3SG-ALLAGR some very good  
‘There are some really good ones.’  
b. \*Hai-**me** moito traballo por facer  
be.EXIST.3SG-CL<sub>DAT</sub>.1SG much work for do.INF  
Intended: ‘There is a lot of work to do (and it’s bogging me down).’
- (4) Áa achegando-se-**che**-me-lle o lume ó meu neno  
go.IMPF.3SG arrive.PROG-CL<sub>3,REFL</sub>-ALLAGR-CL<sub>DAT</sub>.1SG-CL<sub>DAT</sub>.3SG the fire DAT my boy  
‘The fire was closing in on my boy (and it affected me).’

Like other ALLAGR phenomena, GALLAGR may not surface if any argument (subject, direct object, dative) is 2<sup>nd</sup>-person.

- (5) a. Intentas(\*-**che**) amañar dabondo nesa relación  
want.PRS.2SG-(ALLAGR) fix.INF too-much in-that relationship  
‘You want to fix too much in that relationship.’  
b. Sacaron(\*-**che**)-te desa merda axiña  
remove.PST.3PL-(ALLAGR)-CL<sub>ACC</sub>.2SG of-that shit soon  
‘They got you out of that mess quickly.’  
c. Din(\*-**che**) as moegas a ti pra faceres viño  
give.PST.1SG-(ALLAGR) the baskets DAT you<sub>DAT</sub> COMP make.INF.2SG wine  
‘I gave you the baskets to make wine.’

**PROPOSAL:** Many approaches to ALLAGR claim that this phenomenon is oriented in the C-domain with variation regarding its exact position coming from its relationship to other agreement morphemes. I follow this idea, claiming that GALLAGR is found in a functional projection directly related to 2<sup>nd</sup>-person (ADDR<sup>o</sup>; cf. Myler 2017) above TP, eventually clustering with other clitic morphemes on  $f^o$  (or Fin<sup>o</sup>; cf. Uriagereka 1995, Gupton 2014, Author 2021, *a.o.*). Following an *interaction/satisfaction* approach to Agree (Deal 2015, 2021, *a.o.*), I claim that the satisfaction feature for the ALLAGR probe is [ADDR], owing to an elaborate feature geometry (Harley & Ritter 2002, *a.o.*; Figure 1). When this probe is valued by a DP bearing [ADDR], GALLAGR may not surface (or is spelled-out as  $\emptyset$ ). I claim there are two ways in which this valuation may occur, block ALLAGR. In a scenario in which either the direct object (5b) or dative (5c) argument is 2<sup>nd</sup>-person, [ADDR] is valued on a low functional head (F<sup>o</sup>; cf. Cardinaletti & Shlonsky 2004, Wood 2015, *a.o.*) above  $v^o$  which controls agreement restrictions in PCC contexts. I claim that any feature valuation that occurs on this head bleeds Agree with the higher ADDR<sup>o</sup>, owing to the lack of GALLAGR in (5b-c). This type of derivational mechanism may be thought of as a version of *Cyclic Agree* (Béjar & Rezac 2003, 2009) in which the valuation of a feature at one stage in the derivation bleeds Agree with another further up in the phrase marker. The difference here is that this inherently entails head-to-head movement as shown in Bány's (2015) account of the *Inverse Agreement Constraint* in which the valuation of a particular person feature on  $v^o$  determines what further agreement operations may take place once  $v^o$  adjoins to T<sup>o</sup>. In this instance, if [ADDR] is valued on F<sup>o</sup> low in the phrase marker, this valuation serves to saturate the  $u$ [ADDR] probe on  $f^o$ , resulting in the lack of ALLAGR at PF. In the case of (5a), it is the subject (or *pro*) in [Spec, T<sup>o</sup>] that values the  $u$ [ADDR] probe that c-commands it, the same outcome as predicted above for 2<sup>nd</sup>-person objects.



Differently from a *Cyclic Agree* account, however, I claim that when the probe on ADDR<sup>o</sup> does not find a viable goal to agree with, Agree fails without a derivational crash (Preminger 2014). Additionally, it is under these circumstances that GALLAGR may be spelled-out as a Last Resort phenomenon in the specifier of ADDR<sup>o</sup>. As the final landing spot for clitics in Galician is on  $f^o$ /Fin<sup>o</sup>, the ALLAGR clitic would be the last to merge. I follow Deal (2021) in claiming that clitic order is templatic (6), an observation that dates back to the original claims in Bastida (1976) for Romance clitics. This can be seen comparing the linear order of GALLAGR (4) with its 2<sup>nd</sup>-person accusative counterpart (7), showing that argumental and non-argumental clitics alike share the same templatic slot in (6).

(6) *Person-based Romance clitic template* : || SE – 2 – 1 – 3 ||

(7) Presentou-te-me-lle

present.PST.3SG-CL<sub>ACC.2SG</sub>-CL<sub>DAT.1SG</sub>-CL<sub>DAT.3SG</sub>

‘She presented you to me (and it affected him).’

An Agree-based proposal in the nature outline above accounts for the well-known syntactic restrictions of cross-linguistic ALLAGR varieties and provides the necessary explanatory adequacy that links the surfacing of ALLAGR with its exclusion in the presence of 2<sup>nd</sup>-person arguments elsewhere in the syntax unlike previous proposals (Alok & Haddican 2022, Haddican 2019, Huidobro 2022, McFadden 2020, *a.o.*). In addition, it provides further evidence for phenomena that rely on Agree across multiple functional heads whose valuation at one stage or another may bleed agreement with a higher probe.

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## Activation levels: A Fresh perspective on French *wh in-situ*

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This corpus-based paper studies the evolution of French *wh*-interrogatives in micro-diachrony (1970s-2010s). By demonstrating a significant increase in the overall proportion of *in-situ* constructions and of context-free *in-situ*, we demonstrate that what counts for the understanding of *in-situ* is not ‘presupposition’ but ‘context’, *contra* much previous work on the topic.

**The phenomenon.** There exist (at least) 4 different strategies to form single-*wh*, mono-clausal, matrix partial questions in Hexagonal French; these are illustrated in (1).

- (1)
- |    |                     |               |            |         |                            |
|----|---------------------|---------------|------------|---------|----------------------------|
| a. | <b>Où</b>           | va-t-il?      |            |         | ex-situ, VS                |
|    | where               | go-prs-3sg-he |            |         |                            |
| b. | <b>Où</b>           | il            | va?        |         | ex-situ, SV                |
|    | where               | he            | go-prs-3sg |         |                            |
| c. | <b>Où</b>           | est-ce        | qu’il      | va?     | ex-situ, <i>est-ce que</i> |
|    | where               | est-ce        | que        | that=he | go-prs-3sg                 |
| d. | Il                  | va            | <b>où?</b> |         | in-situ, SV                |
|    | he                  | go-prs-3sg    | where      |         |                            |
|    | ‘Where does he go?’ |               |            |         |                            |

Interpretationally, all question-formation strategies in (1) can be used as requests for information, i.e., as information-seeking questions. These uses signal ignorance on a certain topic, and consequent search for information (as opposed to, minimally, rhetorical and echo questions, which do not require a genuine answer). Here, we focus exclusively on information-seeking occurrences. Syntactically, despite the different ways in which the finite verb and the subject interact in the questions in (1) (VS, SV, *est-ce que* + SV), we observe that in (1a-c) the *wh*-word systematically surfaces clause-initially (‘*ex situ*’), while in (1d) the *wh*-word is in the so-called ‘*in-situ*’ position, i.e., it surfaces clause-finally. The last variant has (mainly) been described as a relatively new phenomenon of spoken French which has become gradually part of the language since at least the beginning of 20<sup>th</sup> century.

**The problem.** Over the past five decades, French *in-situ* questions have been the center of much work in theoretical linguistics. Nevertheless, most scholars still disagree on both the distribution and interpretation of the structure. A famous point of friction is whether a particular contextual condition (often understood as ‘presupposition’) licenses the *in-situ* strategy which differentiates it from *ex-situ* occurrences. Here, we refer to those who believe that a dedicated licensing condition exists (Chang 1997; Boeckx 1999; Cheng & Rooryck 2000, a.o) as the ‘conservatives’, and the opposing faction (Mathieu 2004; Adli 2006; Hamlaoui 2011; Déprez et al. 2013, a.o.) as the ‘liberals’.

**Our solution.** To solve the above controversy, we explored the interpretation of this construction in Hexagonal French over a span of 4 decades, as documented in two existing corpora of spoken French. Two dimensions were considered: (a) the quantitative dimension, i.e., the evolution of the total proportion of *in-situ* vs *ex-situ* constructions; (b) the interpretive dimension, i.e., whether the discourse-boundness of the structure observed for the beginning of the 20<sup>th</sup> century (Larrivée 2019) evolved over time. Accordingly, we evaluated our data based on the notion of ‘discourse activation’ (Dryer 1996, Larrivée 2019, Garassino 2022), which requires the study of the context that precedes each occurrence of *wh in situ*, and its degree of linkedness (that we measure in terms of ‘activation’) to the *wh*-word itself.

**Tools and frameworks.** Our study is based on the ESLO corpus, a dataset of spoken French composed of two sub-corpora, ESLO 1 and 2. These corpora document how French was spoken in Orléans, France, in the 1970s and 2010s, respectively. To understand the pragmatics of the French *wh in-situ* strategy, we followed Larrivée (2019) and Garassino (2022). Larrivée (2019)

investigates the relationship between in-situ constructions and the preceding discourse, and distinguishes two levels of activation: *explicit activation* (EACT) and *non-activation* (N-ACT). He defines ‘[e]xplicitly activated sequences’ as ‘are those primed by their use in the antecedent context’. This is illustrated in (2), where the explicitly activated proposition is underlined.

- (2) OW26 dans les jeux antiques euh ils se dopaient quand même avec des méthodes un peu bizarres mais [...]  
 ‘In the old (olympic) games they’d dope themselves with weird methods...’  
 ch\_PP6 ils se dopaient comment ?  
 ‘How did they took drug?’  
 OW26 ils prenaient euh des plantes  
 ‘They took plants.’ (ESLO2\_ENT\_1026, Larrivée 2019a: 120, (13))

Conversely, in the context of *non-activation*, the question literally introduces a new topic into the discourse (i.e., the topic is not ‘activated’, discourse free), as in (3).

- (3) finalement tu trouves **comment** la vie à Orléans?  
 ‘So, how you find life in Orléans?’ (ESLO2\_ENT\_1022, Larrivée 2019a: 120, (14))

Garassino (2022) additionally identified a third context in which in-situ is licensed, which we adopted in our classification: when the propositional content of the question is not ‘explicitly mentioned in the conversation’ but nonetheless easily retrievable through our knowledge of the world, it is inferable (INF), as in (4).

- (4) NAT: Et qu’est-ce que tu as acheté d’autre alors?  
 ‘And so, what else did you buy?’  
 MAI: Et ben on a acheté &euh la table avec les quatre chaises/# sept-cent balles//#  
 ‘Well, we bought a table with four chairs, 700 euros’  
 JOS: Pour mettre où ? #  
 ‘Where are you going to put them?’ (C-ORAL-ROM, ffamcv05, Garassino 2022)

**Results:** We observed a significant change within the system of partial interrogatives in French. In the 1970s, ex-situ questions constituted most cases of partial questions in spoken French while in the 2010s, in-situ had become the most widely used variant. We also observed that the percentages of each ‘activation’ level (EACT, N-ACT, INF) significantly varied and became more diversified in the 2010s. In particular, we observed a significant rise of N-ACT contexts (+25% in 40 years) and a significant fall of INF contexts, while the overall proportion of EACT did not change significantly. We thus registered a correlation between the frequency of the construction and its interpretative flexibility, while our calculations suggested that the in-situ strategy is in the process of replacing the ex-situ strategy.

**Discussion:** We propose that the controversy on the licensing conditions of the in-situ construction can be explained in terms of micro-diachronic change. The ‘conservatives’ indeed described a state of language concomitant with ESLO1, when N-ACT occurrences were still rare, while liberals described a state of the language like that in ESLO2, where in-situ was less context-bound. Our work therefore highlights the advantages of the tripartition of French wh in-situ as proposed in Garassino (2022) over a categorical understanding of wh in-situ, but also the importance of considering French and all languages not as monoliths but as living creatures. Especially when dealing with spontaneous speech and phenomena that display (apparent) optionality, the approach that seems to yield the most reliable results is indeed that of micro-diachrony. Our work thus brings a new understanding of the contexts in which this structure is licensed, and of its evolution over time, both quantitatively and theoretically.



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## Addressing Romance Vocatives Comparatively

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Recent cross-linguistic work on vocative expressions has coalesced around the idea of a Vo(cative)P, a projection higher than DP hosting vocative particles and nouns and paralleling the cartographic approach to the clause (see, for example, Stavrou 2013, Coene et al. 2019, Hill 2014, D'Alessandro & van Oostendorp 2016, Espinal 2013, Corr 2022, Slocum 2016). I will also adopt an articulated DP, though not one identified solely with vocatives. Instead, I build on the intuition that vocatives are 'smaller' than regular nominal expressions and argue that vocatives combine a second person feature in an upper DP with other possible components in a lower DP. This proposal can account for the surprising fact that several Romance languages admit definite articles in vocatives.

Many properties of vocatives are well known. First, vocatives always involve 2<sup>nd</sup> person (Szabolsci 1987), though not always expressed:

- (1) a. Tú! (Spanish)  
b. Usted!  
'You'!
- (2) a. Toi! (French)  
b. Vous!  
'You'!
- (3) Eh vosaltres! (Catalan; Espinal 2013)  
'Hey you!'

Second, vocatives cannot be arguments. In many languages, definite articles (e.g., Venetian, Central Catalan) or personal articles (Balearic Catalan) must accompany proper names in argument contexts but are prohibited in vocative contexts:

- (4) a. *la* Maria (Venetian; from Slocum 2016, 69)  
b. (*\*la*) Maria!  
'Maria (!)'
- (5) a. *la* Maria (Central Catalan)  
b. (*\*la*) Maria!  
'Maria(!)'
- (6) a. *na* Maria (Balearic Catalan)  
b. (*\*na*) Maria!  
'Maria(!)'

The point about proper names above, namely that they involve less structure when non-arguments, is further illustrated in the examples in (7). Here, the proper name is used in a predicative context, as confirmed by the fact that the Catalan personal article *en* is illicit (see Moro 2003):

- (7) a. Me llaman Juan. (Spanish)  
b. Em diuen (*\*en*) Joan. (Catalan)  
me call.3PL Juan  
'They call me John.'

Third, vocatives often involve bare nouns, even in languages otherwise requiring articles:

- (8) a. Chica! (Spanish)  
b. Chicas!  
'Girl(s)!'

- (9) a. Bambino! (Italian)  
 b. Bambini!  
 'Kid(s)!'

- (10) a. Noi! (Catalan; Espinal 2013)  
 b. Nois!  
 'Boy(s)!'

To account for the vocative facts above, I will appeal to the articulated DP structure developed in Bernstein, Ordóñez, and Roca (2021) and the idea that D is the person head (Longobardi 2008, Bernstein 2008). The idea in Bernstein et al. is that a DP involves both an upper DP1 and a lower DP2, the upper DP1 corresponding to Ortmann's (2014) 'pragmatically unique' (discourse) contexts and the lower DP2 to 'semantically unique' (lexical) contexts (see compatible ideas in Zamparelli 1995; Martín & Hinzen 2014; Giusti & Iovino 2014):

- (11) [DP1 ..... [D1 ..... [DP2 ..... [D2 ..... [NP N ] ] ] ] ] ]

Two striking and relevant sources of support for (11) are that, a) several Romance languages (e.g., Balearic Catalan and varieties of Picard) display two different forms for definite articles, the distributions aligning with Ortmann's Uniqueness Hierarchy (see (12)); and b) regular definite articles may co-occur with personal articles in Balearic Catalan (see (13)).

- (12) a. *es* ca, *sa* casa vs. *l'*Havana, *el* cel, *la* terra (Balearic Catalan)  
 'the dog', 'the house' 'Havana', 'the sky', 'the earth'  
 b. *che* fu, *chele* porte vs. *l'*Italie, *le* pape, *le* lunne (Boulogne Picard)  
 'the fire', 'the door' 'Italy', 'the Pope', 'the moon'

- (13) *es* conco *en* Toni (Balearic Catalan)  
 the.M uncle ART.M Toni  
 'Uncle Toni'

Returning to the structure in (11), Bernstein et al. propose that the *s*- and *ch*- articles would correspond to D1 and the *l*- articles and personal articles to D2 (Boulogne Picard examples from Haigneré 1901).

French, Sardinian, and Romanian display definite articles in vocatives, the definite article indicated in italics in the following examples (Sardinian from Blasco Ferrer 1986: 94):

- (14) *Les* enfants! (French)  
 'Children!'

- (15) *Su* dotó! (Campidanese Sardinian)  
 Doctor!

- (16) *Professorule!* (enclitic definite article) (Romanian)  
 'Professor!'

The articulated DP structure in (11) provides a context for the definite articles in (14)-(16), namely that they correspond to D2, with D1 reserved for the required 2<sup>nd</sup> person feature of vocatives:

- (17) [DP1 ..... [D1 2<sup>nd</sup> person [DP2 ..... [D2 *les, su, -le* [NP N ] ] ] ] ] ]

That the vocative definite article corresponds to D2 is supported by the fact that even the D2 *l*- article of Menorcan Catalan is permitted in vocatives, while the D1 *s*- article is barred:

- (18) a. \*S'avi! (D1 definite article) (Balearic Catalan)  
 b. L'avi! (D2 definite article) (Menorcan Catalan)  
 'Grandfather!'

The analysis also explains other curious Romanian data. Typically, the enclitic article is permitted not only with nouns, but also with adjectives (adjectives merged higher than nouns), consistent with prior analyses of N- or A-to-D raising (e.g., Dobrovie-Sorin 1987). In vocative expressions, however, only the noun may appear with the enclitic article, consistent with adjunction to the lower D1.

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## Adopting the Romance Way: Syntax, Prosody and Meaning in Elementary Spanish Learners

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In Romance languages, the focused constituent in narrow-focus structures typically occurs sentence-final, e.g., sentences 3 and 4 (Cruschina). However, in Germanic languages, equivalent meanings are expressed via *in-situ* focus, phonetically represented by an increase in the duration, intensity and pitch range of the focused element, and therefore, making this constituent perceptually salient (sentences 1 and 2). In a similar fashion, the expression of the thematic-categorical contrast is also expressed via word-order in Romance languages and intonation in Germanic languages (Zubizarreta and Nava 655). Second language research shows that English speakers transfer *in-situ* focus when learning Spanish (Hertel 293, Nava) and struggle to produce subject-verb inversions as in (3) even in advanced levels of proficiency (Zubizarreta and Nava 666).

- |     |  |     |                                     |
|-----|--|-----|-------------------------------------|
| (1) | Who's eating?<br>The GIRL's eating.          | (3) | ¿Quién come?<br>Come la NIÑA.       |
| (2) | What's the girl doing?<br>The girl's EATING. | (4) | ¿Qué hace la niña?<br>La niña COME. |

The present study explores the effects of direct instruction to elementary Spanish learners on the use of word inversion as a means of expressing subject-verb focus and thematic-categorical contrasts. Specifically, we investigate whether the acquisition of word order inversion leads to the adoption of Spanish intonation, and consequently, to the reduction of *in-situ* prominences by native speakers of English.

Thirty English learners of Spanish (experimental  $N=20$ ; control  $N=10$ ) took pre- and post-tests in which they answered contextualized questions eliciting subject-verb focus and thematic-categorical meanings. Participants were asked to utter complete sentences, consisting of subjects and verbs. To obtain a native Spanish reference, the test was administered to an additional group of 3 monolingual Chilean-Spanish speakers. The experimental group received 9 training sessions between the tests. Audio recordings of the pre- and post-test consisted of a total of 2520 sentences (40 test sentences \* 2 tests \* 30 participants + 120 Spanish natives = 2520 sentences) containing at least two lexical items, a noun and a verb. The tonic and post-tonic syllables of each noun and verb were manually annotated using Praat. A script returned the duration, intensity and F0 peak values for the labelled syllables, which were normalized for speech rate and gender differences. Logistic regressions with accuracy as the dependent variable, group (experimental, control), test (pre- and post), and meaning (focus and thematic) as fixed factors, and participants and items as random effects were used to analyse the learning of subject inversion. Mixed effect models with duration, intensity, and pitch measures as the dependent variables,

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group (experimental, control) and test (pre- and post) as the fixed factors, and participants and items as random factors assessed the transfer of the acoustic properties of focus-in-situ. As for subject inversion, results showed that accuracy improved by 40% in focus statements and by 20% inthetic-categorical sentences in the experimental group. Conversely, the control group did not produce syntactic inversion, confirming that the observed learning of subject inversion stems from explicit instruction and not from regular, classroom-language exposure. With regard to the transfer of the acoustic correlates to *in-situ* focus, results indicated that students from the experimental and control groups used duration, intensity, and pitch to mark *in-situ* focus. This result is expected as all the control group participants and most of the experimental group students failed to use subject inversion, resorting to *in-situ* focus. More interesting results arose from the analysis of correct answers by the experimental group, which showed a relationship between acoustic correlates to intonation (duration, intensity and F0) and the number of Intonation Phrases (IP) uttered. This suggests that teaching how to express focus andthetic-categorical sentences with subject inversion is conducive to an initial learning of Spanish sentence melody. Results are discussed in the context of the phonetics and phonology of focus structures in L2 speech.

*Keywords: prosody, syntax, nuclear stress, focus, second language acquisition, explicit teaching*

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## AN ACOUSTIC AND DISTRIBUTIONAL APPROACH TO DISFLUENT REPETITIONS IN ROMANIAN SPONTANEOUS SPEECH

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Studies dealing with disfluencies in spontaneous speech predominantly focus on English data, while among Romance languages most of the research is drawn from well-resourced languages such as French or Spanish [1]. Consequently, in this presentation we propose a preliminary acoustic and distributional analysis of *identical repetitions* (i.e. immediate and identical repeat of spoken material, e.g. ‘din din’ [from from]; IR henceforth) based on Romanian speech data. Phonetic analyses of Romanian spontaneous speech phenomena are still rare, in part due to a lack of available speech aligned corpora. As a result, our pilot study is carried out on 4hs of addressed monologues pertaining to 4 adult native speakers, 2 female (110 minutes), 2 male (130 minutes), 30-40 years of age, without any speech impairments, extracted from a larger Romanian speech corpus recorded and hand-annotated by [2]. To our knowledge, this would be the first applied linguistic research on disfluent repetitions carried out on the only speech aligned corpus available for spontaneous Romanian spoken data.

A total of 629 repetitions as immediate repeats were manually extracted from the corpus, with 72% produced by male speakers and 28% derived from female monologues. Our results show that in 79% of IR, the linguistic format of the repetition was a single word. The remaining tokens consist of multiple word repeats distributed as following: two-word (16%, N = 101), three-word (3.5%, N = 22), four-word (0.6%, N = 4), five-word (0.2%, N = 1), six-word (0.5%, N = 3), and seven-word sequences (0.2%, N = 1). Similar to previous findings on the topic in Romance languages ([3], [4], [5], among others), in over 98% of the extracted data the *reparandum* (RM) was repeated only once, while two *repairs* (RR) surfaced in 1.3% of the cases. There was only one instance of a two-word seven repeat utterance pertaining to a female speaker.

When taking into account the analytic vs synthetic typological parameter, the results for this Romanian corpus differ from prior linguistic data pertaining to other Romance languages as modern French and Spanish. In this context, Romanian occupies an intermediate position, especially within the nominal case morphology [6]. For this reason, *prepositions* represent the most frequent category of repeated function words (31%, prep. ‘de’ [of] being the most common, having multiple functions within the discourse [7] – compared to only 19% in French [4]), followed by *adverbs* (18%, neg. ‘nu’ [not]) and *conjunctions* (14%, ‘să’ [to]). In our data, *determiners* have a lesser frequency within identical repetitions (3% compared to 17% in spoken French [4]).

We observed that, in up to 51% of IR, there is no pause between RM and RR. In our preliminary analysis, we distinguished between short silent pauses (under 200ms) and long silent pauses (above 200ms). When a pause occurs in the *interregnum* (IM) [8], it is more often a long pause (68% a long pause vs 29% a short one), while in the remaining cases we have encountered either two long pauses as well as a combination between short and long pauses (1% each). From a temporal perspective, the median duration of an IR extends to 873ms, with a range of 4305ms (213ms minimum duration and 4518ms maximum duration; see *Table 1* for data related to duration as a function of repetition form and number of repeats). When a pause is present in the IM, the mean duration of the repeat is 1348ms ( $\pm 744$ ms), while the absence of a pause correlates with a decrease in the overall duration of the IR (749ms  $\pm 359$ ms).

In our study we also focus on the interaction between IR and other disfluencies such as prolongations (found in 75% of the data) and pause fillers (occurring in only 23% of the cases). We document the frequency, distribution and acoustic correlates of these DFs in connection to IR present within the Romanian speech corpus under investigation.

While some findings appear to be language independent (related to speech planning phenomena), others are language specific (due to typological differences in connection to IR output), individualising Romanian in the context of Romance languages.

	1	2	3	4	5	6	7	1	2	7
	word	words	words	words	words	words	words	repeat	repeats	repeats
Frequency	497	101	22	4	1	3	1	620	8	1
Mean ±	925 ±	1,286	2,079	1,670	1,479	2,527 ±	3,812	1,032±	1,420±	3,543
Std.	524	± 767	± 903	± 240	± NaN	1,092	± NaN	646	391	± NaN

Table 1a. *Sequence duration (ms) as a function of repetition form*

Table 1b. *Sequence duration (ms) as a function of number of repeats*

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## An anchoring solution to the loss of preverbal negative concord in Old Spanish

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In an exemplar-based model of grammar, speakers use retained episodic memories of linguistic events to aid in the formation of categories whose exemplars, or tokens, share some minimal similarity (see Lacerda 1995; Goldinger 1996, 2000; Johnson 1997; Pierrehumbert 2001, Wedel 2006). Following Goldberg (2006: 86), within such categories there are higher-frequency exemplars which serve as *cognitive anchors*, or “salient standards of comparison” around which other exemplars are attracted and modeled. Empirical evidence for a cognitive anchoring effect has been shown in syntactic acquisition (Casenhiser and Goldberg 2005; Azazil 2020) and synchronic variation (Bybee and Eddington 2006), but still more work would do well to defend this approach in the domain of diachronic syntax. The present paper will apply the notion of a cognitive anchoring effect to certain challenges regarding the diachrony of Negative Concord (NC), or the co-occurrence of multiple negative lexical items that together only express one instance of semantic negation (for early analyses of NC in Spanish see Bosque 1980; Laka 1990).

In Old Spanish, preverbal NC existed but was not realized evenly across different Negative Concord Items (NCIs). Consider (1a), where the preverbal NCI *ninguno* ‘no one’ coincides with the clause negator *non* ‘no’, without producing a semantic double negation. As in (1b), though, the NCI *nunca* ‘never’ was unique in that it avoided preverbal NC, as noted by researchers as early as Llorens (1929).

- (1) a. *Que ninguno non fable con los lidiadores*  
‘Let no one speak with the litigators’  
(c. 1218-1250; Anonymous author, *Fuero de Zorita de los Canes*)
- b. *que nunca çesan de gastar la vida del ome*  
‘they never cease to waste the life of the man’  
(1251; Anonymous author, *Calila e Dimna*) (examples from CORDE)

Preverbal NC (i.e., the co-occurrence of the negator) disappeared among all NCIs as the language entered the 17<sup>th</sup> century (see also Camus Bergareche 2006). To explain the loss of preverbal NC in Old Spanish, Posner (1984) suggested that it may have been due to contact with Italian which offered a prestige model that lacked preverbal NC. Poole (2011) correlated the loss of preverbal NC with a shift in the polarity of these items from negative polarity items (not inherently negative items) to NCIs (items able to express negation by themselves). Espósito (1989) and Mackenzie (2019: 220-221) suggested that the syntax was economized such that the redundancy of a preverbal overt negation in addition to the NCI was eliminated. Mackenzie, in particular, argues that the preverbal sentential negator *non* was actually a kind of expletive negation, drawing parallels to expletive negation with verbs of doubt and denial that also disappeared during the same time period.

None of these approaches to the loss of preverbal NC, however, has incorporated the fact that *nunca* avoided preverbal NC. The present paper remedies this issue in arguing that the high relative frequency of the lexical item *nunca* helped to establish it as a cognitive anchor for the other NCIs that lost NC in the preverbal position. To defend this approach, the CORDE database



was first searched for the raw token frequencies of the NCIs *nunca*, *ninguno*, *ningún*, *nada*, and *nadie*. The results are below in Table 1, divided from the 13<sup>th</sup> to the 16<sup>th</sup> century.

NCI	1201-1300	1301-1400	1401-1500	1501-1600
<i>nunca</i>	3,474	4,262	10,456	18,073
<i>ninguno</i>	5,567	4,106	6,733	13,546
<i>ninguna</i>	5,776	5,089	7,639	17,604
<i>ningún</i>	2,052	1,662	1,846	9,113
<i>nada</i>	2,240	830	2,647	10,193
<i>nadie</i>	149	10	401	6,408
Total	19,258	15,959	29,722	74,937
% <i>nunca</i>	18.0%	26.7%	35.2%	24.1%

**Table 1. Token frequency of NCIs in CORDE, 13<sup>th</sup> – 16<sup>th</sup> century**

Table 1 should draw attention to the fact that *nunca* was a highly frequent NCI, accounting for almost half of the searched NCIs in the 15<sup>th</sup> century, and that it also increased notably in relative frequency from the 13<sup>th</sup> to 15<sup>th</sup> century. Then, all tokens of *nunca*, *ninguno*, and *nada* were extracted from the CORDE database using a web data scraper and Python code. From this dataset, 100 tokens of each NCI were randomly drawn from each of the four centuries under consideration. Of each set of 100 tokens, tokens featuring NCIs in preverbal configurations were counted, in addition to whether or not those NCIs co-occurred with preverbal negators. The results are below in Table 2.

NCI	1201-1300			1301-1400		
	Preverbal tokens	Preverbal +NC tokens	% NC	Preverbal tokens	Preverbal +NC tokens	% NC
<i>nunca</i>	93	1	1.1%	95	1	1.1%
<i>ninguno</i>	34	28	82.4%	37	34	91.9%
<i>nada</i>	11	8	72.7%	6	5	83.3%

NCI	1401-1500			1501-1600		
	Preverbal tokens	Preverbal +NC tokens	% NC	Preverbal tokens	Preverbal +NC tokens	% NC
<i>nunca</i>	92	0	0.0%	97	0	0.0%
<i>ninguno</i>	50	24	48.0%	59	1	1.7%
<i>nada</i>	11	3	27.3%	15	1	6.7%

**Table 2. Preverbal NC, 13<sup>th</sup> – 16<sup>th</sup> century**

Table 2 shows falling counts of preverbal NC from the 13<sup>th</sup> to 16<sup>th</sup> century, and the aforementioned lack of preverbal NC with the NCI *nunca*. The novel data in Table 2 is the strong tendency of *nunca* to appear in preverbal position. Consider the 14<sup>th</sup> century, where of 100 random *nada* tokens only 6 are found in preverbal configurations, but of 100 *nunca* tokens 95 were preverbal. The present paper argues, thus, that both the increasing relative frequency of *nunca* and its propensity to appear in preverbal configurations without NC helped it to serve as a cognitive anchor around which the other NCIs were assimilated as the language entered the 16<sup>th</sup> century. That is, other NCIs lost their co-occurring preverbal negator because speakers modeled their usage patterns around the anchor of *nunca*. The larger-picture implication of this study, therefore, is a case study that

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supports the role of cognitive anchoring, with frequency patterns of usage at its base, as a catalyst for diachronic change in syntactic structure. The advantage offered by this approach is a cognitive causal explanation for the loss of preverbal NC that accounts for the unique nature of the *nunca* lexical item.

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## An empirical study on Complementizer Deletion in Spanish.

### New evidence in favour of an empty C head.

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The discussion on optional omission of the complementizer *que* ‘that’ in Spanish is played by two fundamental assumptions. First, the optionality is restricted to complement clauses conveying an *irrealis* meaning (Torrego 1983; Broveto 2002; Antonelli 2013). That is, the omission of *que* is typically possible if the embedded verb is in subjunctive or another *irrealis* mood, - and, consequently, it is mostly found in complements introduced by verbs such as *lamentar* ‘to lament’ - whereas it is mandatory when introducing an indicative embedded clause. The second assumption shared by the literature is that the omission of *que* correlates with the absence of a preverbal embedded subject, as shown in (1):

- (1) *Lamento* (\*Carmen) no esté (Carmen) contenta con su trabajo.  
I-lament Carmen not be-SBJV-3sg Carmen happy with her job  
‘I lament that Carmen is not happy with her job.’ (Broveto 2002)

The possibility of omitting *que* in a complement clause was first noted in the work of Torrego (1983). Building on her observations, Broveto (2002) and Antonelli (2013) propose two different analyses of the phenomenon, both of which trying to determine whether *que*-less clauses manifest their C-layer. The conclusions are opposite: Broveto (2002) argues in favour of the lack of the CP, whereas Antonelli (2013) proposes the presence of a syncretic C projection.

The aim of my investigation is to bring to the discussion new empirical evidence collected from the *Corpus del Español del Siglo XXI* (CORPES) and show that the data assumed by the literature ignore the complexity of the phenomenon.

The first observation is related to the mood of the *que*-less clauses. The omission of *que* was annotated in each of the occurrences in the dataset ( $n=1382$ ). About 37% of *que*-less clauses are found in embedded subjunctive contexts of volitive predicates and verbs of desire, (see (2)), and about 63% in embedded indicative contexts of belief predicates, (see (3)). Contrary to what previous studies suggest, the data I gathered do not indicate a strict correlation between CD and the conveying of an *irrealis* meaning typical of the ‘lament’ class of verbs<sup>1</sup>.

- (2) *El pasaje termina con una fugaz visión: la madre, ya recuperada,*  
the passage ends with a brief vision: the mother already recovered  
*abrazando al padre le suplica Ø perdone la vida de su hijo.*  
hugging the father cl. begs spare-SBJV-3sg the life of her son  
‘The passage ends with a brief vision: the mother, now recovered, hugging the father, begs him to spare her son’s life.’ (CORPES, 2002, Spain)
- (3) [...] *nos hemos interesado por realizar una mayor indagación sobre el Arco Iris,*  
cl. we-have interested for perform a major investigation on the rainbow  
*que opinamos Ø es de gran valor para ampliar la percepción de la [...]*  
that we-think is of great value for expand the perception of the  
‘[...] we have taken an interest in performing a deeper research about the rainbow that we think is of great value to expand the perception of the [...]’ (CORPES, 2007, Spain)

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<sup>1</sup> However, as it can be observed in the examples mentioned here, the omission of *que* appears also in contexts where the matrix verb is embedded in a relative phrase.

As for the second assumption on the impossibility of a preverbal embedded subject, the dataset shows that about 2% occurrences present subjects and adverbials appearing on the left of the embedded verb both in indicative and subjunctive contexts, as reported in the examples below.

- (4) a. [...] *algo que me produce verdadera ilusión y que espero Ø los lectores disfruten tanto como yo he disfrutado al fraguarlo.*  
something that cl. produces true joy and that I-hope the readers enjoy-SBJV-3pl as much as I have enjoyed while forging  
‘[...] something that causes me true joy and that I hope the readers will enjoy as much as I did while forging it.’ (CORPES, 2008, Spain)
- b. *Ese día, que espero Ø pronto veamos, la ciencia habrá encontrado su camino.*  
that day that I-hope soon see-SBJV-1pl the science will.have found its path  
‘That day, which I hope we will soon see, science will have found its way.’  
(CORPES, 2011, Spain)

We have just seen that our data contradict the two major assumptions. Now I will show that they also raise problems for Brovotto’s and Antonelli’s proposals.

First, analysing *que*-less clauses as IPs (Brovotto 2002) prevents us from justifying the presence of the subjunctive mood if the latter is triggered exclusively under a C-T relation. Therefore, assuming the presence of the C-layer of the embedded clause is needed to account for (i) the presence of subjunctive mood, and (ii) the possibility of long A’-movement from inside the *que*-less clause.

Antonelli’s (2013) proposal also raises some problems. His claim is that, if *que* has been omitted, V-movement to C takes place. However, as I showed earlier, the predictions made by the literature on linear order are not borne out by the empirical data found in the corpus, since preverbal embedded material is attested. In particular, among the elements preceding the verb, low adverbs (in the sense of Cinque 1999; see (4b)), and quantifiers as subject (see (5)) are also found.

- (5) *Además, Carreño se toma una licencia más que creo Ø nadie ha señalado todavía.*  
in addition Carreño cl. takes a license more that I-think nobody has noted already  
‘Also, Carreño takes another license that I think nobody has noted yet.’ (CORPES, 2006, Spain)

The point to be emphasized here is that, if the verb moves to C, (i) it should be in a position structurally higher than low adverbs, and (ii) it should be followed by subject quantifiers, given that they cannot undergo topicalization. If the preverbal subject is not in the C layer, neither the embedded verb can be.

Summarizing, empirical data suggest that the embedded verb does not move to the C layer, as the preverbal embedded position can be filled only by unmarked subjects, quantifiers, and low adverbs. Nevertheless, the presence of C seems to be necessary given that the embedded mood must be involved somehow in the establishment of the dependency, and an intermediate landing site is required in order for the A’-movement to be possible.

On the basis of this discussion, I claim the necessity of postulating the presence of an empty C head as the best theoretical way to account for empirical data that, otherwise, would remain unexplained.

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**An optimality theoretic approach to diphthongization in Rio de Janeiro:  
The case of stressed word-final syllables**

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The near-categorical diphthongization of all vowels before /s/ (realized as the palatal sibilant [ʃ]) in word-final stressed syllables is one of the most salient characteristics of the Portuguese spoken in Rio de Janeiro, Brazil. In this dialect, a high palatal glide /i/ appears after the underlying vowel resulting in a falling diphthong (1).

- |     |    |         |        |            |
|-----|----|---------|--------|------------|
| (1) | a. | ‘rapaz’ | ‘boy’  | [xa.ˈpaiʃ] |
|     | b. | ‘arroz’ | ‘rice’ | [a.ˈxoɪʃ]  |
|     | c. | ‘capuz’ | ‘hood’ | [ka.ˈpuɪʃ] |

This presentation approaches word-final diphthongization in Rio de Janeiro Portuguese from an optimality theoretic (OT) perspective. While previous rule-based and OT accounts have attempted to explain why diphthongization occurs (Giangola, 1997; Major, 1985; Reinhardt 1970), I argue that all prior proposals have been unsuccessful for at least one of three reasons: (i) they are unable to explain why diphthongization does not occur word-medially in stressed syllables (e.g. ‘pasta’, ‘folder’, [ˈpaʃ.tə]) (Major, 1985; Reinhardt, 1970); (ii) they do not explain the connection between the palatalization of /s/ and the palatal glide /i/ (Giangola, 1997; Major, 1985); or (iii) they are unable to account for why a word-final stressed position should motivate diphthongization (Reinhardt, 1970). The OT approach in this presentation builds upon and improves these past approaches. In this presentation, I provide evidence and argue for a high-ranking constraint Weight-to-Stress/Stress-to-Weight<sup>1</sup> (WSP) which states that syllables with primary stress must be bimoraic. I claim that this constraint may be satisfied either by a stressed, closed syllable (e.g. ‘dar’, ‘to give’, [ˈdax]) or through the lengthening of a stressed vowel<sup>2</sup> in an open syllable (e.g. ‘pá’, ‘shovel’, [ˈpaː]). In theory, a moraic coda /s/ would result in a bimoraic syllable if preceded by a monomoraic vowel. That is, examples such as those in (1) initially appear to satisfy this constraint. However, I argue that the constraint  $*[s/ʃ]_{\mu\#}$  requires word-final coda [s] and [ʃ] to be treated as non-moraic in Brazilian Portuguese. This is based on crosslinguistic evidence according to which /s/ is often extrametrical and because the only additional element permitted after a bimoraic syllable structure in Brazilian Portuguese is /s/. Thus, the insertion of a mora after a stressed monomoraic vowel and before word-final [s]/[ʃ] is the only way to satisfy WSP (3) which must dominate DEP- $\mu$ , as well as the rest of the constraints. I conclude that the epenthesis always emerges as the palatal high glide [i] in this dialect because the mora receives featural content from the adjacent consonant, in the case of the Rio de Janeiro dialect, the palatal sibilant [ʃ]. This account also explains why epenthesis does not occur word-medially. Because  $*[s/ʃ]_{\mu\#}$  only affects word-final codas, WSP is able to be satisfied without epenthesis (4). Additionally, this analysis explains why the palatal high glide [i] does not appear outside of Rio de Janeiro. Although all dialects exhibit mora epenthesis (violation of DEP- $\mu$ ), the lack of /s/ palatalization in other dialects prevents the spread of [+hi] from the consonant to the epenthetic mora (5). Because of high-ranking DEP-feat which dominates \*LONG, a geminate is predicted to surface in these varieties.

## (2) Relevant constraints

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<sup>1</sup> The Weight-to-Stress principle generally refers to the observation that heavy syllables attract primary stress (Prince, 1990). The current analysis contains the mirror image of WSP, which requires that stressed syllables be heavy.

<sup>2</sup> This presentation assumes that all vowels are moraic V/ $\mu$ .

- $\int$ /coda - Coda /s/ is a palatal in the coda (combination of \*s/coda >> IDENT/PLACE).
- \*[s/ɲ]μ# - Word-final sibilants [s] and [ɲ] are not moraic.
- Weight-to-Stress/Stress-to-Weight (WSP) - Stressed syllables must be bimoraic.
- DEP-feature - Features cannot be inserted.
- \*LONG - No geminates.
- DEP-μ - Moraic segments cannot be inserted.
- \*LINK - No shared association lines/features.

(3) 'rapaz'/x apas/	$\int$ /coda	*[s/ɲ]μ#	WSP	DEP-feat	*LONG	*LINK	DEP-μ
xa.pas	*!		*				
xa.paɲ   μ		*!					*
xa.pa:ɲ					*!		*
xa.pauɲ				*!			*
→ xa.paɲ						*	*

(4) 'pasta' /pas.tə/	$\int$ /coda	*[s/ɲ]μ#	WSP	DEP-feat	*LONG	*LINK	DEP-μ
pas.tə	*!						
→ paɲ.tə   μ							*
pa:ɲ.tə					*!		*
pauɲ.tə				*!			*
paɲ.tə						*!	*

(5) 'rapaz'/xapas/	*[s/ɲ]μ#	WSP	DEP-feat	*LONG	*LINK	DEP-μ	$\int$ /coda
xa.pas		*!					*
xa.pas   μ	*!					*	*
→ xa.pa:s				*!		*	*
xa.paɯs			*!			*	*
xa.paɯs			*!			*	*

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## **An ultrasound study of cavity expansion during Canadian French voiced obstruents**

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Vocal fold vibrations are more difficult to achieve during obstruents than sonorants because of the aerodynamic voicing constraint (AVC), i.e., the fact that a build-up of air pressure in the supraglottal cavity during oral closures reduces the transglottal airflow and thus hinders vocal fold vibrations (Ohala 1983; 2011). The AVC can be circumvented by a number of voicing adjustment gestures that expand the supraglottal cavity actively (pharyngeal expansion by tongue-root advancement, larynx lowering) or passively (reduction of muscle contraction in the supraglottal tract), or allow air to leak out of the supraglottal cavity (oral or nasal leakage) (Kent & Moll 1969; Perkell 1969; Bell-Berti 1975; Westbury 1983; Westbury & Keating 1986).

To our knowledge, there has only been one study of voicing adjustment strategies in French (Solé 2011; 2018). This study found that French initial voiced stops are often realized with nasal leakage and cavity expansion. However, since it was based on aerodynamic measures, it is unclear which cavity expansion strategy was employed. In the current study, we look at the vertical displacement of the larynx and at pharyngeal expansion in Canadian French 1) to determine if these voicing adjustments are used significantly, 2) to assess the amount of interspeaker variation and 3) to establish if there is a correlation between the use of voicing adjustment gestures, closure voicing amplitude during voiced obstruents and the prevalence of certain types of voicing interruptions (Davidson 2016).

To answer our research questions, we recorded laryngeal and lingual ultrasound videos with 10 native speakers of Canadian French as they read a list of sentences containing phrase-medial sonorants, voiced and voiceless fricatives and voiced and voiceless stops. Laryngeal ultrasound videos were recorded first, followed by lingual ones. The laryngeal ultrasound videos were analyzed to detect the vertical movement of the larynx using optical flow analysis (Moisik *et al.* 2014; Witsil 2019). Established lingual ultrasound techniques were used to look at the position of the tongue-root and infer pharyngeal expansion (Ahn 2015; 2017; 2018a; 2018b; Ahn & Kwon 2019).

Results from 10 speakers reveal that there is generally larynx lowering in voiced obstruents (but consistently lower than 1 mm). The larynx is gradually lowered during all or most of the voiced closure, reaches its lowest position near the release and reverts to its default position during the following vowel. SSANOVA plots show a significant pharyngeal expansion by tongue-root advancement in voiced stops and fricatives. Tongue body lowering is also found, especially in voiced bilabial stops. Despite individual variation, this suggests that Canadian French resorts to both larynx lowering and oral cavity expansion to circumvent the AVC in voiced obstruents.



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Two severely endangered North-Eastern varieties of Basque, Zuberoan and Mixean Low Navarrese, have been described with an extremely rare opposition between an oral /h/ and a nasalized aspirate /h̃/ in the phonological literature (Hualde 1993; Egurtzegi 2018). This opposition, which some researchers considered theoretically impossible (see Walker & Pullum 1999), has only been proposed for a handful of languages —Seimat (Oceanic), Kwangali and Thimbukushu (both Bantu)— and no phonetic studies were available for any of them (see Blevins & Egurtzegi 2023). In this talk, I will offer a brief historical account of the processes that gave rise to the nasalized aspirate /h̃/ and show evidence of its opposition with /h/ in the modern Zuberoan and Mixean varieties (as opposed to other accounts, Michelena 1977) before introducing two recent phonetic analyses that show the persistence of these sounds until today.

In Basque, the nasalized aspirate /h̃/ arose from the lenition of an intervocalic \*n in words such as Proto-Basque *seni* > Basque *seh̃i* ‘boy, servant’ or Latin *(h)onore(m)* > Basque *oh̃ore* > Zuberoan *uh̃ue* ‘honor’. Lenitions of Latin /n/ in intervocalic position are also attested in Romance languages (including in Gascon, in historical contact with Basque) but no aspirate outcome is reported in the literature (although Sardinian shows [ʔ], Molinu 2022), which makes the development and maintenance of /h̃/ in Basque surprising.

Following Egurtzegi (2018), /h̃/ and /h/ can be argued to contrast in Basque based on the coarticulatory dynamics and distributional restrictions of nasal segments in the language as well as in processes of assimilation and analogical extension involving /h̃/ that strongly suggest its phonemic status. Two recent phonetic studies with speakers of the Mixean (Egurtzegi & Carignan 2020) and Zuberoan (Egurtzegi, García-Covelo & Urrestarazu-Porta 2023) varieties show that a distinction between /h/ and /h̃/ can also be established on phonetic grounds. While the first study provides evidence of the nasal vs. oral categories of aspirates through a Principal Component Analysis including 30 acoustic cues, the second presents a nasalance study that addresses the difference between the two categories based on amplitude differences between the nasal vs. oral signal (see Fig. 1). Nonetheless, these studies also suggest that some speakers have merged the two segments into /h/, and some lexical items have sporadically lost aspirate nasalization.

In short, I will present evidence for an unlikely opposition of aspirates solely based on nasality (/h/ vs. /h̃/), a contrast that has only been documented by studying the phonetic detail of an endangered language, which are too often neglected in phonetic research.

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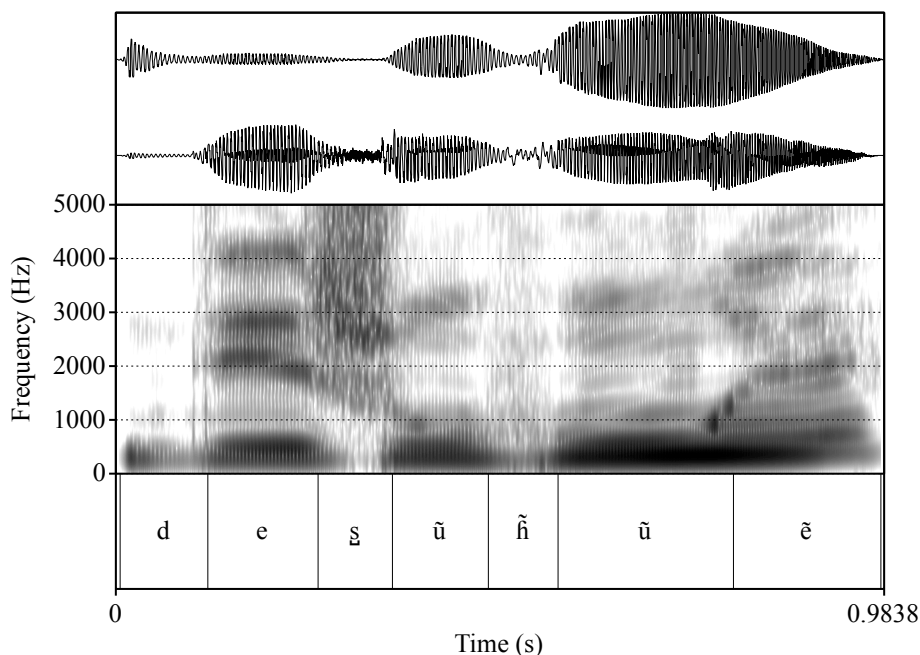


Figure 1: Waveforms and spectrogram of *desuñue* 'dishonor' (Egurtzegi et al. 2023). The upper and lower waveforms correspond to the nasal and oral channel respectively.

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## Apprehension in Romance: Bouletic and Epistemic Modality in Portuguese and Italian

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1. Cross-linguistically, particles with a continuative meaning (i.e. denoting the continuation of a state from a previous time until the present, e.g. English *still*) may develop meanings of averting a negatively evaluated outcome, or other modal meanings of prediction (Francez 2022; Heine & Kuteva 2002). So far, the study of averting particles has focused mostly on indigenous American and Australian languages (cf. Caudal 2023), less so on Romance. This paper fills this gap by providing an analysis of European Portuguese (EP) *ainda* and Italian *ancora* in sentences like (1) and (2).

(1) Não saltes num pé, olha que **ainda** cais!  
neg jump-SUBJ.2SG on.one foot look-IMP.2SG that still fall-IND.PRS.2SG  
'Don't jump on one foot, you may fall!'

(2) Stai attento **ancora** si rompe la bottiglia!  
stay-IMP.2SG careful still CL.REFL break-IND.PRS.3SG the bottle  
'Be careful, the bottle may break!'

In (1) and (2) the particles have an averting meaning: they mark the possible outcome of an event-sequence (i.e., the interlocutor falling in [1], the bottle breaking in [2]) as undesirable. Their use implies that the sequence should be interrupted in order to avoid the outcome (following Kuteva et al. [2019], Caudal [2023] calls such averting grams *apprehensionals*). This use has occasionally been described for Italian (cf. Tempesta 2018 on Apulian varieties), but has not been mentioned for EP (cf. Lopes 2000 on the different meanings of *ainda*). We examine Italian and EP data from Twitter and propose an account of averting *ainda/ancora* that relates their averting meaning with the continuative meaning.

2. Averting *ainda/ancora* is associated with the following implications:

- (i) imminence implication: the outcome is close in time (these particles cannot be used with respect to a possible outcome that is deferred in time; cf. ??*Ancora le temperature aumentino di 3°C prima del 2100!* 'Global temperatures may rise 3°C by 2100!');
- (ii) counter-bouletic implication: the outcome is undesirable or contrary to what the speaker wants (the particles cannot be used with positively-valued events; cf. ??*Ainda ganhas a lotaria!* 'You may win the lottery! [unless ironic]).

Based on (i)-(ii), we analyze averting *ainda/ancora* as modal (bouletic) particles with a presuppositional component: they combine with a preadjacent proposition *p* (the proposition expressed by the sentence without the particle), which is contrary to what the speaker wants, and presuppose the existence of an event-sequence leading to *p* as its outcome. Our proposal builds on Amaral & Del Prete's (2021) analysis of the periphrases *acabar-por-INF* (EP)/*finire-per-INF* (It.), argued to be modal (epistemic) expressions presupposing an event-sequence and associated with the implication that the outcome of the sequence is contrary to an expectation.

3. Twitter data from both languages show a pattern of co-occurrence with imperatives (e.g., EP [3] and It. [4b]) and other constructions expressing preferences (e.g., It. [4a]), hence supporting our bouletic modal analysis.

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- (3) Odeio ver velhinhos a correr para o autocarro q[ua]nd[o] ele claramente ainda demora a chegar, tem calma men, ainda te matas  
 ‘I hate to see these sweet old people running for the bus when clearly the bus will still take a while to arrive, go slowly men [sic!], you may get killed’
- (4) a. È un [pò] pallido il ragazzuolo. Un pò di carne di cavallo. O lenticchie. Ancora si offende qualcuno  
 ‘He’s a bit pale, the little boy. [Let’s give him] Some horse meat. Or rather lentils. [Otherwise] someone may be offended’
- b. Chissà quanto costa questa Cocacola Bungabunga :biggrin: Invitiamo anche Silvio alla festa ancora si offende  
 ‘Who knows how much this Cocacola Bungabunga will cost [Coke bottle with picture of Silvio Berlusconi]. Let’s also invite Silvio to the party, [otherwise] he may be offended.’

Our analysis shows a semantic connection between the continuative and the avertive meaning: the hypothetical continuation of a situation may lead to an undesirable outcome. For example, in (3), if the old man continues to run to the bus, assuming an inertia world, the (dispreferred) outcome is that he may be run over, and in (4a), if the speaker gives horse meat to a boy, hearers who disapprove of eating meat may be offended.

4. We follow Löbner (1989)’s analysis of German *schon* ‘already’ and *noch* ‘still’, adverbs that encode implications about previous/current/future states of affairs, and the transitions between them. We propose that avertive *ainda/ancora* result from the conventionalization of a conversational implication based on their aspectual meaning: a predictable future state may be dispreferred, hence the transition between states should be avoided – in other words, if a salient sequence of events continues to unfold, some negative outcome might result.

5. Our analysis of avertive *ainda/ancora* contributes to our knowledge of bouletic modality in Romance. Interestingly, this avertive meaning of a continuative adverb is discontinuous within the Romance languages; to the best of our knowledge, it is not attested in Northern Italian varieties, French *encore* or Spanish *todavía*. More broadly, this study advances our understanding of the complex interplay between temporal, aspectual, and modal meanings.

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## Are French and Venetian V2 languages? A diachronic treebank analysis

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It is widely assumed that the typologically rare V2 word order was operative in at least some of the Medieval Romance languages. This has been challenged however, for Ibero-Romance notably (Sitaridou et al. 2019), but also for French itself (especially in the work of Kaiser, e.g., 2002). Even looking at the most influential recent monographs (Meisel, Elsig & Rinke 2013, Poletto 2014, Wolfe 2018), the putative V2 status of Medieval Ibero-Romance, Gallo-Romance and Italo-Romance has tended to be assessed on the basis of representative examples from verse and prose literary texts from various regions. When systematic studies of a coherent empirical set have been performed, they have generally relied on extended passage of sources rather than sources as a whole for reasons of expediency. Furthermore, the main tests used in the literature to assess the V2 status have been the rate of subject inversion vs. subject initial clauses and the V2 linear restriction itself. This even though they have been shown to be problematic in view of the Romance configuration of the CP (Rizzi 1997) and the existence of vP peripheral subjects (Belletti 2004). Other phenomena related to the V2 property (e.g., type of null subjects, Tobler-Mussafia) have not yet been systematically exploited. Investigating such phenomena would help us to independently assess the V2 status of these languages and at the same time to clean out the confounding factors related to the interpretation of subject inversion as a consequence of V-to-C or as a vP peripheral phenomenon. The systematic study of word order patterns in a treebank of calibrated texts would allow the respective situation of Medieval Romance languages through time to be assessed (as it was for German and Scandinavian varieties by e.g., Cichosz, Gaszewski and Pezik 2016). This would help us consider the relation between rule and usage, assess whether the observable differential patterns are entirely accounted for by the current models (of a distinction between a strict ForceP and a non-strict FinP V2), and establish when a language loses V2 status.

We present the result of a comparative analysis of V2 word order in two Medieval Romance varieties, French and Venetian (e.g., Wolfe 2018 and references therein). The analysis relies on a calibrated corpus to enhance comparability of results. For each language, the corpus contains one text per century for the 14<sup>th</sup>, 15<sup>th</sup> and 16<sup>th</sup> century, at temporal intervals of about a hundred years, and from the same region for the French material (Normandy). Prose texts are used, belonging to a non-literary legal genre that contain traces of dialogal exchanges, and have been found through preliminary investigations to yield less conservative rates of use of changing variables (Larrivé 2022). The syntactically annotated texts are systematically considered for position of the finite verb in main and subordinate clauses, using parallel extraction queries capitalizing on the fine-grained PENN annotation set which is sensitive to phrase boundaries and phrase-structure, further assisted by the graph-based dependency parser HOPS for the old French texts (Grobol & Crabbé, 2021).

The extraction process however raises methodological questions, depending on how configurations are counted. Some are well-known, such as the status of a coordinated clauses that under subject coreference is ambiguous between V1 and V2. Some other are less so, such as the surprising high frequency of V1 word order. As both Venetian and French are expected to go from a V2 system to a SVO word order, the high proportions of V1 in the early stages is troubling. A qualitative examination of the V1 order shows that the surprising proportions are found in relative clauses introduced by a subject relative marker and in coordinated clauses, as already expected. Both coordinated clauses and subordinates introduced a subject relative marker are therefore set aside from the count.

What the data reveal is that French is moving from a low FinP V2 to an SVO, while Venetian is one step behind, moving from a high ForceP to a low FinP V2. The data in a) show a consolidation of the verb in the second position in French, due to the rise of the SVO

structure; those in b) show a wide diversification of verb positions in Venetian, due to the increasing availability of Topic projections in front of the inflected V, reflected by the decreasing V2 proportion shown in a); those in c) are a reflex of the loss of null subjects in French and the development of the modern pro-drop system in Venetian.

- a) V2 in Venetian goes down from 70% to 45%, while in French it rises from 40% to 51%
- b) Aggregating V3, V4 and V5, Venetian V3+ rises from 18% to 38%, and French slides from 27% to 18%.
- c) Venetian V1 gradually goes up from 9% to 17%, while in French it decreases from 19% to 9%.

The data in d) show a progressive increase in subject inversion in embedded clauses in both Venetian and French, probably due to the development of vP-peripheral subjects. In Venetian, the raise of subject inversion in main clauses is due to the sum of the new system of vP-peripheral subject while the V-to-C property is still in place, as the steady differential between main and subordinate clauses shows (see e). In French, the low proportion of subject inversion in main clauses shows the loss of V2 (see f)), confirmed by the raising proportion of (vP peripheral) postverbal subjects in embedded clauses (see d)).

- d) The proportion of subject inversion in subordinate clauses raises gradually in both varieties, from less than 10% of all inversions in the earliest period to 40% in the latter.
- e) In Venetian, main-clause subject inversion goes up from 20% in the earlier period to 32% in the two later texts, with a steadily higher rate (+15-18%) with respect to subordinate-clause subject inversion.
- f) In French, main-clause subject inversion stays below 5% across the period, with an increasingly higher proportion of verb in a low position in the later text, as opposed to movement to a higher CP position in the earlier period.

The loss of main/subordinate asymmetry in subject inversion and null subjects is a clear indication that V2 is being lost in both varieties, although the change was already observable in French well before it was in Venetian. A further confirmation of V2 loss in Venetian is the crash of enclisis to inflected verbs (Tobler-Mussafia, see Benincà 2006), highlighted in g), a phenomenon absent in French.

- g) Rate of enclisis to finite Vs in Venetian:  $\cong$  20% until 1340, < 2% after that date.

The significance of the investigation is that the move from V2 to SVO is diagnosed not only by the rates of subject inversion, but also by the rates of pro-drop asymmetry between main and subordinates and the loss of enclisis to the inflected verb in Venetian. This is convergent with an overall narrative by which high verb movement is lost gradually rather than in one go from V2 to SVO, undergoing a phase of movement to a low C position attested by Venetian, where the amount of V3/V\* raises but subject inversion and the main/embedded asymmetry remains robust. The systematic investigation of treebank allows to both testing of existing models and expand our understanding of language change, stressing the necessity of a multifactorial analysis by which V2 is acquired and lost through a variety of indicators (and not simply the subject position) and in a stepwise fashion.

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## Aspectual conditioners on *by*-phrases in adjectival passives

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**Setting the stage:** Spanish adjectival passives (<*estar* ‘to be’ + past participle>, henceforth *estar*-passives) tend to disallow the addition of a *por* ‘by’-phrase introducing the external argument. This is unlike verbal passives, which are more permissive when it comes to *por*-phrases, as the contrasts in (1) and (2) show.

- (1) a. \*Los neumáticos están rajados por unos pilluelos del barrio. *estar-passive*  
(‘The tires are slashed by some urchins from the neighborhood.’)  
b. Los neumáticos han sido rajados por unos pilluelos del barrio. *verbal passive*  
(‘The tires have been slashed by some urchins from the neighborhood.’)
- (2) a. \*La ventana está cerrada por Pedro Sánchez. *estar-passive*  
(‘The window is closed by Pedro Sánchez.’)  
b. La ventana ha sido cerrada por Pedro Sánchez. *verbal passive*  
(‘The window has been closed by Pedro Sánchez.’)

**Previous accounts:** In the descriptive literature, it has been argued (Hengeveld 1986) that *por*-phrases are possible in *estar*-passives when the agent is somehow detectable in the result state. Thus, (3) would be acceptable since the ambassador is recognizable in the resulting signature on the document. Similar claims have been made for German (Rapp 1996), Hebrew (Meltzer 2005) and English (McIntyre 2015 calls it the State Relevance Hypothesis).

- (3) El documento está firmado por el embajador.  
(‘The document is signed by the ambassador.’)

Gehrke and Marco (2014), building on Gehrke (2012), propose that *estar*-passives denote the consequent state kind of an event kind, and *por*-phrases are acceptable when they modify such event kind. For instance, in their example in (4), a non-specific indefinite such as *un niño* ‘a kid’ is OK in a *por*-phrase because it helps create an event kind, namely the kind of event of a kid painting and its consequent state kind (a painting that looks like the kind of painting a child would produce).

- (4) El cuadro estaba pintado por un niño.  
(‘The painting was painted by a kid.’)

**Problems with previous accounts:** The state-relevance and state-kinds hypotheses are riddled with counterexamples. Take (5) and (6), for instance. The examples are ungrammatical even if it is detectable that the scratches were produced by my cat or that it was my nephews who stepped on the sand. Note that (5) and (6) do not improve with a non-specific indefinite, even though one can easily conjure up the kind of scratches that a cat makes on a curtain, or the way that children step on the sand (not less easily that the way a kid could paint a portrait, as in (4), which to our native ears is not fully acceptable to begin with).

- (5) La cortina está rasgada \*{por mi gato/ por un gato}.  
(‘The curtain is torn {by my cat/ by a cat}.’)
- (6) La arena está pisoteada \*{por mis sobrinos/ por unos niños}.  
(‘The sand is stepped-on {by my nephews/ by some kids}.’)

**Our proposal:** We put forth the generalization in (7):

- (7) Only *estar*-passives derived from stative verbs accept *por*-phrases.

This generalization encompasses object-experiencer psych verbs (e.g. (8a)), Davidsonian/causative states (e.g. (8b), see Fábregas & Marín 2017 and García-Pardo 2020) and locative verbs (e.g. (8c)), all of which allow *por*-phrases in *estar*-passives.

- (8) a. María está impresionada por su hijo. ‘María is impressed by her son’  
 b. El edificio está vigilado por la policía. ‘The building is guarded by the police’  
 c. La casa está rodeada por árboles. ‘The house is surrounded by trees.’

So what, then, happens with examples like (3), where *por*-phrases are allowed with participles derived from telic verbs? Our claim is that verbs like those listed in (9), all of which allow for *por*-phrases in *estar*-passives, have both a telic and a stative reading, and it is precisely the stative reading that allows the addition of a *por*-phrase.

- (9) *firmar* ‘sign’, *convocar* ‘summon’, *homologar* ‘homologate’, *apadrinar* ‘sponsor’,  
*editar* ‘edit’, *solicitar* ‘request’...

We exemplify the stative reading of *firmar* in (10), which does not pass the telicity test of *in x time* modification nor does it accept dynamicity-oriented adverbs like *rápidamente* ‘fast’. Also, (10) does not have a habitual reading despite being in the present tense, unlike what happens with dynamic predicates. Note that the predicate in (3) is also stative, as it fails the *in x time* test and disallows dynamicity-oriented modification (e.g. (11)).

- (10) La nota la firma Camila Sosa Villada (\*en cinco segundos/ \*rápidamente), quien actualmente prepara un nuevo libro.  
 ‘Camila Sosa Villada, who is currently working on a new book, signs the note (\*in five seconds/ \*quickly).’  
 (11) El documento está firmado por el embajador (\*en cinco minutos).  
 ‘The document is signed by the ambassador (\*in five minutes).’

Why is it, then, that participles derived from strictly telic verbs do not accept *por*-phrases in *estar*-passives? (e.g. (1) and (2)). Here, we follow García-Pardo (2020) in his proposal that only stative verbal predicates are good inputs for adjectival passives. The telic verbs that appear as inputs of *estar*-passives are, in fact, truncated structures that only include the result state (which, for Ramchand (2008), is encoded in a projection she labels *resP*). The consequence is that the higher projection introducing the external argument is absent in the *estar*-passive (e.g. (12)), and hence a *por*-phrase is impossible.

- (12) [<sub>AP</sub> -ados [<sub>resP</sub> los neumáticos [<sub>res</sub> raj- ]]]      *No external argument* (e.g. (1a))

On the other hand, transitive stative predicates can be inputs for *estar*-passives while maintaining their full argument structure, hence allowing *por*-phrases. We provide an example in (13), where *vP* is the stative projection that introduces the external argument.

- (13) [<sub>AP</sub> -ado [<sub>vP</sub> por el embajador [<sub>vP</sub> el documento [<sub>v</sub> firm- ]]]]

**Conclusions:** This paper sheds new light on *por*-phrases in *estar*-passives, whose availability in said constructions has hitherto been hard to systematize. We have shown how (at least many of) the puzzling examples in the literature, such as (3), are not problematic once we take a closer look at the aspectual composition of the verbal input.

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## Asymmetries in Word-final Schwa Realization in French

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Few phenomena have garnered as much attention in the phonological literature as the French schwa. The schwa in French is a vowel of limited phonological distribution (\*əC, \*Və, \*əV) characterized by its complex alternation with zero which appears to be conditioned by prosodic, segmental, phonetic, lexical, and sociolinguistic factors. This alternation is the product of both deletion and epenthesis processes shown in (1) and (2) respectively.

- (1) *du sucre* /dy sy.kʁə/ → [dy.sykʁ] ('some sugar')  
(2) *ours blanc* /uʁs blɑ̃/ → [uʁ.sə.blɑ̃] ('white bear')

Schwa epenthesis and schwa deletion are both most commonly licensed word-finally and illustrate a peculiar asymmetry (Eychenne 2019). This paper presents the results of a quantitative analysis of the word-final schwa-zero alternation in Metropolitan French. Results of the present study suggest that despite high rates of schwa deletion, phonetically realized schwa usually corresponds to an etymological or lexical schwa. True schwa epenthesis is, therefore, exceedingly rare. Epenthetic and lexical schwa are subject to different linguistic distributions, which vary according to their phonotactic contexts and their distributions in the word. Overt lexical schwa enjoys a wide distribution with few restrictions, while epenthetic schwa is constrained in its realization. We interpret these results to suggest that what has historically been called the *schwa* in French is instead the manifestation of two distinct phonological phenomena: the lexical schwa and the epenthetic schwa and perhaps itself an epiphenomenon.

We approach the question of word-final schwa realization quantitatively through a comparison of the distributions of underlying (lexical) schwa and epenthetic schwa. Data for this study come from the *Projet Phonologie du français contemporain* (PFC) corpus (Durand et al. 2002), an oral corpus of spoken French containing approximately 1,500,000 words, in which all schwas are identified and annotated according to a specific protocol. The results of a random forest model in addition to a series of chi-squared tests found robust differences between the distributions of epenthetic and lexical schwa. First, epenthesis was only licensed word-finally. Next, almost all epentheses were licensed after singleton consonants: fifteen occurred after consonant clusters. Cluster-final words that took an epenthetic schwa fit into two categories: loanwords (i.e. *Ford, concept, hard*) or clusters containing /s/ (i.e. *Max, laps, x*). This argues against the commonly-held assumption that schwa epenthesis is commonly employed as a repair strategy for complex clusters. It would seem that the primary function of epenthesis is simply to open syllables. Epenthesis was also more likely to occur after less sonorous segments than phonetically realized lexical schwa ( $W = 395928$ ;  $p < .001$ ). Finally, epenthesis was more likely to occur phrase-finally ( $\chi^2 = 58.892$ ;  $df = 1$ ;  $p < .001$ ). It has been suggested that phrase-final schwa epenthesis may function as a backchannel marker (Hansen & Hansen 2003). Current results reinforce this suggestion as approximately one-third of the epenthetic schwas occur tagged to the discourse particles (*donc, alors, and en fait.*)

To account for this asymmetry between word-final deletion and epenthesis, we expand upon a proposal by Côté (2007) who posits that there are minimality constraints on the prosodic word and the prosodic phrase: both the prosodic word and

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phrase must consist of two syllables. The implication that lexical and epenthetic schwa have distinct linguistic distributions in French further our understanding of the types of prosodically weak segments a language may contain as well as the roles those segments can play in the overall phonological landscape.

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The use of cleft constructions in spoken language is linked to the interaction of numerous pragmatic and discursive functions. Aside from certain discursive variables, like for example channel and register (see studies cited in De Cesare 2017), the literature identifies at least two relevant parameters for describing asymmetries (in terms of acceptability or frequency) in the use of cleft sentences. The first one is the syntactic category of the clefted constituent, viz. subject or direct/indirect object, see examples in (1); the second one is the pragmatic function of the clefted (and focussed) constituent, viz. identifying or corrective, see examples in (2).

- (1) a. clefted subject: *C'est [Marie]<sub>F</sub> qui donne le journal à son frère*  
b. clefted object: *C'est [un journal]<sub>F</sub> que Marie donne à son frère*
- (2) a. identification focus:  
    *Qui donne le journal à son frère?*  
    *C'est [Marie]<sub>F</sub> qui donne le journal à son frère*  
b. correction focus:  
    *Julie donne le journal à son frère, n'est-ce pas?*  
    *Non, c'est [Marie]<sub>F</sub> qui donne le journal à son frère*

Asymmetries on both parameters may have a functional motivation: signaling a focus through a specific syntactic constructions is a much urgent need for a constituent that is not linearly in the rightmost position (i.e. the subject) and a corrective focus is more relevant to be recognised, as it signals not only a piece of information to be added to the common ground, but also that a previous piece of information has to be erased from it (Cruschina 2021). For Belletti (2015), in effect, the two parameters allow two different underlying structures to be described.

In terms of cross-linguistic comparison, several corpus studies have pointed to a higher frequency of clefts in French than in other languages, including Romance languages (Lambrecht 2001, Dufter 2009, De Cesare 2017). Some of these studies have suggested that this higher frequency in French is linked to specific conditions, including the parameters mentioned above. In particular, the syntactic role of subject appears to be the the most relevant in favoring the use of clefts in French (Destruel 2012), in line with the functional reasons given above: because of its greater rigidity in word order, French does not dispose of a wide range of alternatives to signal the focal nature of the subject. The same parameter has been found to be relevant for the asymmetries in the use of clefts observed in comparative studies with Spanish (Van den Steen 2005) and Italian (Roggia 2008). The role of the pragmatic function has been analyzed in some experimental studies: while in French it does not seem to play a role in the frequency of cleft constructions (Destruel 2012), in Argentinian Spanish (Gabriel 2010) it has an important effect in the frequency of use of subject clefts.

This paper compares Italian and French speakers regarding their responsiveness to these two parameters - syntactic role (subject vs object) and pragmatic function (identification vs correction) of the focussed element - in the use of clefts and observes L2 speakers of the same language pairs, in order to identify whether and how native language asymmetries have an effect in L2 use and how they interact with each other.

The study was conducted on a corpus of task-elicited speech. The task is adapted from Gabriel's (2010) model: the speaker is shown a *PowerPoint* presentation containing two

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short comic strip stories, accompanied by a caption, followed by written questions. The questions are formulated in such a way as to elicit answers with a broad, identifying and corrective focus on different syntactic components of the sentence: subject, object, verb, other arguments. A total of 60 participants took part in the experiment: 15 native speakers of Italian, 15 native speakers of French, 15 Italian speakers of L2 French, 15 French speakers of L2 Italian; all groups are mixed and the age range is 19-40. Productions in French (L1 and L2) were recorded in Paris and productions in Italian (L1 and L2) were recorded in Turin. Each speaker produced, according to the protocol, 29 sentences, resulting in a final dataset of  $29 \times 45 = 1305$  analysable utterances.

Our results confirm that the syntactic role is the only relevant parameter for determining the use of clefts in native French: focussed subjects are systematically clefted, regardless of their function. In native Italian, as already found in native Spanish, both parameters (syntactic and functional) play a role: focussed subjects are more often clefted than objects, but both subjects and objects are preferably clefted in corrective-focus utterances. This could be due to the fact that Italian, unlike French and similarly to Spanish, has a wider repertoire of possibilities to rearrange word order in order to signal marked information structures, and thus pragmatically specialize cleft structures for contrastive functions. In L2 productions, a partial approximation to the target language is observed in terms of frequency, but asymmetries crucially adhere to the model of the mother tongue. French speakers of Italian L2, in fact, reduce the use of clefted subjects in all pragmatic contexts, thus keeping the syntactic role as the only active parameter, in line with their L1. Italian speakers of French L2, on the other hand, increase the use of clefts, but only in those pragmatic contexts that would be also typical in their L1, namely corrective focus.

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## Attitudes towards possessive constructions in La Palma, Islas Canarias

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This study analyzes the alternation between unstressed prenominal possessives (1), prepositional possession doubled with a possessive pronoun (2), prepositional possession without doubling (3), and possession expressed with a stressed postnominal possessive (4).

- |   |                          |
|---|--------------------------|
| (1) <i>Mariana apagó su teléfono</i><br>'Mariana turned off her phone'                      | UNSTRESSED POS + NP      |
| (2) <i>Mariana apagó su teléfono de ella</i><br>'lit. Mariana turned off her phone of hers' | UNSTRESSED POS + NP + PP |
| (3) <i>Mariana apagó el teléfono de ella</i><br>'lit. Mariana turned off the phone of she'  | ART + NP + PP            |
| (4) <i>Mariana apagó el teléfono suyo</i><br>'lit. Mariana turned off the phone hers'       | ART + NP + STRESSED POS  |

Postnominal possessives have not received as much attention as other type of constructions in which stressed possessives are used, as for instance, adverbial pronominal possessives (*delante mía* vs. *delante de mí*; e.g., Hoff 2020; Marttinen Larsson 2022; Marttinen Larsson and Bouzouita 2018; Marttinen Larsson and Álvarez López 2022). Diatopically, postnominal possessives have been documented both in European and Latin American Spanish varieties, such as Venezuelan, Costa Rican, Cuban, Canarian and Andalusian Spanish, to name but a few (Bouzouita and Marttinen Larsson 2020; Guirado 2021). Furthermore, few authors have taken into account the whole range of possessive construction possibilities given in (1) to (4). The social factors that have been attested to influence this variation are age, sex, and socioeconomic level with seniors, men, and lower income people favoring the postnominal stressed variant. In this study, we present preliminary qualitative and experimental results that analyze the attitudes of Canarian speakers towards the different ways to express nominal possession in Spanish.

Twenty-three participants of La Palma completed attitudinal questionnaire in which the following variables were manipulated, which yielded a total of 54 experimental items: type of possessive construction (see examples 1-4), grammatical person (first vs. second vs. third) and number (singular vs. plural), and gender of the possessive (feminine vs. masculine) The questionnaire was divided into two sets in which informants evaluated each target sentence using a visual scale that consisted of three emoticons: happy 😊, neutral 😐 and sad 😞. The data was submitted to a multinomial generalized mixed effects model in R.

As expected (see Figure 1 below), the unstressed variant showed the highest acceptability rates (84%), however and unexpectedly, this was not categorical, followed by the stressed variant (44%), the prepositional undoubled variant (33%), and the doubled prepositional variant (16%). With regards to the gender of the stressed possessive, the masculine form shows higher rates of acceptability (46% vs. 41% of the feminine possessive), which goes in the opposite direction of what has been found for postnominal adverbial possessives where the feminine variant is preferred (Merino Hernández and Bouzouita 2022; for Andalusian Spanish, see Marttinen Larsson and Bouzouita 2022). The statistical analysis (see Table 1 below) reveals that the type of possession, grammatical person, and age of participants are the predicting factors that condition the evaluation of the different target items. Overall, the unstressed variant is evaluated significantly better ( $p < 0.001$ ) than the other three, with the strongest difference being between this type and the doubled variant. There is a statistically significant difference between first and third person ( $p = 0.027$ ), but not between second and first. This confirms what has been found for adverbial possessives (e.g., Marttinen Larsson and Álvarez López

2022). Finally, overall people over 40 years ( $p = 0.047$ ) of age evaluate the target items better than those who are younger.

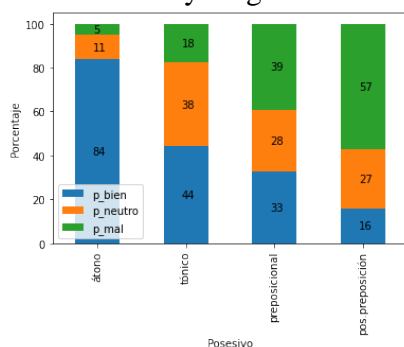


Figure 1. Acceptability rate of the different possessive constructions.

Dependent variable: evaluation (good, bad, neutral), Reference group: good							
Predictors	Reference group	Estimate	Std. Error	z value	Odds Ratios	CI	p
(Intercept)		-1.03266	0.66134	-1.561	0.36	0.10 – 1.30	0.118
possessive[doubled]	unstressed	3.93180	0.36809	10.682	51.00	24.79 – 104.92	<0.001
possessive[prepositional]	unstressed	2.73911	0.25750	10.637	15.47	9.34 – 25.63	<0.001
possessive[stressed]	unstressed	2.16675	0.24799	8.737	8.73	5.37 – 14.19	<0.001
person [second]	first	-0.02102	0.22335	-0.094	0.98	0.63 – 1.52	0.925
person [third]	first	-0.61807	0.27798	-2.223	0.54	0.31 – 0.93	0.026
number [singular]	plural	0.37011	0.20645	1.793	1.45	0.97 – 2.17	0.073
age [40+]	adults (18-39)	-1.06802	0.53817	-1.985	0.34	0.12 – 0.99	0.047
sex [male]	women	0.23548	0.42995	0.548	1.27	0.54 – 2.94	0.584
education [middle school]	high school	-1.19275	0.63166	-1.888	0.30	0.09 – 1.05	0.059
education [high school+]	high school	0.28314	0.89935	0.315	1.33	0.23 – 7.74	0.753

Table 1. Statistical analysis for the evaluation of the target items.

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**Auxiliary selection and past participle agreement in the Griko periphrastic perfect:  
A (micro)diachronic and diatopic study of a Greek variety in contact with Italo-  
Romance**

The phenomenon of auxiliary selection in the present perfect among Italo-Romance languages has been extensively studied due to its many diverse patterns, the most common of which are the unaccusativity-split (like in Standard Italian) and various kinds of person- and tense- driven split (both widespread across Central and Southern dialects; see Manzini & Savoia 2005 for a complete picture).

This mosaic of diatopic variation proves to be particularly interesting when the analysis is conducted on Griko, a Greek dialect spoken in Salento (extreme south of Apulia) at least since the Middle Ages, and in intense contact with Salentino and Italian, which is reflected in its morphosyntax. Indeed, due to the contact situation with Italo-Romance, Griko developed a periphrastic perfect tense built with auxiliary BE/HAVE + past participle (with invariable ending for transitives and unergatives and with possibility of past participle agreement (PPA) with unaccusative subjects).

The descriptions provided so far of auxiliary selection mechanisms in the Griko periphrastic perfect turn out to be incomplete and furthermore they do not take into account the diatopic and diachronic variation occurring in the language: according to Baldissera (2013), Griko displays the typical person-driven split, with obligatory HAVE in the 3<sup>rd</sup> person, but this account does not consider all the attested instances of BE also in the 3<sup>rd</sup> person; an unaccusativity-split is proposed by Morosi (1870), who also observes the frequent use of HAVE with unaccusatives, but fails to account for the much more extensive use of BE with transitives in some Griko varieties; Rohlfs (1972) confirms the existence of an unaccusativity-split and correctly observes the generalization of BE in some areas, but he explains this fact by treating the periphrasis as adjectival, despite the lack of PPA in his transitive examples. Furthermore, none of the descriptions pays attention to the presence or absence of PPA with unaccusative subjects in the different varieties and to its connection with the selected auxiliary. This study aims to provide a consistent account of auxiliary selection in Griko, looking at the interaction between Greek and Italo-Romance features in the development of the periphrasis and analysing prose and poetry texts from Sternatia, Calimera, Martano and Corigliano – all ranging from the 16<sup>th</sup> to the 21<sup>st</sup> century – in order to capture the noted diatopic variation and

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to ascertain the effect of (micro)diachronic change in these areas, especially during the last two centuries.

As a first result of this work, different patterns across time and space can be identified, which point towards an underlying unaccusativity-split for all the varieties under investigation – following the original Proto-Romance pattern – with a successive generalization of BE in some of them, namely Martano and Calimera. While in the former the change is complete at least since the 19<sup>th</sup> century and accompanied by the total absence of PPA with unaccusative subjects, in the latter there still is some optionality in auxiliary choice, and PPA is the default. The Sternatia variety maintains the split, but in older texts an optional use of HAVE with unaccusatives is attested as well: however, PPA obtains only if the unaccusative verb selects BE. The data collected from Corigliano until now are limited to traditional poems and confirm the usual unaccusativity-split, with PPA on unaccusatives.

These patterns are even more interesting, as they diverge from the consistent generalization of HAVE occurring in most Salentino varieties at least since the Middle Ages (see *Il Libro di Sidrac Salentino*), with obligatory PPA with unaccusative subjects. Additionally, the Salentino data analyzed until now from some recent works from Calimera (Vito Bergamo's stories) pattern more similarly to the other Salentino varieties than to Griko, since they show a tense split with the usual unaccusativity-split in the perfect, always with PPA, and HAVE-generalization in the pluperfect.

Further work is collecting more Salentino evidence from Calimera and other neighboring towns, where Griko and Salentino coexist or have coexisted for a long time. In this way, we can frame more closely and in detail the situation evidenced in Griko, also analysing more deeply the observed PPA patterns and putting them in relation to language contact and to the change of alignment in auxiliary selection over time.

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## Auxiliary selection in French and Italian

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**INTRODUCTION** Auxiliary selection is a well-known phenomenon in perfect tense formation that relates to the ability of some languages to choose between ‘have’ or ‘be’. It has been a central theme in academic literature since Perlmutter’s (1978) unaccusative hypothesis and has piqued the interest of many linguists in the domain of Romance languages, particularly Italian and French (Van Valin 1990, Sorace 2000, Sorace and Legendre 2003, Bentley and Eythórsson 2004). A particularly influential theory is the Auxiliary Selection Hierarchy (ASH) proposed by Sorace (2000). Whereas the verbs that select ‘be’ and ‘have’ are located at the two extremes of this hierarchy, the so-called *peripheral verbs*, the ones that are most sensitive to auxiliary selection variation, are located in the middle of the hierarchy. *Accroître* ‘increase’, *diminuer* ‘decrease’, *passer* ‘pass’ ‘go to’, *monter* ‘mount’, *changer* ‘change’, *paraître* ‘appear’ are only some of the examples of ‘double auxiliary’ verbs. Consider *monter* in the following examples:

(1) **Le ton a monté** et j’ai alors constaté que [...]   
ART tone have.AUX.3Sg rise.PTCP and I.have.AUX.1Sg then notice.PTCP that [...]   
The tone rose and I then noticed that [...]

(2) **Le ton est monté** et lorsque l’une de nous émettait [...]   
ART tone be.AUX.3SG rise.PTCP and when ART-one of us make.IPFV.3Sg   
The tone went up and when one of us made [...] (FrTenTen(17))

Legendre and Sorace (2003:7-8) argue that one of the classes exhibiting “regular alternations” is that of verbs denoting ‘indefinite change’ in a particular direction”, like *salire* (it.) *monter* (fr.) ‘go up’, and that “the strength of preferences is a function of the (+/-) inherent telicity of the verb”. Moreover, “*monter* (and *descendre*) select *être* or *avoir* for most speakers depending on the agentivity of its subject”, in their view. Despite the progress made in the state of the art by ASH, the parameters that license either ‘be’ or ‘have’ auxiliation with peripheral verbs remain unclear. Moreover, while the agentivity of the subject has been widely identified as a relevant parameter for auxiliary selection, less attention has been devoted to the interpretation of subjects liable to an agentive interpretation by metonymy.

**METHODS** To address these challenges, we decided to combine chi-square analysis and corpus analysis by using ItTenTen (16) and FrTenTen (17) via Sketch Engine (cf. Jakubíček et al., 2013) as primary corpus. A sample of verbs with double auxiliation were analyzed by means of a battery of tests, combining semantic and syntactic parameters. The semantic parameters considered are the subject’s human trait, animacy, agentivity and the *non-volitional internal cause*. Among the different syntactic contexts considered, we looked at locative, temporal and aspectual adverbials, adverbial arguments, adverbials of quantity and adverbials of manner. Then, given that several verbs have besides their intransitive construction a transitive construction, we identified when a direct object complement could be assumed as implicit in order to understand the subtle line separating the two interpretations. At a later stage we examined the data with CHAID (Kass 1980). This nonparametric test provides a way to observe how the different features (semantic and syntactic parameters) contribute to the selection of the auxiliary by creating a decision-tree in which every segment contains similar sentences according to the features. This enables us to see not only the factors that influence the selection

of auxiliaries, but also to predict which auxiliary a given verb is expected to select. Spreadsheet and decision trees are not in the abstract because of their dimension: they are available upon request.

**RESULTS** One of the first results comes from examining the concepts of internal and external causation not only at the general level of intransitive verbs, but also specifically with respect to peripheral verbs. Besides the agentivity parameter usually considered in studies on auxiliary selection, we identify as relevant the concept of *non-volitional internal cause* (Mateu 2009). The Italian verbs examined in our study demonstrated how the distinction between agentivity and internal cause, in conjunction with verb semantics and subject's animacy and human trait, can explain auxiliary selection. Verbs are more likely to show double auxiliation when they are characterized by non-agentive, but causative subjects. However, other factors prove to be at work, namely the availability of a resultative reading. It has gone largely unnoticed that the auxiliary alternation interferes with aspect. A preliminary comparison using CHAID reveals that agentivity is a stronger predictor of auxiliary choice for Italian peripheral verbs than for the French verbs. The lists below show the importance of the parameters in the sorting of sentences into homogeneous segments: at the top of the list, we found parameters having p-values lower than 0.05, and at the bottom, we found parameters that are not statistically significant ( $p > 0,05$ ).

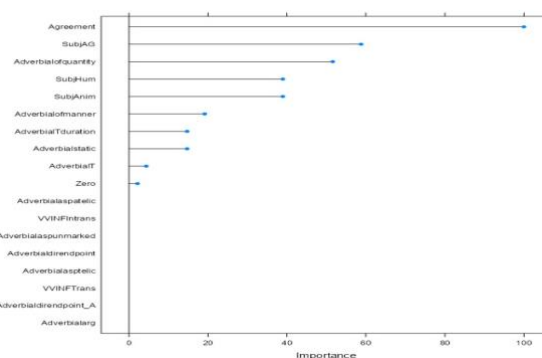
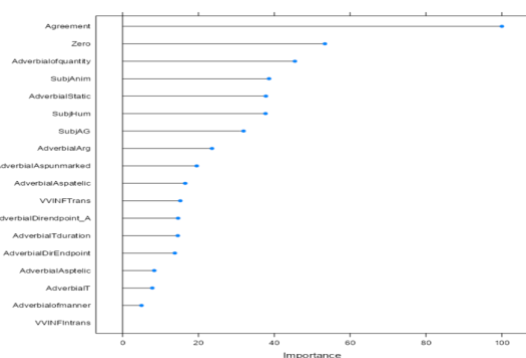


Table 1 – Parameters ranked in order of importance (French)

Table 2 – Parameters ranked in order of importance (Italian)

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**Introduction.** Natural languages employ two main strategies to express frequent, iterated or habitual eventualities: either by means of verbs bearing morphological markers of imperfective aspect (which also allow so-called ongoing and dispositional interpretations), or by means of the dedicated “habitual” particles. In Spanish, rather than a particle, the dedicated construction to express habituality takes the shape of a periphrastic verb involving the verbal precate *solero* and its infinitive complement.

- (1) *Juan* {**a.** *fuma* / **b.** *suele fumar* }  
 Juan smoke.IPFV SOLER smoke.INF  
 ‘Juan smokes (as a matter of habit)’

The intricacies of the semantic contribution of dedicated “habitual” or “generic” markers such as *solero* remains largely unexplored, as is the relation they bear to the more general unmarked imperfective mode. This paper (*i*) presents a description of the main syntactic, semantic and pragmatic properties of habitual constructions with *solero* in Spanish, and (*ii*) a corresponding formal analysis capturing its semantic properties, its differences wrt. habitual readings of its unmarked imperfective counterpart, and the pragmatic inferences that *solero* is argued to convey.

**Restrictions on *solero*.** **1.** Semantically, *solero* is always generalizing and cannot apply to ongoing events; unlike (1a), (1b) cannot describe a situation where Juan is currently smoking. **2.** Syntactically, *solero* shares properties with the distribution of both modal and aspectual periphrases: like modal verbs and unlike aspectual periphrases, it cannot appear in the imperative (2), but like aspectual periphrases and unlike modal verbs, it cannot combine with compound infinitives, which often take perfective morphology ((3); Gómez Tórrago 1999, Vatrican 2021):

- (2) {**a.** *\*Suele* / **b.** *\*Puede* / **c.** *Empieza a* } *cantar!*  
 SOLER.IMP can.IMP begin.IMP to sing.inf  
 {**a.** Int.: ‘Have the habit of singing!’ / **b.** ‘Have the ability to sing!’ / **c.** ‘Start singing!’ }

- (3) {**a.** *\*Suele* / **b.** *Puede* } *haberle visto por el Retiro*  
 SOLER.IMP can.IMP have.inf-CL see.pfv at the Retiro  
 They {**a.** have see.SOLER / **b.** could have seen} them in the Retiro park

**3.** *Solero* cannot apply to once-only predicates, (4): it requires a plurality of certain minimal size, be it a plurality of situations/events as illustrated previously in (1), or a plurality of individuals.

- (4) *El gorila Maguilla* {**a.** *vive* / **b.** *\*suele vivir* } *en libertad*  
 ‘Maguilla Gorilla {live / live.SOLER } freely in the wild’

- (5) *Los gorilas* {**a.** *viven* / **b.** *suelen vivir* } *en libertad*  
 the gorilas live.3PL.IPFV SOLER.3PL LIVE.INF in freedom  
 ‘Gorillas {live / live.SOLER } freely in the wild’

**4.** *Solero* may only describe realized eventualities: unlike (6a), (6b) would be false in a situation where the coffee machine is new and was never used before (Green 2000).

- (6) *Esta máquina* {**a.** *hace* / **b.** *suele hacer* } *un café muy rico*  
 this machine make-IPFV SOLER MAKE.INF a coffee very tasty  
 ‘This machine {makes / make.SOLER } very tasty coffee’

**5.** Generalizations lacking exceptions, including those stating norms, rules, dispositions, uninterrupted states (e.g. *be a bachelor*), etc. are not describable by means of *solero*, (7). However, rather than false, such expressions simply result in infelicity or oddness: one could use (7b) to achieve a certain effect, for instance as a joke, within a poetic narrative, etc. Crucially, however, in those instances the normative, dispositional or deontic (circumstantial) flavor of the unmarked *solero*-less counterpart in (7a) is lost.

- (7) *El sol* { **a.** *sale* / **b.** *#suele salir* } *por el este*  
 the sun come.out-IPFV SOLER come.out-INF out-of the east  
 ‘The sun {rises / #rises.SOLER} in the East’

**Proposal.** Bare habitual. Assuming that tense heads are assignment dependent temporal pronouns directly denoting time intervals, I follow much earlier work (Deo 2010, Arregi et al. 2014, Ferreira 2016) in giving habitual interpretations of bare sentences a modal treatment. The modal base is a function from world-time pairs to a set of (ordered) worlds (Kratzer 1981, 1991), in this case constituted by a set of gnomic alternatives to world  $w$  at time  $t$ , where the “dispositions”, “propensities” and “habits” are as in  $w$  at  $t$  (Boneh & Doron 2013). I assume that in present tense Spanish has a null imperfective morpheme  $\emptyset_{\text{IPFV}}$ . This morpheme states that every accessible world  $w'$  is s.t. the plurality of eventualities  $*P$  contains  $t'$ , the time of the eventualities at  $w'$ . We analyze (1a) as in (9). Note that the evaluation world need not be one where  $e$  holds, and thus the non-actualization of (6a) is successfully accounted for.

$$(8) \llbracket \emptyset_{\text{IPFV}} \rrbracket^{w,t,g} = \lambda P_{\langle s, \langle \epsilon, t \rangle \rangle} \cdot \lambda t' \cdot \forall w' \in MB_w^t \cdot \exists e [ *P(w', e) \wedge t' \subseteq T(e) ]$$

$$(9) \llbracket (1a) \rrbracket = \text{T iff } \forall w' \in MB_w^{g(i)} \cdot \exists e [ g(i) \subseteq T(e) \wedge \text{smoke}'_{w'}(e) \wedge Ag_{w'}(e) = \text{Juan}' ]$$

Soler habituals. Our account rests on two main pieces. **I.** Habituality is a notion that rests on event iteration (Vlach 1993, Boneh & Doron 2012), and it is thus at the center of *soler*’s contribution: *soler* holds of a plural eventuality  $e$  that is equal to the supremum of its proper parts  $e'$  (Kratzer 2008). Expressing this via Link’s (1983)  $\sigma$ -operator we introduce the required existence of a plurality of such  $e'$  sub-eventualities, effectively banning once-only predicates. Moreover, lacking any modal quantification, events must be checked wrt. the evaluation world, accounting for *soler*’s restriction to realized eventualities. As expressed in (10), *soler* together with perfective aspect requires thus iterative eventualities within a topical time, (10).

$$(10) \llbracket V \text{ soler} \rrbracket^{w,g,t} = \lambda t' \cdot \exists e [ P_w(e) \wedge T(e) \subset t' \wedge e = \sigma e' [ P_w(e') \wedge e' < e ] ]$$

**II.** *Soler* habituals are quantificationally dependent and thus must be bound (c-commanded) by some quantificational expression, overt or covert (cf. Chierchia 1995). In this, we follow Cable’s (2022) account of habitual morphology in Tinglit, whereby quantificational adverbs quantify strictly over times in the actual world. The semantic role of such adverbial quantifiers is to determine how often (via quantification) and during what time spans (through their associated contextual restriction) *soler* habitualities occur.

- (11) a. *Suelen ir al fútbol todos los domingos*  
 SOLER go-INF to soccer every the Sunday

‘They go to a soccer game every Sunday’

$$\text{b. } \forall t' [ \text{Sunday}(t') \wedge t' \in C_t \rightarrow \exists e [ T(e) \subset t' \wedge \text{go-soc}'_w(e) \wedge e = \sigma e' [ \text{go-soc}'_w(e') \wedge e' < e ] ] ]$$

**Discussion.** Quantification. *Soler* habituals are argued to introduce no quantificational force by themselves. This is welcome because *soler* statements are compatible with quantificational adverbs of any force. For instance, variants of (11), with adverbs such as *always* and *very rarely* are fully grammatical and felicitous, suggesting a “vanilla” status of *soler* wrt. the frequency in which eventualities must occur and corroborates our hypothesis that the core contribution of *soler* is only iteration. Exceptionless generalizations. We suggest that the oddness of *soler* habituals in generalizations that are known to have no exceptions is essentially a pragmatic phenomenon: *soler* is odd whenever its corresponding bare imperfective counterpart expresses a “rule-based” (Carlson 2005) or “definitional” (Krifka 2013) generic. Such generic statements uncontroversially convey strong (universal) modal interpretations, true in all accessible worlds. Instead, *soler* habituals, on the other hand, depend on their associated quantificational adverb to determine the strength of their statement but, even in cases where they combine with adverbs such as *always*, these are further contextually restricted, and thus never seldom hold at all times/situations—i.e. they are temporally discontinuous.

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**Bilingual Knowledge of Resultatives: A Study of Spanish Heritage Speakers**  
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Heritage speakers often exhibit structural differences from baseline grammars across linguistic domains (Montrul, 2010). The present study examines Spanish heritage speakers' (SHS) knowledge of resultatives in English and Spanish, in comparison with monolingually raised native speakers of Spanish (MRS) and English (MRE). Crucially, resultatives occur in English but not in Spanish (Pylkkänen, 2008).

Resultatives predicate a state of an NP which is a result of the action described by the verb (Hovav & Levin, 2001). Examples (1) and (2) show resultatives.

(1) John hammered the metal *flat*.

(2) The lake froze *solid*.

Resultatives are subject to a Direct Object Restriction (Levin & Hovav, 1995), meaning they can only be predicated of objects. As such, they are grammatical with transitive verbs, as in (1) and unaccusative verbs, as in (2). They are ungrammatical with unergatives, as in (3), unless a fake reflexive object is added as in (4).

(3) \*She sang hoarse.

(4) She sang *herself* hoarse.

Given SHSs' dominance shift to English, they are predicted to have nativelike knowledge of English resultatives. This prediction is supported by previous research which found that SHSs have nativelike knowledge of the dominant language (Montrul, 2006; Montrul & Ionin, 2012). Assuming dominant language influence, SHSs are predicted to incorrectly accept resultatives in Spanish. With respect to dominance, greater English dominance should result in greater acceptance of resultatives in Spanish, while greater Spanish dominance should result in greater rejection of resultatives in Spanish.

19 Spanish heritage speakers, 25 monolingually raised Spanish native speakers and 29 monolingually raised English native speakers completed the study (Table 1). Spanish speaking groups completed the Bilingual Language Profile (Birdsong et al., 2012), Spanish and English cloze tests, and 2, 56-item acceptability judgment tasks, one each in English and Spanish. For the Spanish task, conditions were \*Resultative and Resultative which contained items like (1) and their grammatical Spanish counterparts. For the English task, conditions were Transitive Resultative, items like (1), and \*Unergative Resultative, items like (3). The MRE group completed only English tasks.

According to the statistical results, overall predictions were partially supported. For the Spanish task, there were significant differences between the SHS and the MRS groups. The SHS group accepted significantly more ungrammatical resultatives in Spanish, indicating dominant language influence.

For the English task, results diverged from predictions. There were no significant differences found between the SHS and MRS groups. However, there were significant differences found between the SHS group and the MRE group, in the transitive resultative condition. Interestingly, this difference was due to the SHS group demonstrating *more* categorical judgments in English. This finding confirms the tendency attested in heritage phonetics/phonology in which HSs, "tend to amplify properties that separate their two languages." (Polinsky, 2018, p. 162)



Finally, across both tasks dominance and proficiency were not significant predictors, which may be attributable to the nature of our sample: the high level of English proficiency of the MRS group and the relatively balanced bilingualism of the SHS group.

*Table 1 - Participant Information*

Group	Number	Mean English Cloze Score (SD) - Max 40	Mean Spanish Cloze Score (SD) - Max 20	Mean Dominance Score (SD)*
HS	19	36.2 (3.87)	12.4 (4.6)	-38.4 (29.6)
MRS	25	33.7 (6.66)	17.6 (3.3)	64.2 (48.3)
MRE	29	37.1 (2.95)	-	-

\*Scores range from -218 to +218, with negative scores representing English dominance and positive scores indicating Spanish dominance

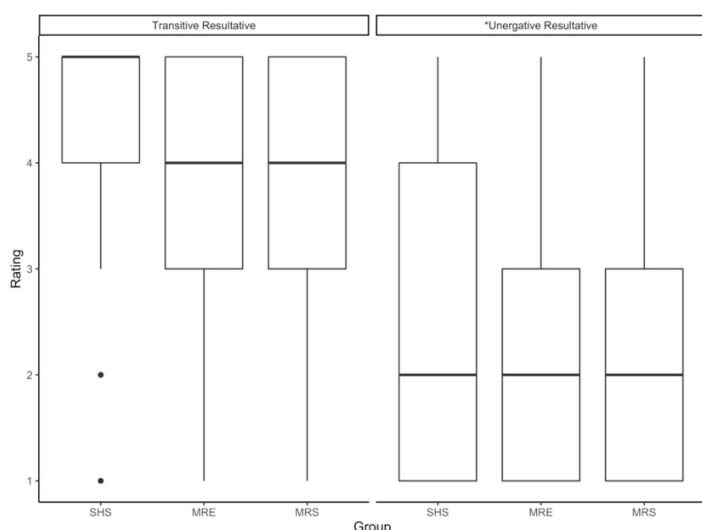


Figure 1 - English AJT

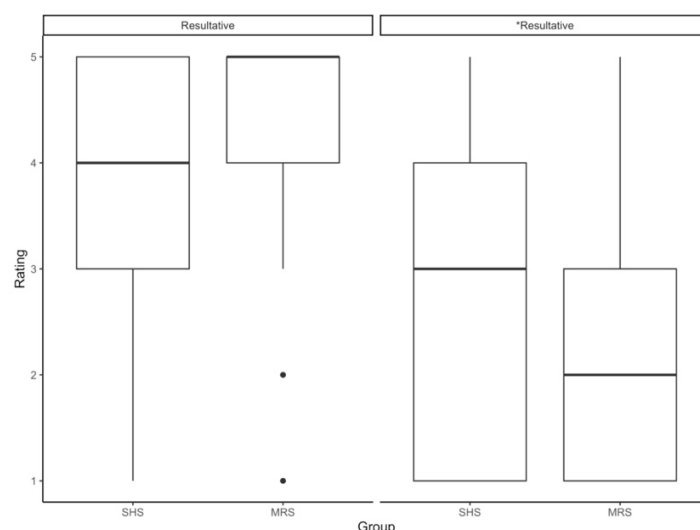


Figure 2 - Spanish AJT

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## *C'(es)t un effort : vowel reduction of French /ɛ/ in a formal speaking task*

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Traditionally, the only vowel in French that can be fully reduced is the schwa. However, the full reduction or deletion of other vowels to /Ø/ has also been observed: Clapin (1974) and Griolet (1986) describe /ɛ/ > /Ø/ reduction in certain varieties of French in North America (cf. *à cette heure* /a.sɛ.tœʁ/ 'now' against *asteur(e)*, *astheure*, or *a'stheure* /a.stœʁ/); Torreira and Ernestus (2011) demonstrate that /e/ in *c'était* (/se.te/; 'it was') is regularly reduced to [ste] in casual speech in Paris; and Durand, Laks, and Lyche (2002) give the words *déjeuner* (/de.ʒø.ne/ > [deʒ.ne]; 'lunch') and *peut-être* (/pø.tɛtʁ/ > [ptɛtʁ]; 'maybe') as examples of possible /ø/ deletion.

Torreira and Ernestus (2011: 51) suggest that the phenomenon of the reduction of non-schwa vowels (i.e., /e/, in their study) "can be elided categorically only in extremely relaxed and casual speech" and that casual speech phenomena "cannot be properly studied in a highly controlled laboratory setting." However, the deletion of /ʃ/ in *son* (/sɔ̃/; 'his/her') in liaison position has also been observed in the formal speech context of reading tasks recorded in a laboratory setting (McBride & Griffiths, 2020). In both of these studies, the deleted vowel yields viable, complex onsets (i.e., either [st] or [sn]) that are attested lexically in French.

The present study draws inspiration from the abovementioned work by Torreira and Ernestus (2011) by seeking to a) determine whether deletion of the mid-vowel /ɛ/ can be attested with regularity in a formal speaking task, b) describe some of the phonetic properties of reduced /ɛ/ in *c'est* (/sɛ/; 'it/that is') in liaison position, and c) identify some of the conditioning factors of /ɛ/ reduction in this context.

A modest number of *c'est* tokens (n=7 per speaker) are analyzed in a reading task completed by 19 speakers of Northern Metropolitan French in a laboratory setting. The vowel /ɛ/ appears in both pre-vocalic and preconsonantal *c'est* (cf. examples in (1), below), in both phrase-initial and phrase-medial positions. Duration of [s], [s(ɛ)], [ɛ], and [t], as well as vowel formants for /ɛ/ are extracted using Praat (Boersma & Weenink, 2022).

- 1) a) *C'est un...*  
/sɛ.tœ̃/  
'It's a...'
- b) *C'est pour...*  
/sɛ.puʁ/  
'It's for...'

In response to the first research question, the vowel /ɛ/ is observed to reduce fully (i.e., deletion) in more formal reading-task speech in 25.26% of all *c'est* tokens preceding a vowel-initial word. In these cases, the reduction seems to be categorical rather than gradient, as comparison of the durations of [s] in [s(ɛ)] and [sɛ] in *c'est* tokens suggests that [s] doesn't

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undergo compensatory lengthening when /ɛ/ is elided (mean duration of [s]/\_ε = 90ms; mean duration of [s]/\_ε = 91.3ms;  $p > 0.05$ ).

When full reduction of /ɛ/ does not occur, its mean duration is ~35.6ms. A decrease in duration generally corresponds to an increase in vowel height toward [i,ɪ] through "reduction in gestural magnitude" (Torreira & Ernestus, 2011: 50), which may support the dual-nature of both gradient and categorical reduction that Torreira and Ernestus (2011) postulated for /ɛ/.

The factors that seem to condition categorical reduction the most are position within the phrase and speaker. While 36.8% of speakers did not fully reduce /ɛ/ in any *c'est* token, others did so extensively, including two that even elided the /ɛ/ before the consonant /t/ (i.e., in *c'est tout ce que...* [stuskø]; 'it's all that...'). Speakers who did fully reduce /ɛ/ tokens did so at least twice as frequently in phrase-initial position as in phrase-medial position. Speech rate does not seem to be a strong factor in conditioning the full reduction of /ɛ/.

Although schwa does not seem to be the only vowel in French that can be reduced with some regularity, results from the present study and those of Torreira and Ernestus (2011) suggest that schwa still constitutes a unique phonological class in French phonology. For example, in the data set analyzed here, /ɛ/ is deleted more frequently in phrase-initial position than in phrase-medial position, which results differ from Hansen's (1994) observations that French schwa is often more stable in phrase-initial position.

The present study provides further evidence for the ability of vowels other than schwa to be reduced—even fully—in speech; even in speech obtained in "a highly controlled laboratory setting" (Torreira & Ernestus, 2011: 51). Additionally, this study joins others (e.g., Côté & Morrison, 2007) that call into question some of the longstanding assumptions held about French phonology, such as what may or may not constitute a 'weak' vowel in French.

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### *Chilean s-deletion and aspiration: against a Stratal OT account*

Spanish exhibits multiple opaque processes that affect the syllable coda (e.g., velar neutralization, glide consonantization, aspiration) and overapply to onsets as the result of resyllabification (Hualde 1989, 1991; Colina 2009, among others). Perhaps the most well-known is aspiration, in which [h], coda realization of /s/, can appear in the onset prevocally across word and prefix boundaries (Kaisse 1998; Colina 2002, 2011, 2021; Wiltshire 2006; Torres Tamarit 2014), *las alas* [la.ha.lah] ‘the wings, fem.’. Coda aspiration is of interest to phonological theory because of its interaction with morphological processes and of interesting patterns of dialectal variation that affect the contexts of overapplication. Additionally, aspiration has attracted the attention phonologists working in optimality theory due to the challenges posed by opacity for a parallel model of phonology.

This paper focuses on aspiration in Chilean Spanish as described in Broš (2019) (1-2). In Chilean Spanish, aspiration surfaces morpheme internally (1a), and in word-final prevocalic position (2b). However, deletion takes place instead in absolute word-final position (1b) and in word-final preconsonantal position (2a). Broš argues for a Stratal OT account, convincingly showing that it is superior to Harmonic Serialism (Torres Tamarit 2014). I contend that, although Stratal OT may be necessary to account for other phonological phenomena, a much simpler analysis of the Chilean data does not need to resort to strata or strata-specific rerankings. The proposed analysis contributes to our understanding of the Chilean data, to our knowledge of aspiration and other opaque phenomena in Spanish, and to the debate on parallelism in OT. The analysis is as follows. Deletion is the preferred repair mechanism to avoid coda /s/ in Chilean Spanish, \*s/coda >> MAX (SL) >> MAX (seg), *mes* [mé] (4). Aspiration surfaces instead when the ranking in (4) is dominated by other constraints: (i) morpheme internally, to avoid deleting a segment within a morpheme (rather than at the edges), CONTIGUITY >> \*s/coda >> MAX (SL) >> MAX (seg), *este* [ehte] (6); (ii) prevocally across word and prefix boundaries, to avoid an onsetless syllable, ONSET >> MAX (SL) >> MAX (seg), *tres amigas* [tre.ha.miga] ‘three friends, fem.’ (8) (cf. (7) where no onset violation is at stake). [h] serves as an onset at the expense of violating the constraint that requires alignment of the stem and the syllable, ALIGN-L (Stem,  $\sigma$ ). In (8), however, [s] should be preferred to [h] because, in addition to satisfying ONSET, [s] is faithful to the input. Yet, aspiration overapplies and [h] surfaces. Overapplication is explained by a Str OT account (Broš 2019) through constraint reranking at the phrasal level. I argue that there is no need for reranking (or for Strata). [h] responds to the need to aspirate (or to delete, i.e., to be weak, in Wiltshire’s terms 2006) next to a prosodic boundary, such as the prosodic word (PrWd). Although [h] is no longer in the coda in across-the-word prevocalic position, it is adjacent to a PrWd boundary (|), [tre.h|a.miga] (8). Overapplication is such only in relation to the coda position. Finally, stem-final /s/ in (5) [mese] fails to aspirate due to the absence of a PrWd boundary.

(1a) Word-medial coda /s/ aspiration      (1b) Word-final coda /s/ deletion (adapted from Broš 2019)

<i>este</i>	[éh.te]	‘this’	<i>tres</i>	[tré]	‘three’
<i>festival</i>	[feh.ti.βál]	‘festival’	<i>mes</i>	[mé]	‘month’
<i>desde</i>	[déh.ðe]	‘from’	<i>meses</i>	[mé.se]	‘months’

(2) Word-final coda /s/ across a word boundary

(2a) Deletion before a consonant

(2b) Aspiration before a vowel (adapted from Broš 2019)

tres meses	[tré.mé.se]	'three months'	tres amigas	[tre.ha.mi.ɣa]	'three friends'
las normativas	[la.nor.ma.tí.βa]	'the rules'	términos económicos	[téɾ.mi.no.he.ko.nó.mi.ko]	'economic terms'
tres términos	[tre.téɾ.mi.no]	'other aspects'	principales estrategias	[prin.si.pá.le.heh.tra.té.xja]	'principal strategies'

(3) Relevant constraints:

\*s/coda: no coda [s]; \*s| PRWD: no [s] next to a PrWd boundary

MAX (SL): No deletion of the supralaryngeal node (i.e., PA features)

MAX (seg): No segment deletion.

ONSET: Syllables must have onsets

CONTIGUITY: No segment deletion morpheme internally.

ALIGN L (STEM, σ): Align the left edge of the stem and a syllable boundary

(4) <i>mes</i>	*s/coda	MAX (SL)	MAX (Seg)	(5) <i>meses</i>	*s/coda	MAX (SL)	MAX (Seg)
a. $\text{☞}$ mé			*	a. $\text{☞}$ mése			*
b. més	*!			b. méses	*!		
c. méh		*!		c. méseh		*!	

(6) <i>este</i>	CONTIGUITY	*s/coda	MAX (SL)	MAX (Seg)
a. [éte]	*!			*
b. [éste]		*!		
c. $\text{☞}$ [éhte]			*	

(7) <i>tres meses</i>	ONSET	*s/coda	MAX (SL)	MAX (Seg)
a. $\text{☞}$ tre.mé.se				*
b. tres.mé.se		*!		
c. treh.mé.se			*!	

(8)	ONSET	*s/coda	*s/PRWD	MAX (SL)	MAX (Seg)	ALIGN L (STEM, σ)
a. tre. a.mí.ɣa	*!				*	
b. tre. s a. mí.ɣa			*!			*
c. $\text{☞}$ tre.h a.mí.ɣa				*		*

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## Clause internal or fronted? The syntax and pragmatics of *wh*-words in Valdôtain Patois

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It is widely assumed that *wh*-words and Contrastive Foci (CF) target the same position, both in the high and low peripheries (Rizzi & Bocci, 2017, Bonan, 2019; Kahnemuyipour, 2001). Such an approach is motivated by the complementary distribution of *wh*-words and CF in the High Left Periphery (HLP) across Romance languages (Rizzi & Bocci, 2017). In this paper, I use evidence from Franco-Provençal Valdôtain (FPV), or Valdôtain Patois (Glottolog: [vall1249](https://doi.org/10.1017/S0022268916000124)), to argue for a more nuanced approach. *On the empirical plane*, I show that **(i)** FPV *wh*-words move to an operator position at the edge of the *vP* phase, then overtly to the highest A'-position and that **(ii)** *wh*-words are compatible with CF clause-internally, but not in the high periphery. *On the theoretical plane*, I argue that **(i)** *wh*-words and CF do not target the same position and that **(ii)** the inner structure of the peripheries differs.

**Data.** FPV is an Arpitan language spoken in the northern Italian region Aosta Valley (the data in this paper come from the variety spoken in the village Morgex), with an unmarked argument order DO>IO (1). All *wh*-words (except *perqué* 'why') can occur in two positions: fronted (FWh), (2a), and clause-internal (IWh), (2b). Both options differ from echo questions (2c) in terms of prosody and linear order. Topics can freely co-occur with both types of *wh*-words, (3). Contrastive Focus (CF) can co-occur with IWhs (4a), but not with FWhs (4b,c).

(1) Dz'ì                      baillà lo    libro à Marco.  
1SG'have.1SG              given the book to Marco  
'I have given the book to Marco.'

(2) a. **À qui** t'à baillà lo libro?  
b. T'à baillà **à qui** lo libro?  
    'To whom did you give the book?'  
c. T'à baillà lo libro **À QUI**?  
    'You gave the book to WHOM?'

(3) a. *À Marco* **quan** te 'lli            predze?  
    To Marco when 2SG CL.DAT' speak  
    'When will you speak to Marco?'  
b. Te 'lli predze **quan** *à Marco*?

(4) a. Te predze **quan** À MARCO, pò à Luca?  
b. \*À MARCO **quan** te predze, pò à Luca?  
c. \***Quan** À MARCO te predze, pò à Luca?  
    'When do you speak to Marco, no to Luca?'

**IWhs and the structure of the Low Left Periphery (LLP).** The following arguments show that the IWh in (2b) has moved from its base position: **(i)** the order of arguments; **(ii)** crossover effects, **(iii)** parasitic gaps, (6), and **(iv)** lack of intervention effects (not shown here for space reasons). **(i)** Since the unmarked order of arguments is DO>IO (1), the IO>DO order in (2b) indicates that the IWh has moved. **(ii)** In 0, *à qui* 'to whom' induces a crossover effect if coindexed with the possessive *son*.

(5) \*T'à baillà [**à qui**]<sub>i</sub>; son<sub>j</sub> libro t<sub>i</sub>?  
    'To whom you gave his book?'

(6) T'à                      pensò que            dze            couegnissao            **qui**            [sensa demandé *pg*]?  
2SG'have            thought what    1SG    know            whom    [without    asking]?  
    'Who did you think I knew without asking?'

The IWh's landing position is relatively low; in particular, it must follow low manner adverbs like *bien* 'well':

(7) a. Te            soun-e                      *bien*            **dequé** à            l'organeun?  
    You    play-2SG            well    what    to            the-accordion  
    'What do you play well with the accordion?'  
b. \*Te soun **dequé** *bien* à l'organeun?

This result suggests that the left periphery of the *vP* (LLP) in FPV has an elaborate structural layering, which is consistent with several proposals concerning LLP structure and its parallels to



the structure of the CP (Belletti, 2004; Bonan, 2019; Kahnemuyipour, 2001; Poletto 2014, a.o.). In the LLP, the highest A'-position is an operator position, purely targeted by wh-words. This whP is followed by freely adjoining topics (8). The position of the whP is crucial: it is the demarcation of the lower-phase edge, parallel to ForceP in the HLP (Rizzi & Bocci, 2017).

- (8) a. Te lo baille [<sub>Op</sub> **quan**] [<sub>Top</sub> lo libro] à Marco?      b. \*Te lo baille [<sub>Top</sub> lo libro] [<sub>Op</sub> **quan**] à Marco?  
 'When do you give the book to Marco?'

Contrastive focus can co-occur with an IWh. The order is again fixed: IWh-(Top)-CF-(Top):

- (9) a. Te lo baille **quan** lo libro À MARCO deman?      b. \*Te lo baille À MARCO **quan** lo libro deman?  
 'When do you give the book to Marco tomorrow?'

Crossover effects show that the CF constituent also undergoes A'-movement:

- (10) a. Te baille **quan** son<sub>i</sub> libro À MARCO<sub>i</sub>?      b. \*Te baille **quan** À MARCO<sub>i</sub> son<sub>i</sub> libro?  
 'When do you give to Macro his book?'

For several reasons, IWh and CF cannot be analyzed as multiple specifiers of FocP (*pace* the Attract-All-F account, Bošković, 2022): **(i)** as it will be shown in the talk, FPV disallows multiple wh-words; **(ii)** the order is strictly wh > CF; **(iii)** topic phrases can intersperse, cf. 0. Thus, IWh and CF target separate positions, with CF targeting a lower A'-position inside the LLP.

**FWh and the structure of the High Left Periphery (HLP).** I then show that, despite their acceptability inside islands, IWhs overtly move further up to a wh-position in the HLP. Evidence for this movement comes from **(i)** the lack of intervention effects (IEs); **(ii)** inverse scope; **(iii)** binding (all presented in the talk), and **(iv)** parasitic gaps (6). PGs can only be licensed by overt A'-movement to a high position, where they can take wide scope (Nunes, 2004). As I will outline in the talk, the Lebeaux, or reconstruction, effect (Lebeaux 1988; Fox, 1999) in (11) supports a successive-cyclic movement analysis of the wh-word, transiting through the LLP (12). Finally, I will show that such position is not a mere phase escape hatch, but a dedicated wh-position.

- (11) [Quinta fotografie que l<sub>i</sub>'à fà à Ivana<sub>k</sub>]<sub>i</sub> tsaque garcon<sub>j</sub> l'à stampò t<sub>i</sub> [<sub>VP</sub> per llie<sub>k</sub> t<sub>i</sub>]<sub>j</sub>?  
 Which picture that 3SG'has made to Ivana every boy 3SG'has printed for her  
 'Which photo that he has made Ivana every boy has printed for her?'

- (12) ([TopP ] [<sub>whP</sub> **XPi**] ([TopP ] [TP ... [<sub>whP</sub> **XPi**] ([TopP ] [FocP] ([TopP ] [<sub>VP</sub>... ]])

The different word orders, as in (2a-b), are obtained by deletion of different copies at PF (Bošković, 2011), hence the amelioration of island effects discussed in the talk. The mutual exclusivity of FWhs and CF in the HLP (4b-c) suggests that, as opposed to the LLP, in the HLP wh-words and CF target the same position, lower than the phase edge (12), as Topics can precede it (3a). While a definitive explanation of this asymmetry between the HLP and LLP in FPV is outstanding, in the talk I will discuss possible analyses, including one ascribing the mutual exclusivity to post-syntactic constraints.

In summary, this paper presents evidence that: **(i)** FPV IWhs move to a dedicated wh-position at the edge of the LLP, whereas CF target a lower position in the LLP; **(ii)** Whs successive-cyclically move further up, to an wh-position in the HLP, then different copies can be deleted at PF (lower copy deletion: FWh; higher copy deletion: IWh); **(iii)** peripheries differ structurally: in the LLP the wh-positions is at the periphery's edge, while in the HLP it can be preceded by other A' elements, e.g. Topics.

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**Setting the stage.** Although less understood, a crucial trait of differential object marking (DOM) in many Romance languages is its sensitivity to the sentential syntactic configuration, going beyond better studied interactions with traits such as an *animacy*, *humanness*, *referentiality*, etc. For example, it has been shown that DOM leads to ungrammaticality when the structure contains a dative which is clitic doubled using a dative clitic in several varieties of Spanish (see especially Ormazabal and Romero 2013a, b, 2019, López 2012, Bleam 2000, or Zdrojewski 2008, a.o.), in Galician (Gravelly and Irimia 2022) or Catalan (Irimia and Pineda 2021). In Romanian, instead, if a clitic doubled dative might produce ungrammaticality with DOM in some contexts (Cornilescu 2020, Tigău 2021), accusative clitic doubling of DOM acts as a repair strategy (Irimia 2021). Here, we discuss available, as well as novel data from the Sicilian dialect of Ragusa (Guardiano 1999, 2000, 2010, 2022). The guiding question is: what role does Ragusa DOM play in sentential syntax, as shown by co-occurrence restrictions?

**The data.** First, a few general notes are in order regarding Ragusa DOM. As seen from the examples below, Ragusa is similar to standard Spanish in that DOM uses *a* (homophonous with the ‘dative’ preposition) which is obligatory not only on personal pronouns and human proper names, but also on all referential definite human DPs. Guardiano (2022) has demonstrated that, in the dialect of Ragusa, marked objects must project at least a D head (DOM is excluded on bare nouns). On the other hand, Ragusa is similar to Romanian in that accusative clitic doubling of human referential DPs is possible.

**DOM, D, licensing, and Case.** For Romance languages with robust DOM, numerous accounts have pointed to the syntactic nature of this phenomenon, which manipulates objects with a complex internal structure (e.g., KP for López 2012 or Ormazabal and Romero 2013a, b, a [PERSON] specification in Cornilescu 2000, or a special feature in the extended nominal projection for Romanian – Hill and Mardale 2021, a.o.). We show that Ragusa DOM is indeed a syntactic mechanism because it triggers co-occurrence restrictions which cannot be easily derived in the morphology. Moreover, the data under analysis allow us to make remarks about the licensing position of marked and unmarked objects.

(i) **DOM and co-occurrence restrictions.** In (1), we see that DOM cannot co-occur with a clitic doubled dative (unless DOM is clitic doubled too, as in 2).

(1) (\*cci)        mannamu **a**        stu    malatu        o                                dditturi.                (Ragusa)  
CL.DAT3    send.1PL    DOM    this    sick    person    DAT.DEF.M.SG    doctor  
Intended: ‘We are sending this sick person to the doctor.’

(2) cc’u                    mannamu **a**        stu    malatu        o                                dditturi.                (Ragusa)  
CL.DAT3.ACC.3    send.1PL    DOM    this    sick    person    DAT.DEF.M.SG    doctor  
‘We are sending this sick person to the doctor.’

As mentioned above, similar data have been discussed for other Romance languages, with the clash being attributed to both DOM and clitic doubled datives needing to undergo licensing in a domain in which there is only one licenser available. These results might, in turn, be taken to confirm recent analyses (López 2012, Ledgeway et al. 2019, a.o.), under which DOM can be unified as signaling a type of accusative which needs obligatory licensing (in terms of Case), by functional heads in the clausal spine (*v*, T, C, etc.). Generally, such licensing is assumed to impose raising of DOM to a higher position than unmarked nominals (see especially López 2012, Baker 2015, a.o.). For López (2012), DOM implies licensing after raising to a position above VP, but below *v*; the latter licenses the [uC] feature on DOM which needs to raise to Spec,  $\alpha$  ( $\alpha$  a functional head encoding a bundle of animacy, specificity, goal-related and telicity

features). In this line of reasoning, the problem with example (1) is that the clitic doubled dative also needs licensing, but only one relevant licenser is available in this configuration (3). In turn, unmarked direct objects might not need licensing, as they might not contain [uC].

- (3)  $\dots[v\dots[_{\alpha P} \text{DOM}_{[uC]} [_{\alpha} \text{IO}_{\text{DAT}} \alpha = \text{Cl}_{\text{DAT}} [_{\text{VP}} \text{V} \langle \text{DOM} \rangle ]]]]$  (adapting López 2012)
- 

(ii) **DOM and raising.** Although examples such as (1) support the syntactic licensing accounts for DOM, an examination of the structural constraints on direct objects in the language does not grant the conclusion that there is a difference in raising between DOM and unmarked objects. For example, unmarked and marked nominals can equally bind into indirect objects (IOs), irrespective of whether they precede or follow the IO overtly, as in (4) or (5). This indicates that both classes can be found higher than the IO (as opposed to Spanish, where only DOM has been claimed to be able to bind into the IO; see López 2012).

- (4) Puttamu tutti<sub>i</sub> i kani e so<sub>i</sub> patruni/(a) tutti<sub>i</sub> i picciridi e so<sub>i</sub> maistri.  
bring.1PL all DEF dogs DAT.DEF their owners/DOM all DEF kids DAT.DEF their teachers  
'We bring all the dogs to their owners/all the kids to their teachers.' (Ragusa)

- (5) Puttamu e so<sub>i</sub> patruni (a) tutti<sub>i</sub> i kani.  
bring.1PL DAT.DEF their owners (DOM) all DEF dogs  
'We bring all the dogs to their owners.'

Generally, Ragusa unmarked nominals can be seen in high positions in the clause, just like DOM and do not pass tests supporting pseudo-incorporation (no V-Obj adjacency, etc.), suggesting that they are equally subject to licensing (in terms of Case), and the split is *not* between objects that require sentential licensing (DOM) and objects that do not [or between Case-checked (=DOM) and Caseless nominals (Ormazabal and Romero 2013, López 2012, Rodríguez-Mondoñedo 2007, etc.)]. All these facts motivate an analysis according to which, in Ragusa, DOM signals a *supplementary licensing operation* on objects containing more than one *feature* that requires licensing. Such an account has been shown to provide better results for Romanian, where DOM is similarly not signaled by a higher position; as Irimia (2020, 2021) or Hill and Mardale (2021) have shown, Romanian DOM objects contain an additional ([PERSON]) feature needing licensing beyond Case per se.

(iii) **Accusative clitic doubling on DOM as a repair strategy.** Why does clitic doubling of DOM acts as a repair strategy? We follow some insight from Cornilescu (2020) for Romanian: clitic doubling of DOM involves DOM licensing in a position above *vP*. This is further confirmed by binding: only clitic doubled DOM can bind into the external argument (as in (6)), indicating that it is licensed above *vP*. Licensing of clitic doubled DOM above *vP* leaves the *v* licenser available for the licensing of the clitic doubled indirect object.

- (6) u so<sub>i</sub> (știssu) viliènu i mmazzàu a ttutti.  
DEF.M.SG POSS3 self poison CL.3M.PL.ACC killed.3SG DOM all.M.PL  
'Their own poison killed them all.' (Ragusa; talking about snakes)

In turn, the fact that DOM without clitic doubling is *not* licensed above *vP* is demonstrated in another context, namely its well-formedness with high applicatives, for example affected possessors as in (7), which tend to be licensed above *vP*. Examples of this type also indicate that possessor SE is not generated DP-internally (as seems to be the case for Romanian, where examples similar to (7) are ungrammatical, see Irimia 2022). DP-internal merge would lead to competition for licensing with the differential marker.

- (7) Ogni matina si porta a tutti i picciridi a scola (Ragusa)  
every morning SE bring DOM all DEF.M.PL kids to.DEF.F.SG school  
Lit. 'Every morning she drives to herself all the kids to school.'

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Lastly, mapping licensing positions can address Ragusa differences from languages where clitic doubling of DOM does not act as a repair strategy in contexts similar to (2), for example Argentine Spanish. As Saab (2022) has shown, in this language both clitic doubled DOM and clitic doubled datives need licensing above  $vP$  and thus compete for the same licenser but in a higher position.

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## Collocations with *tomar* ‘take’ + nouns of ‘emotion’ and Constructional Change in the History of Spanish

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The present study focuses on Spanish collocations formed with the verb *tomar* ‘take’ and nouns of ‘emotion’ such as *cariño* ‘affection’ and *miedo* ‘fear’. These structures include an experiencer (the entity experiencing the emotion) and a second complement that, in Modern Spanish, corresponds to a goal argument, i.e. the entity towards which the emotion is metaphorically directed (Alba-Salas 2012, Sanromán Vilas 2017). Whereas the experiencer is the syntactic subject of *tomar*, the goal complement can have two different realizations, each of them associated with a different constructional subschema in Traugott and Trousdale’s (2013) sense. In the first one –the ditransitive subschema, the most common today– the goal is an indirect object, e.g. (1). In the second subschema –the (non-dative) prepositional subschema– the goal is introduced by a preposition other than *a*., such as *por* ‘for’ in (2). Both subschemas involve metaphorical extensions of *tomar* as a ‘heavy’ verb of acquisition of possession whose use as a collocate here contributes the ingressive meaning of ‘beginning to experience the emotion’ designated by the noun (Alba-Salas 2012, Sanromán Vilas 2017); for example, *tomarle miedo* in (1) can be informally paraphrased as ‘begin to feel fear’.

- (1) La modernidad es **otra cosa a la que** a veces **le tomo miedo**. *Modernity is something else that I sometimes grow afraid of.* (Pedro Ramón López, 2011, Dominican Republic, [pedroramonlopezoliver.wordpress.com](http://pedroramonlopezoliver.wordpress.com))
- (2) [...] la Divina Providencia hizo que, desde el noviciado, **tomase cariño por los enfermos**. [...] *since his novitiate, Divine Providence made him grow very fond of the sick.* (anonymous blogger, [preguntasantoral.es](http://preguntasantoral.es), Spain, 2011)

The collocations under study are particularly interesting from a diachronic perspective because in Medieval Spanish, contrary to what we find in the present-day language, the second complement not only allowed a wider range of prepositions –such as *de* ‘of’ in (3), for example– but could also correspond to the cause or source (rather than the goal) of the emotion, as is the case with the complement of *tristeza* ‘sadness’ in (4).

- (3) [...] ca tamaño es **el mjedo que tomaron de mj los delas portogal** & [...]. [...] *since the Portuguese grew so afraid of me and [...].* (*Crónica de Alfonso X*, Fernán Sánchez de Valladolid, composed 1300s, copied 1489 [Madrid, Nacional, 829])
- (4) [...] non deuedes uos **tomar tamanna tristeza por este fecho** como yo. [...] *you should not grow as sad over this event as I do.* (*General estoria II*, Alfonso X, composed 1200s, copied 1300s [BNE 10237])

Using the *CORDE* and the *Corpus del español*, the study traces the historical realization of the second complement in these *tomar* collocations from the 1200s through the 2000s. The corpus search, which yielded almost 3000 occurrences, involved 38 different nouns of ‘emotion’ classified in three groups based on recent synchronic analyses (e.g. Anscombe 1995, Sanromán Vilas 2003, 2012, De Miguel 2015): as endogenous nouns that construe the emotion as originating in the experiencer and being projected towards an external goal (e.g. *cariño*); as exogenous nouns in which the emotion is seen as originating in an external source or cause (e.g. *tristeza*); and as hybrid nouns that allow both options (e.g. *miedo*). The results suggest that the (non-dative) prepositional subschema, which predominated in the Middle Ages, originally combined with both goal and source/cause complements, and thus also with the three types of nouns examined here. By contrast, the ditransitive subschema, which seems

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to be more recent, exclusively involved goal complements, so it has been historically productive only with endogenous and hybrid nouns. Although both subschemas declined after the Middle Ages due to competition from other collocates, the (non-dative) prepositional subschema was particularly affected because the main dialect- and register-neutral competitors of *tomar* in Modern Spanish provide a better fit for exogenous nouns. While *tomar* ceased to be productive with exogenous nouns by the 1900s (cf. Sanromán Vilas 2017), it has continued to be used with endogenous and hybrid nouns, but almost exclusively in the ditransitive subschema, which can accommodate their goal argument.

Using the framework of Diachronic Construction Grammar (Traugott & Trousdale 2013), the emergence of the ditransitive subschema as the default realization of collocations with *tomar* and nouns of ‘emotion’ is analyzed as entailing the restructuring of a broad network of Spanish Constructions. The process involved not only *tomar* as both a heavy verb and a collocate, but also other ingressive collocates, as well as Light Verb Constructions with *tener* and *haber* ‘have’ and two grammatical Constructions –both of them featuring an indirect object, but mapped onto different semantic roles– that have played a key role in the history of Spanish: the Ditransitive Construction (e.g. Ortiz Ciscomani 2011), and the Intransitive Dative Construction (e.g. Vázquez Rozas & Rivas 2007, Melis & Flores 2012).

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## Colourful modifiers. How overt morphology restricts the distribution of Italian adjectives

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This study investigates the distribution of adjectives that do not inflect in Italian and shows that, irrespective of their interpretation, these are confined to the postnominal position. Supported by new quantitative evidence, we show that this pattern finds no satisfactory account in prominent analyses of Romance adjectives (Cinque, 2010; Laenzlinger, 2005). Specifically, we argue that this distribution cannot be captured by solely relating different orders to different types of movement of the noun. Rather, we take these data to suggest that different merge sites of the relevant adjectives are responsible for their distribution.

We restrict our attention to colour adjectives (CAs), which represent an ideal test-bed for three reasons: i) this class has a relatively rich number of non-inflecting elements (which can be argued to still be adjectives based on standard diagnostics, Cabredo Hofherr and Matushansky, 2010), ii) CAs all encode the same type of information, allowing us to exclude the role of lexical-semantics in regulating the ordering restrictions in question, and iii) they are a priori compatible with both a prenominal and a postnominal position, despite the former having a stylistically marked status. The relevant contrasts (first noticed by Zamparelli, 1994) are in (1-2):

- (1) Quest'opera descrive **le (grigie) facciate (grigie)** dei palazzi  
This work describes **the.FPL grey.FPL facades.FPL grey.FPL** of the buildings  
popolari.  
working-class  
“This work describes the grey facades of working-class buildings”
- (2) Poche spedizioni hanno esplorato **(gl)i (\*blu) abissi (blu)** dell'  
Few expeditions have.3PL explored **the.MPL blu.∅ abyss.MPL blu.∅** of the  
Oceano Pacifico.  
Ocean Pacific  
“Few expeditions explored the blue abysses of the Pacific Ocean”

In both sentences, the adjective gets an individual-level reading. As (1) shows, this reading is available for direct-modification adjectives in both prenominal and postnominal position (cf. Cinque, 2010). The crucial point is that the non-inflecting adjective *blu* ‘blue’ in (2) receives the same interpretation, but cannot appear before the noun. From a descriptive perspective, our claim is that the ability to inflect and show Concord with the head noun by itself determines whether an adjective can appear prenominally.

To corroborate the observation, we collected experimental data through an acceptability-judgement task with Italian L1 speakers. Given a suitable pragmatic and semantic context, we predicted inflecting adjectives like *rosso* ‘red’ to be possible in both pre- and postnominal position. On the other hand, we expected non-inflecting CAs like *blu* ‘blue’ to receive low acceptability scores in prenominal position, with the postnominal position being virtually the only option. As Figure 1 shows (next page), our expectations were borne out.

The four bars in the plot represent the mean acceptability scores on a 5-point Likert scale in the four conditions we tested. From left to right, these involve 1) postnominal inflecting CA (*facciate grigie* ‘grey facades’), 2) postnominal non-inflecting CA (*abissi blu* ‘blue abysses’), 3)

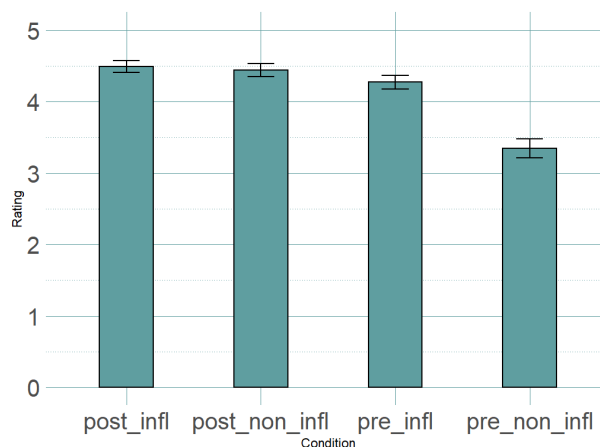


Figure 1: mean ratings on 5-point Likert scale across conditions

prenominal inflecting CA (*grigie facciate* ‘grey facades’), and 4) prenominal non-inflecting CA (*blu abissi*). As is clear from the graph, there is no difference in acceptability between inflecting and non-inflecting adjectives in postnominal position. On the other hand, the expected contrast emerges in prenominal position. Inflecting adjectives have the same mean score as in the first two conditions, while non-inflecting adjectives occurring in front of the noun (rightmost bar) are degraded. Crucially, the pragmatic context is the same in all cases, and the adjectives tested belong to the same lexical-semantic class. As such, the source of the observed difference cannot be semantic. Rather, the only systematic difference is whether or not the adjective can inflect.

These results thus support the broader claim that adjectives that don’t show Concord in Italian cannot appear before the noun. In the discussion, we argue that these results cannot be reduced to apparently similar phenomena like so-called ‘Lazy Concord’ (Nevins, 2011; Rasom, 2008; Savoia et al., 2018), and thus shed new light on the internal morphosyntactic complexity of the DP. More in general, our data represent a new contribution to the literature on the syntax of adjectives by bringing into the picture the role of morphosyntactic constraints, which is arguably still poorly understood in current approaches.

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**Background:** Italo-Romance varieties legitimize two distinct types of complementizer deletion: CD1, which can only be licensed if the selecting verb is a bridge verb and if the embedded verb bears [-realis] feature (1) and CD2, which is insensitive to verb type and to mood feature but requires a specific intervening clitic-nature element (a preverbal clitic, a preverbal negator or an auxiliary) between the matrix and embedded verbs (2). Standard Italian only accepts CD1, whereas Italo-romance varieties like Florentine or Barese select both (Cocchi & Poletto, 2002).

- (1) Credo (che) sarà interessante ascoltarlo.      (2) Ha detto (che) non ha portato nulla.  
believe (that) will be interesting listen-      Has said (that) not has brought anything  
him.      ‘He said (that) he did not bring anything’  
‘I believe (that) it will be interesting to  
listen to him’

According to Cocchi & Poletto (2002), CD1 and CD2 can be unified under the assumption that they both represent instances of “alternative checking” (Zanuttini, 1997; Obenauer, 2001). Focusing on CD2, the complementizer, base-generated in Force and encoding the [declarative] feature is the alternative checker of the clitic element moved to Force. From this featural account, two questions naturally arise: whether an implication between occurrence of CD1 and CD2 can be established and whether it is correct to assume that the clitic element moves solo in CD2 structures. This paper is aimed to offer an alternative view of CD relying on the Parametric Comparison Method (PCM), which is a parametric approach aimed to define the parameters which regulate the phenomena that operate in a specific syntactic domain (CP in this case) and their functional implications (Longobardi, 2001a).

**Parametric implications:** Following the PCM, I argue that there is a parametric implication between CD1 and CD2 resting on both logical and empirical assumptions. From a logical viewpoint, languages like Florentine with CD2 can have complementizer deletion when the selecting verb is both bridge and non-bridge and when the embedded verb encodes both [+realis] and [-realis] features, therefore any time that a language manifests CD2, it must also present CD1. Under the PCM approach, three parameters can be generated:

- (3) *Pc1*: Is complementizer deletion attested?  
*Pc2*: Is complementizer deletion attested with both bridge and non-bridge selecting verbs and with both [+realis] and [-realis] feature specifications on the embedded verb?  
*Pc3*: Is complementizer deletion only attested with bridge selecting verbs and with [-realis] specification on the embedded verb?

Consequently, if a language has a negative value for *Pc1*, there is no point in checking *Pc2* or *Pc3*'s values; these parameters turn 0-, meaning that they are irrelevant due to the value previously assigned to another parameter. On the other hand, if *Pc1* is positive, the other two are relevant. From (1), I can likewise conclude that if *Pc2* is positive, then *Pc3* is 0+, namely if a language admits CD2, it also presents CD1. These assumptions are further supported by empirical data collected from several Italo-Romance varieties: some of them categorically rule out complementizer deletion in both CD1 and CD2 contexts (Sicilian, Alto Polesano, Neapolitan, Campidanese), whereas other varieties present both (Florentine, Barese). Finally, there are some varieties that behave like Italian, which grammaticalizes CD1, but not CD2. However, there is no variety in my knowledge that displays CD2, but not CD1, upholding hence the view that there is a parametric implication between CD1 and CD2.

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**Verb Movement in CD2:** Contrary to Cocchi & Poletto's (2002) proposal on clitic movement to Force in CD2 contexts, in this paper I propose that the clitic forms a unique unit with the verb at the syntactic level. This means that embracing the idea that CD2 involves clitic movement to Force (Cocchi & Poletto, 2002), verb movement along with the clitic need to be hypothesized as well. Under the PCM, this implies that a language like Florentine could assign a positive value to the following parameter (more specifically, if Pc2 is positive then Pc4 is 0+ as languages with CD2 directly entail V-to-Force movement):

- a. *Pc4*: Does the verb move to Force?

This proposal is borne out by some empirical data retrieved from Florentine which, in a manner akin to languages with V-to-Force movement, has a poor preverbal field resulting in a low occurrence of V3 and V4 (Wolfe, 2016). In Florentine, speakers accept a focalized element (or a topic or an adverb etc.) in CD2 structures only if it follows the verb (4):

- (4) M'ha detto \*(QUATTRO BOTTIGLIE) te tu hai bevuto QUATTRO BOTTIGLIE ieri  
Me has told \*(FOUR BOTTLES) you you-cl have drunk FOUR BOTTLES yesterday  
'He told me that FOUR BOTTLES you drank yesterday'

However, V-to-Force languages admit elements like hanging topics to the left of the verb (Wolfe, 2019b). The same occurs in a language like Florentine:

- (5) Scommetto Gianni l'avete preso in giro tutta l'estate per quello che ha fatto  
Bet John him have mocked the whole summer for what he did  
'I bet (as for) John, you mocked him the whole summer for what he did'

From these data, it is, therefore, possible to conclude that in CD2 structure, not only does the clitic element move to Force, but the whole verbal unit undergoes verb movement towards Force.

**Conclusions:** This paper aims to provide a new approach to analysing complementizer deletion introducing the notion of parametric implications. As observed, a parametric tool like PCM can successfully capture the implications between CD1 and CD2 assuming a parameter hierarchy capable of identifying which languages admit different patterns of CD1 and CD2. Moreover, further analysis of this phenomenon has led to the conclusion that languages with CD2 behave similarly to language with V-to-Force movement and this phenomenon can also be regulated by a parameter under the PCM, generating its respective relations.

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## Computer modeling of innovations relative to Latin in today's Romance dialects

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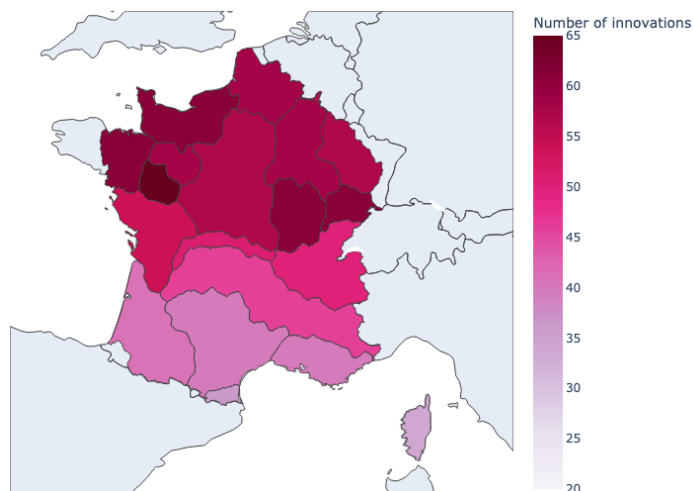
Europe is characterized by great dialectal diversity, which still needs to be documented. For more than a century, Aesop's fable "The North Wind and the Sun" has been used by the International Phonetic Association to illustrate many languages and dialects spoken in the world. On this basis, a speaking atlas of the regional languages of France was designed, before being extended to other European countries (Boula de Mareüil *et al.* 2018, 2021). The linguistic atlas, available at <https://atlas.limsi.fr>, allows visitors to hear and read this one-minute story in hundreds of versions, in minority languages or dialects. Most speakers of the atlas, recorded in the field, also translated a list of a hundred words (in particular referring to fauna and flora) into their varieties. Based on these digital data, and following the principles of dialectometry (Nerbonne *et al.* 2007; Patriarca *et al.* 2020), the comparative method and especially historical glottometry (François 2014; Kalyan & François 2018), we propose computational tools to address the following questions. Is there more variation between northern and southern Romance dialects, or between the west and east of the domain (Ibero-Romance dialects on the one hand, Gallo- and Italo-Romance dialects on the other)? How can we quantify it? To what extent do the groupings depend on the levels considered (phonetic, morphosyntactic, or lexical)? This study relies on a sub-corpus illustrating several dozen Romance dialects from France, Belgium, Switzerland, Italy, Spain and Portugal, for which 148 innovations relative to Latin have been encoded as a matrix of 1s and 0s. We encoded:

- phonetic innovations, e.g., regular sound change E > [wa];
- morphological innovations, e.g., merger of Latin imperfects in -ABA- and -EBA-;
- syntactic innovations, e.g., non-null subject or narration in the present perfect;
- lexical innovations, e.g., substitution of CUM 'with' with APUD HOQUE > *avec*.

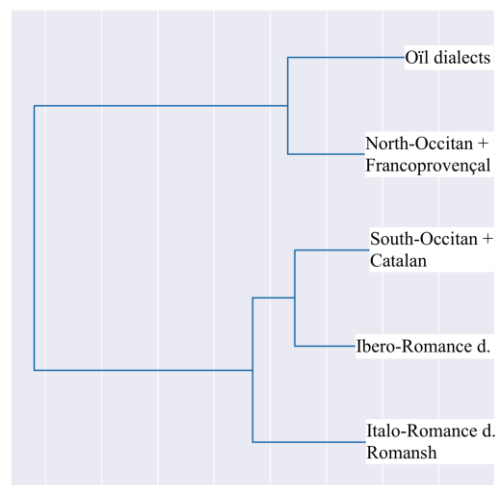
A range of classification techniques was applied to visualize the emerging clusters (in the form of trees, projections into a two-dimensional plane, etc.) and draw the main isoglosses. The results of the different methods of analysis and calculation will be confronted in order to propose a synthesis, making it possible to reassess the location of the main dividing lines between dialect groups. These results shed new light on dialectology, contributing to model the dynamics of territorial expansion since the breakup of Latin.

Several attribute selection algorithms have been used, among which decision trees provide a readily readable representation. Agglomerative hierarchical clustering (also known as Ward's method) provides other representations, in the form of dendrograms. The Python libraries Scikit-learn and Plotly were used. The former offers various attribute selection and classification algorithms, while the latter enables the results to be visualized in the form of variable-size points and choropleths (i.e., colored surfaces, which may correspond to our dialectal areas). Attribute selection is all the more important as some machine learning algorithms do not allow the number of features to be greater than the number of observation vectors (here, survey points). As some selection algorithms, such as Random Forests, are not deterministic, they were run 100 times, and a majority vote was applied to determine the best

features. From the entire set of features, the survey points considered can be ranked according to the number of innovations they show, and this number can be associated with a more or less dark color on a base map in GeoJSON format and then vectorized.



**Fig. 1:** Linguistic map of France featuring the Romance areas that are the most innovative (in dark red) vs. the least innovative (in light pink).



**Fig. 2:** Simplified dendrogram resulting from a cluster analysis with 5 classes.

The first results show that *Oil* (northern Gallo-Romance) France is the most innovative (Fig. 1). This is the case, in particular, of the Angevin dialect, in the northwest of the domain, while in France, Corsica is the region with the fewest innovations compared to Latin. At the scale of Europe, Friulian and Romansh (Rhaeto-Romance group) are the most conservative, according to our measures. Among the most discriminant features, we find the palatalization of Latin *CA*, which characterizes the majority of Northern Gallo-Romance dialects. The results of the hierarchical clustering, using all features or only the best ones to guarantee the robustness and parsimony of the approach, provide heuristic answers to the questions raised above. Preliminary results (Fig. 2) corroborate a North/South division, the divide passing through the middle of the Occitan (southern Gallo-Romance) area, with *Oil* and intermediate dialects clustering together in the North, the rest in the South. In the second branch of the dendrogram, the main division is between South-Occitan, Catalan and Ibero-Romance dialects on the one hand, Rhaeto- and Italo-Romance dialects on the other.

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## Corrective Focus in Italian Wh-Questions

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Current cartographic models claim that in root questions wh-phrases and corrective foci compete for the specifier of a left-peripheral FocusP projection. This also holds for in-situ corrective foci because they, too, are assumed to move to specFocusP, albeit covertly (Rizzi 1997, Rizzi & Cinque 2016, Rizzi & Bocci 2017). Consequently, wh-phrases and corrective foci are predicted to never co-occur in root interrogative clauses.

This talk presents a class of questions in Italian that systematically challenge this prediction. For example, in dialogue (1), the focus *GIANNI* in question A2 determines a corrective move that leads to the replacement of question B with A2. Native speaker informants find A2 grammatical and natural despite the simultaneous presence of the wh-phrase *Chi* and the corrective focus *GIANNI*. ('F' marks the corrective focus, SMALL CAPS nuclear stress, CAPITALS emphatic stress, and parentheses optional material.)

- (1) A1: *Chi<sub>wh</sub> hai invitato alla FESTA?*  
'Who did you invite to the party?'
- B: *Chi<sub>wh</sub> ho invitato alla festa di SANDRO?*  
'Who did I invite to Alexander's party?'
- A2: (No.) *Chi<sub>wh</sub> hai invitato alla festa di GIANNI<sub>F</sub>.* (Non di Sandro.)  
(No.) Who (you) have invited to-the party of JOHN. (Not of Alexander.)  
'(No.) Who did you invite to JOHN's party. (Not Alexander's).'

The talk will test whether Italian corrective questions are a genuine challenge to current cartographic assumptions by closely examining their key properties in detail.

To begin with, Italian corrective questions will be shown to share the properties of root questions, thus showing that they are not subordinate questions in disguise. Specifically, I will show that (i) they are not rhetorical questions; (ii) they are not echo questions (A2 mentions *GIANNI* for the first time); and (iii) they demand an answer (this being a distinctive property of root interrogatives, see Schwabe 2007).

Second, the corrective foci in Italian corrective questions will be shown to share the same properties of other corrective foci typically claimed to move to specFocusP in the cartographic literature. For example, they force the replacement of a previous question – namely B in dialogue (1) – exactly like corrective foci in declarative clauses force the replacement of a previous statement, see (2). Furthermore, they trigger the same optional negative tags that Leusen (2004) associated to corrective foci in declarative clauses; compare the parenthesized negative tags in (2.B) with the identical ones in (1.A2) above.

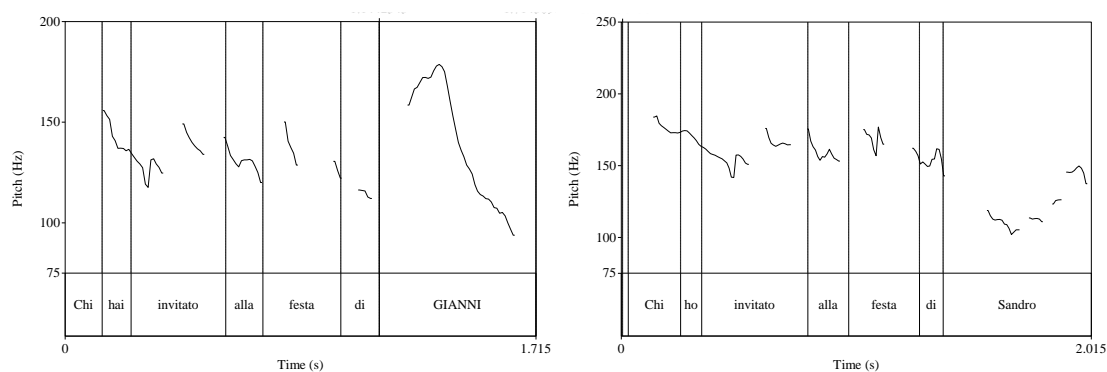
- (2) A: *Lucia ti ha invitato alla festa di SANDRO.*  
'Lucy invited you to Alexander's party.'
- B: (No.) *pro mi ha invitato alla festa di GIANNI<sub>F</sub>.* (Non di Sandro.)  
(NO). (She) me has invited to-the party of JOHN. (Not of Sandro.)  
'(No.). She invited me to JOHN's party. (Not Alexander's).'

Third, I will show how a minor extension to Rooth’s model of focalization, which assumes focalization in-situ, enables the co-occurrence of corrective foci and wh-phrases in the Italian corrective questions being considered (on in-situ focalization, see also Brunetti 2004, Costa 2013, Samek-Lodovici 2015, Rooth 2016, and Wagner 2020). Specifically, I will propose that the focus value of corrective questions consists of a set of alternative questions, much like the focus value of declarative clauses consists of a set of alternative propositions. For example, the focus value of A2 in (1) contains questions of the form ‘who did you invite to X’s party’, with X ranging over *Sandro*, *Gianni*, etc.

Under this analysis, corrective exchanges involving questions like (1) parallel corrective exchanges involving declaratives like (2). In both, corrective foci are interpreted in-situ as per Rooth (1992, 2016), thus allowing their co-occurrence with wh-phrases in the Italian corrective questions examined in this talk.

If times remains, I will also show how corrective questions like (1.A2) systematically lack the terminal rise found in non-corrective questions (D’imperio 2002). For example, A2 displays emphatic stress on the first syllable of the focus *GIANNI* and no terminal rise. By contrast, B leaves the first syllable of *Sandro* unstressed but shows a terminal rise on the second syllable, even though word-level stress falls on the first syllable across both names.

### (3) Pitch contours for (1.A2) and (1.B)



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# DOM and intervention effects in Romanian ditransitives

Alina Tigău (University of Bucharest) and Klaus von Heusinger (University of Köln)

**1. Introduction** This paper discusses Romanian (Rom) ditransitive constructions (DC) focusing on some intervention effects arising when a differentially marked direct object (DOMed DO) co-occurs with an indirect object (IO). Our study rests on three grammaticality judgement experiments involving 480 Romanian natives and testing quantificational binding relations between the two internal arguments. One of the most comprehensive studies on Rom DCs is Diaconescu & Rivero (2007)'s alternative projection account. They argue that the two interpretations of *give*-verbs, *caused movement* and *caused possession* mirror configurations (1) and (2) respectively:

- (1) *Theme c-commands Goal*: [<sub>VoiceP</sub> DP<sub>Agent</sub> Voice[<sub>vP</sub> v [<sub>PP</sub> DP<sub>Theme</sub> P DP<sub>Goal</sub>]]]  
 (2) *Goal c-commands Theme*: [<sub>VoiceP</sub> DP<sub>Agent</sub> Voice[<sub>vP</sub> v [<sub>AppIP</sub> DP<sub>Goal</sub> [**cl**<sub>AppI</sub>] [<sub>VP</sub> V DP<sub>Theme</sub>]]]]

In (1) the dative is a PP argument c-commanded by the Theme while in (2) the Goal is introduced by a low Appl<sup>o</sup>, it is interpreted as a Possessor and it c-commands the Theme, determining the asymmetries in Barss&Lasnik (1987) for the English Double Object Construction (DOC). D&R claim that the DOC properties obtain *only if the Goal is clitic doubled (CD)* with Appl<sup>o</sup> spelling out as a dative *clitic*. In order to test these predictions, we conducted a series of three grammaticality judgement tasks manipulating i) the surface order of DO and IO; ii) direction of binding between DO and IO; iii) the presence of a dative clitic doubling IO and iv) the DO form (unmarked vs. DOMed vs. CDed+DOMed). As the first three parameters already yield a 2x2x2 design, we decided to design three similar questionnaires with 32 test items each and which differed through the DO type used. The results (in 3) show that: a) binding dependencies *do not depend on CD*; b) the two internal arguments show *symmetric c-command*; c) surface word order is an important factor for acceptability: items where the surface word order matches binding directions obtain higher scores than instances where reverse binding obtains. d) The presence of a dative clitic doubling the IO significantly lowers the acceptability of the items in comparison to their undoubled counterparts. e) Finally, sequences where a DOMed DO co-occurs with a CDed IO are highly problematic for surface word order *DO precedes IO*. The analysis in (1) & (2) is thus severely *incomplete*, excluding many grammatical patterns. These findings suggest that the alternative projection account in its present form cannot be maintained.

(3) Mean values for acceptability judgements of a Likkert scale (1 very bad – 7 very good) for DCs showing quantificational binding dependencies between the two internal arguments

	DO before IO				IO before DO			
	DO binds into IO		IO binds into DO		DO binds into IO		IO binds into DO	
	-cl	+cl	-cl	+cl	-cl	+cl	-cl	+cl
Unmarked DO	4.57	3.64	3.08	3.00	3.40	3.22	4.56	4.35
DOMed DO	4.43	<b>2.64</b>	3.05	<b>2.36</b>	3.36	3.27	4.32	3.68
CDed+DOMed DO	4,51	3,52	3,47	3,18	3,67	3,42	5,52	3,51

**2. Aim** The paper has two aims: a) to provide a derivational analysis of Romanian DCs; b) to account for the difference in the evaluation of the DOMed DO > cl-IO pattern. The co-occurrence of DOMed DOs with CDed IOs was granted very low acceptability scores by the respondents in both directions of binding for the *DO before IO* surface order (4). This effect was not noticed with the counterparts of these patterns in the experiments featuring unmarked DOs (5) and CDed+DOMed DOs, which prompt us to hypothesize that the lower acceptability has to do with the internal structure of the DPs involved.

(4) **DOMed DO + CDed IO (low acceptability)**

**DO before IO; DO binds into IO; +cl**

Poliția            /e-a            înapoiat            *pe fiecare copil<sub>i</sub>* pierdut pe plajă    *părinților lui<sub>i</sub>*  
Police.the        them.Dat-has    returned            pe every child    lost on beach        parents.Dat    his  
diperați.  
desperate

'The police returned every child lost on the beach to his desperate parents.'

**DO before IO; IO binds into DO; +cl**

Poliția *i*-a            înapoiat            *pe copilul său<sub>i</sub>* pierdut pe plajă    *fiecărui părinte<sub>i</sub>*  
Police.the    him.Dat-has    returned            pe child.the his lost on beach    every.Dat parent  
după îndelungi căutări.  
after long search

'The police returned his child lost on the beach to every parent, after a long search.'

(5) **Unmarked DO + CDed IO (high acceptability)**

**DO before IO; DO binds into IO; +cl**

Editorii            i-au            trimis    *fiecare carte<sub>i</sub>*    *autorului*            *ei<sub>i</sub>* pentru corecturile finale.  
Editors.the        him.Dat-have    sent    every book        author.Dat.        its    for corrections final

'The editors sent every book to its author for final corrections.'

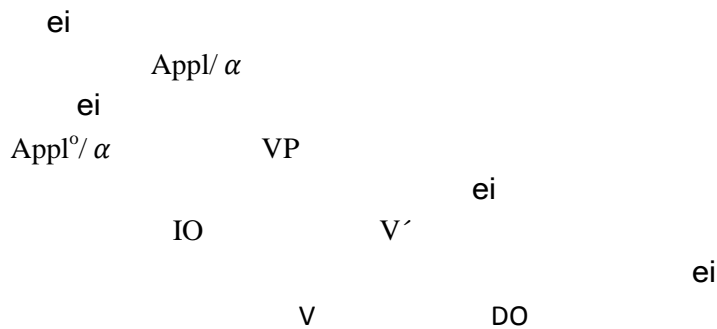
**DO before IO; IO binds into DO; +cl**

Editorii *i*-au            trimis    *cartea sa<sub>i</sub>*    *fiecărui*    *autor<sub>i</sub>* pentru corecturile finale.  
Editors.the        him.Dat.-have    sent    book.the his        every.Dat author    for corrections final

'The editors sent his book to every author for final corrections.'

**3. A derivational account.** Given the experimental findings, we argue in favour of a derivational account for DCs. The symmetric binding potential of the two internal arguments obtains as a consequence of their relative hierarchical order in the VP (6) combined with subsequent movement for reasons of case assignment and [Person] checking (the feature valuation system used is that from Pesetsky & Torrego 2007).

(6) ApplP/  $\alpha$ P



We further posit some priority criteria with respect to feature valuation between the two objects: DO has general priority over IO, but this may change function of the feature specification of the two objects. The proposed system allows us to account for all the patterns assessed as acceptable, and to explain the problematic cases where a DOMed DO interacts with a CDed IO. In the latter case, the analysis draws on the internal featural make-up of the two internal arguments and shows that the problem amounts to a locality issue: DOMed DOs carry [*i*Person] and only need to check case. The CDed IO needs to check both case and its [*i*Person:\_\_\_] feature. Since IO has more features to verify it gains priority over DO (closer proximity to Appl is also important). The IO enters an Agreement relation with Appl<sup>0</sup> (specified as [*u*Person: val]) and checks both case and [*i*Pers: \_\_\_]. The [*u*Person: val] feature of Appl is EPP and the IO moves to SpecAppP. As such, it acts as an intervener for the DO, which may no longer move to a Spec of Appl to get its case feature valued by *v*.

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This contribution presents novel data from some heritage Italo-Romance varieties spoken in the New York area and seeks to give an account of the structural representations that may underlie the *differential* heritage grammar. We examine the interplay among different sources of linguistic input, and how these computations may result in formal representations of novel DP-structures which are not the result of direct transfer, but of an independent reorganization of the DP-internal requirements and constraints, which are *different* (rather than *incompletely* acquired; cf. Kupish & Rothman 2018) from those found in the baseline varieties in the input.

Our corpus (<https://microcontact.hum.uu.nl/#contributions>) includes a large wealth of diverse underexplored, non-standard heritage varieties from Italy in contact with English: Italo-Romance (Nònes Trentino, E. Abruzzese, Cilentano, Apulo-Barese, Sicilian) and Rhaeto-Romance (Friulian) varieties, as well varieties of (spoken) Italian, among which there is the NYC *koine*, an Italian-based contact variety used as the shared ‘community language’ (cf. Haller 1987 *et seq.*). In particular, the corpus consists of spontaneous speech elicited from 58 first- and second-generation speakers (G1: 32 vs G2: 26, respectively) during semi-guided interviews for control purposes within the *MicroContact* project (D’Alessandro 2015, 2018, 2021). The preliminary data collected reveal an incipient tendency to omit/not lexicalise overtly some core functional categories (Andriani & D’Alessandro 2022), among which definite articles, i.e. D-heads. Strikingly, such a tendency is detectable in most G2 speakers independently of the Italo-Romance variety they speak, but no G1 speaker shows attrition in their use of definite articles. G2 speakers, instead, produce ‘non-target’-like DP-structures by omitting definite articles (except for the opposite tendency in (5b)) in contexts such as:

- (1) Plural NPs in subject position: Ø<sub>D</sub>-NP<sub>[PL]</sub>  
*stanno a parlare* Ø<sub>D</sub> *llingue sue (=loro)...* *ma io non gapisco, Ø<sub>D</sub> italiani non vogliono capire...* *non vogliono praticare* Ø<sub>D</sub> *italiano adesso* [Barese (F, 65)]  
 ‘they’re all speaking their own languages... but I don’t get it, **Italians** do not want to understand... they don’t want to practice Italian now’
- (2) Singular bare NPs (± generic): Ø<sub>D</sub>-NP<sub>[SG]</sub>  
*i ai dudj* (Ø<sub>D</sub>) *credits, ma i na i ai* Ø<sub>D</sub> *diploma* [Friulian (M, 93)]  
 ‘I have all the credits, but I do not have **the diploma**(/certificate)’
- (3) Locative (and other) PPs: PP-Ø<sub>D</sub>-NP  
*Però, mó, se vai in-Ø<sub>D</sub> ristorante, pagano.* [Abruzzese (F, 47)]  
 ‘But, now, if you go **to the restaurant**, they do pay.’
- (4) Numerals (4a), Quantifiers (4b), and ‘-sective’ APs (same, other): Ø<sub>D</sub>-AP-NP/Q-Ø<sub>D</sub>-NP
  - a. Ø<sub>D</sub> *primma vota, jì avev’òtt’annə, Ø<sub>D</sub> primma votə ca so gghiutə* [Cilentano (F, 30)]  
 ‘(The) **first time** I was 8 years old, **the first time** I went (to Rimini to visit my cousins)’
  - b. *perché el l’ha fat el panetier tuta* Ø<sub>D</sub> *sua<sub>D</sub> vita in Italia* [Nònes (F, 71)]  
 ‘because he was a baker for **all his life** in Italy’
- (5) Possessives with common nouns (6a) vs kinship terms (6b): Ø<sub>D</sub>-Poss-NP vs D-Poss-NP
  - a. *prima stavan’i tagliani, come* Ø<sub>D</sub> *mia<sub>D</sub> compagna A.* [Barese (F, 42)]  
 ‘before there were Italians, like **my friend** A.’
  - b. *cə sta la famijja purə də mamm’e ppapà, e anche del mio marito* [Abruzzese (F, 47)]  
 ‘(In Abruzzo) there is also mum and dad’s family, as well as **my husband’s**’

Parts of the tendencies in (1)-(5) had already been highlighted in Haller’s (1987 *et seq.*) work on NYC Italian, as well as in Bettoni’s (1991: 377-378) work on Sydney Italian and Reinke’s

(2014) on Montreal Italian. While contact with English (or Italian) cannot be excluded for some structures, the general behaviour of the heritage DP cannot only be understood as the result of trivial transfer. Instead, our scrutiny of the data reveals some sort of ‘independence’ of the processes involved in building the internal structure of the heritage DP; in other words, the heritage DP-structure diverges from those in both baseline and dominant input grammars due to a *differential* ‘feature reassembly’ (Lardiere 2008) of D-related features, responsible for the (c)overt distribution of the definite article (cf. Longobardi 1994; Chierchia 1998; Alexiadou, Haegeman & Stavrou 2008; *i.a.*). We suggest that this (incipient) feature-reassembly process is holistic and taps into the many varieties and variation of syntactic options present in the input (for an Italo-Romance overview, see Cardinaletti & Giusti 2018), so that G2 learners create their own mental representation of DP-structure by assessing all the structural variation in the input against a principle of *relative economy on derivation*. This reassembly of features allows a broader range of structural options involving null Ds; nonetheless, the proliferation of null Ds creates interpretative ambiguity in semantics of the DP, which only overt modifiers or discourse-context can eliminate.

From a broader diachronic and typological perspective, definite articles are the product of grammaticalisation (for Romance, see Ledgeway 2012; *i.a.*) and are only present in roughly half of the world’s languages (308 on 620 surveyed languages on the WALS). Being heritage contexts the perfect circumstances for linguistic changes to become visible in synchrony (Kupisch & Polinsky 2022), what we observe in our G2 in NYC could be an incipient shift to a new parametric (re)setting in these contact varieties (provided that transmission continues), whereby D becomes lexicalized in less and less cases, rather than moving towards the overproduction of articles – expected if G2s avoid silent elements especially at the syntax-pragmatics interface, which leads to overgeneralising overt subject pronouns (cf. Sorace 2004). Moreover, according to the ‘Inertia Principle’ of Syntax (Longobardi 2001, building on Keenan’s work), syntactic change needs a morpho-phonological trigger (including “silence”) to happen. Evidently, silence, i.e. omission, is one of the cues these G2 speakers have started to gradually generalise in their grammars. This might possibly be linked to the changes in the encoding of NUMBER features in the nominal domain, as well as in the verbal domain (loss of subject-verb agreement on T, among others; cf. Andriani & D’Alessandro 2022).

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## Deriving the interpretations and constraints of Italian *si*-constructions: A new analysis and its consequences for a typology of Voice

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**1. Introduction:** Italian *si* constructions are a long-standing issue in generative syntax: like in other Romance languages, the clitic *si* is employed to obtain various readings (passive, impersonal, middle, ergative, and reflexive) with an apparently very similar structure, and has interesting properties with regard to Case, agreement, and sensitivity to aspect and finiteness (Burzio, 1986; Cinque, 1988; D’Alessandro, 2007 and many others).

- 1) Passive (*si*-pass): *Si sono letti molti libri* (‘Many books were read’)
- 2) Impersonal (*si*-imp): *Si è letto libri* (‘One read books’)
- 3) Middle (*si*-mid): *Questi libri si leggono facilmente* (‘These books read easily’)
- 4) Ergative (*si*-erg): *Il ramo si è spezzato* (‘The branch broke’)
- 5) Reflexive (*si*-refl): *Mario si è lavato* (‘Mario washed himself’)

This work aims to provide an account of what syntactic factors affect the availability of *si*’s potential interpretations: in particular, we focus on the features found on the internal argument (IA) of *si* constructions, and its structural position. The analysis we propose explains some asymmetries between (1) and (2-5) that have never received satisfactory solutions. Moreover, we show that *si* is not a non-active Voice head, unlike other languages’ morphemes that exhibit a very similar kind of Voice syncretism.

**2. The puzzle:** The discussion is based on three main observations about constraints that *si*-pass shows and other *si*-constructions do not (Cinque, 1988; Pescarini, 2015; Dobrovie-Sorin, 2017, 2021; Giurgea, 2019):

- i. 1<sup>st</sup>/2<sup>nd</sup> person IAs are banned:
  - 6) \**Mi sono invitato*. (\**si*-pass: ‘I was invited’)
  - 7) *Mi sono svegliato*. (*si*-erg: ‘I woke up’)
- ii. The IA cannot move to Spec,TP despite receiving nominative Case and triggering verbal agreement, as revealed by Aux-to-C constructions, which isolate Spec,TP (Rizzi, 1982):
  - 8) *Essendosi (\*questi libri) letti (questi libri)...* (*si*-pass: ‘These books having been read...’)
  - 9) *Essendosi (Mario) svegliato (Mario)...* (*si*-erg: ‘Mario having woken up...’)
- iii. PRO as IA is banned:
  - 10) \**Mario vuole PRO invitarsi*. (\**si*-pass: ‘Mario wants to be invited’)
  - 11) *Mario vuole PRO svegliarsi*. (*si*-erg: ‘Mario wants to wake up’)

Focusing on the factors that previous literature has taken to determine what readings are possible for a given *si*-construction (i.e. the lexical semantics of the verbal root, the animacy of the IA, and aspect), we show that these cannot capture (i-iii). Moreover, we present some evidence from binding, control, and secondary predication that singles out *si*-pass and *si*-imp, i.e. the only two cases where we can find an agent theta-role which is not co-referential with the IA but has an arbitrary interpretation instead.

**3. The proposal:** We try to explain these facts while maintaining a unifying analysis for virtually all the constructions in (1-5), extending and modifying a proposal put forth by Roberts (2010), which did not consider (i-iii). Following Roberts (2010), we assume that, depending on whether *v*’s phi-features have been already valued or not, *si* merges with *v* as a maximal projection (deriving (2)) or a minimal projection (deriving (1, 3-5)), given the following basic structure: [TP T<sub>(uPerson,uGender,uNumber)</sub> ... [vP *si* v<sub>(uGender,uNumber)</sub> [VP V IA]]].

If *si* is first merged as a maximal projection, it is a genuine external argument (EA) and agrees with T, receiving nominative and cliticising on T. In this case, only the impersonal interpretation is available, so *si* necessarily has arbitrary reference and gets whatever external theta-role the verb assigns. This is a consequence of the requirement for arguments to have phi-

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features/be referential (Longobardi, 1994). For this reason, *si* has [Person: arb] and triggers default third-person agreement on the verb, regardless of the features on the IA.

If *si* is merged as a minimal projection, i.e. directly cliticises on *v* by valuing its features, it does not need to have a full set of phi-features/be referential; therefore, there are two possibilities.

- If *si* has [Person: arb], the *si*-pass interpretation is obtained. Not only can this explain the binding, control, and secondary predication facts, but it also has some more consequences, including (i-iii): since *v* lacks [uPerson], *si*'s [Person: arb] feature remains active after its cliticisation and creates an intervention configuration for [Person] agreement between T and the IA. So, T's [uPerson] is valued by *si* while its [uGender, uNumber] are valued by the IA. Consequently, only IAs that lack [Person] altogether (i.e. 3<sup>rd</sup> person DPs) are admitted (cf. Giurgea, 2019 for Romanian). At the same time, the IA cannot move to Spec,TP as a consequence of the argumental status of *si* (since the *arb* value makes it referential and not a variable), which then qualifies as an intervener for A-movement in terms of locality. For the same reason, when the IA is PRO, it cannot move across *si* and cannot enter the control relation.
- If *si* does not have [Person:arb], the ergative, middle, and reflexive interpretations are available, thanks to the presence of a variable in *si*'s Logical Form. In *si*-erg, *si* is expletive due to the lexical semantics of the verb, which does not assign an external theta-role; in *si*-mid, *si*'s reference is determined by a GEN operator introduced by a T projection; in *si*-ref, *si*'s reference is determined via binding. In all of these cases, *v/si* retains both accusative Case and the external theta-role, so the IA receives nominative and triggers verb agreement, and nothing prevents it from moving to Spec,TP.

**4. Consequences and conclusion:** This analysis shows that an intervention configuration created by a [Person:arb] feature on *si* is the key to the peculiarities of *si*-pass and explains in a straightforward fashion a number of contrasts that had never received a comprehensive account. Moreover, it correctly predicts that the EA can never be realised in *si*-constructions, not even as a PP/*by*-phrase, because the EA position is no longer available after *si* merges. Consequently, *si* cannot be analysed as (non-active) Voice, like it has been proposed for other languages' morphemes that exhibit a similar kind of syncretism (e.g. Latin, Modern Greek, Albanian, see Kallulli, 2021; Kallulli & Roberts, 2022): these languages lack the constraints found on *si* and all allow the EA to be realised as a PP.

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## Developing epenthetic vowels in consonant clusters in heritage Spanish

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Spanish heritage speakers (HSs henceforth) in the United States are early bilinguals that acquire Spanish in the home environment and English as a majority language (Valdés, 2014). While studies on HSs phonetics-phonology have found evidence of non-canonical speech productions (see Rao, 2019 for a review), it is still unclear whether these deviations result from early grammar interaction in childhood or attrition during adulthood (Montrul, 2018). To examine this question, we analyze the production of Spanish consonant clusters containing a tap (e.g., /r.C/ ‘árbol’ and /Cɾ/ ‘tronco’). Crucially, these sequences optionally surface with a vocalic element between the two consonants (Blecua, 2001; Colantoni & Steele, 2006, 2007; Malmberg, 1965) (e.g., /rə.C/ or /Cəɾ/). Such intrusive vocoids (IV henceforth) indicate a low consonant-to-consonant overlap and a high degree of intergestural timing, which, moreover, has been found to be modulated by voicing (Gibson et al., 2019). Unlike in Spanish, consonant clusters containing /ɹ/ in English (e.g., crow [kɹo]) do not demonstrate vocalic epenthesis (Colantoni & Steele, 2006). We predict that the probabilistic nature of IVs along with the higher gestural overlap in English will likely result in lower rates of IVs in Spanish HSs when compared to Spanish speakers raised in monolingual environments.

/Cɾ/ and /r.C/ sequences were elicited using the pictureless book *Frog, where are you* (Mayer, 1969) from 50 HSs (30 children: 8;11<sup>1</sup> ± 1;9 years old, 20 adults: mean age = 20.7), and 52 SpanMonoSs (32 children 8;7 ± 1;11 years old, 20 adults mean age = 20.87). A trained research assistant coded taps as true tap (i.e., TT), approximant tap (i.e., AT), perceptual tap (i.e., PT), or other and segmented epenthetic vowels when the speech signal showed (nearly) periodic waves. Only TTs and ATs were included in the analysis. The rate of IV in the preliminary data (653 tokens, 30 speakers) was analyzed with a mixed-effects logistic regression. The model included the variables AGE GROUP (i.e., children, adults), TYPE OF SPEAKER (i.e., SpanMonoSs, HSs) and their interaction, TYPE OF PHONETIC CONTEXT (i.e., /Cɾ/, /r.C/), TYPE OF TAP (i.e., true tap, approximant tap), and VOICING (i.e., voiced, voiceless) as fixed effects, and the variables PARTICIPANT and WORD as random effects. Our model showed a main effect of AGE GROUP, indicating that children produced fewer IVs than adults ( $\beta = -1.22$ ,  $SE = 0.57$ ,  $z = -1.97$ ,  $p = 0.04$ ), but no main effect of TYPE OF SPEAKER nor interaction between AGE GROUP and TYPE OF SPEAKER were found. In terms of language-internal factors, we found that IVs surfaced more frequently in true taps than in approximant taps ( $\beta = 1.05$ ,  $SE = 0.25$ ,  $z = 4.19$ ,  $p < 0.001$ ), and when the neighboring consonant was voiced compared to voiceless ( $\beta = -0.86$ ,  $SE = 0.36$ ,  $z = -2.39$ ,  $p = 0.01$ ).

Our preliminary results suggest that Spanish-acquiring children at ~ 8 years of age are still developing adult-like coarticulatory patterns in /Cɾ/, /r.C/ clusters, which contributes to the

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<sup>1</sup> While there are no specific studies on the acquisition of consonant clusters in Spanish, research on the acquisition of coarticulatory patterns in English shows that children are still acquiring coarticulation patterns during late childhood (Nittrouer, 1993; Singh & Singh, 2008).

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literature showing that gestural patterns between segments are still maturing at ~ 7-8 y.o. (Nittrouer, 1993; Singh & Singh, 2008). Contrary to our predictions, no significant differences were found between the SpanMonoSs and the HSs, suggesting that, at least in Spanish, HSs develop language-specific coarticulatory patterns. Our findings showing that taps with strong constrictions are more likely to show IVs than taps with weaker ones (i.e., indicating that the former may require longer intergestural timing than the latter), support an articulatory account of IV production. Lastly, similar to Gibson, Sotiropoulou, Tobin, and Gafos (2019), we found that voicing affects the degree of overlap in consonant clusters.

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## Differential object marking makes Spanish object relative clauses easier

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Object relative clauses (ORCs) are typically difficult for children to comprehend (Tavakolian 1981; Friedmann et al. 2009 a.o.). Still, some language-specific morphosyntactic cues can make ORCs easier (Adani et al. 2010; Belletti et al. 2012; Guasti et al. 2012). We argue that Spanish differential object marking (DOM) belongs to such a set of cues, and eases children's comprehension of ORCs. Our hypothesis is that DOM facilitates children's comprehension because it unambiguously indicates the object status of a constituent: constituents marked by DOM can be nothing but direct objects. As such, the parser can rely on this cue and accurately assign theta-roles to the nominals at stake, leading to a correct interpretation of ORCs. Further, we argue that this strategy is grammar-based, and predict that DOM is only effective once it is acquired. If, instead, DOM is not acquired, we predict the child parser to simply neglect it and encounter the usual difficulties associated with ORCs. Two experiments run with Spanish monolingual children support these predictions, showing significant DOM-effects only with children who fully integrated DOM in their grammar. Altogether, evidence is provided that ameliorations to ORCs hinge on grammatical properties (as claimed by Rizzi 2018), and not on frequency (e.g. Diessel et al. 2009) or cognitive strategies (Gordon et al. 2004).

In Spanish, DOM is (roughly) realised on [specific; animate] direct objects (Aissen 2003; Leonetti 2004) by means of an *a* morpheme preceding the constituent to mark (1). In ORCs, DOM (optionally) precedes the relativiser *que* (2).

(1) El niño saluda a Pedro  
The boy greet.3sg DOM Peter  
*The boy greets Peter*

(2) El niño al que saluda Pedro  
The boy DOM.the that greet.3sg Peter  
*The boy that Peter greets*

To test our hypothesis, two experiments were run with 57 Spanish children aged 4, 5, and 6. Both were built on a sentence-picture matching task, along the lines of Friedmann et al. (2009). The first experiment tested the comprehension of SRCs like (3) and ORCs like (4), to appreciate whether SRCs are easier than ORCs in Spanish, too.

(3) El niño que saluda al futbolista  
The boy that greet.3sg DOM.the footballer  
*The boy that the greets the footballer*

(4) El niño que saluda el futbolista  
The boy that greet.3sg the footballer  
*The boy that the footballer greets*

The second experiment tested the comprehension of 2 types of ORCs, varying with respect to the absence (5) or presence (6) of an overt *a* morpheme in front of the relativiser *que* (i.e. DOM).

(5) El niño que saluda el futbolista  
The boy that greet.3sg the footballer  
*The boy that the footballer greets*

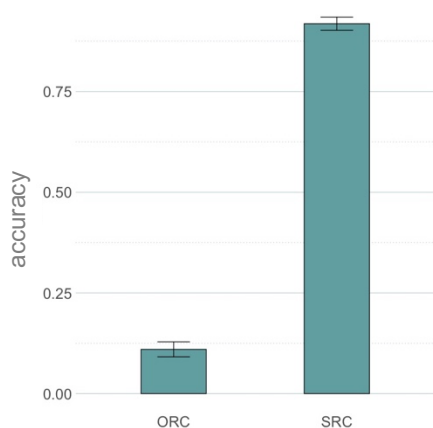
(6) El niño al que saluda el futbolista  
The boy DOM-the that greet.3sg the footballer  
*The boy that the footballer greets*

Furthermore, we assessed whether children acquired DOM by administering a sentence-repetition-task (SRT) which included 9 DOM-structures in different syntactic configurations. In the analysis, each child was assigned a score from 1 to 9 based on the number of successful repetitions of these target-structures. This score reflects the participants' degree of mastery of DOM-grammar at the time of the experiment.

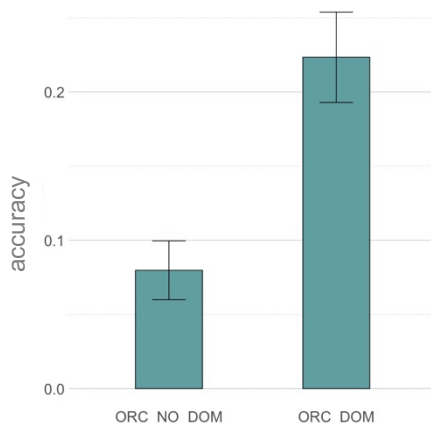
The results show that SRCs were overall better comprehended than ORCs (**Fig. 1**), which is an expected, yet so far unconfirmed result. Moreover, we found that the presence of DOM significantly increases children's accuracy rates (**Fig. 2**). However, only children who achieved

the best performances in the production of DOM in the SRT could benefit from the presence of DOM. In **Fig. 3**, we show that the predicted accuracy of ORCs disambiguated by DOM is proportional to the level of DOM-mastery (based on the scores of the SRT), meaning that DOM is only effective when acquired.

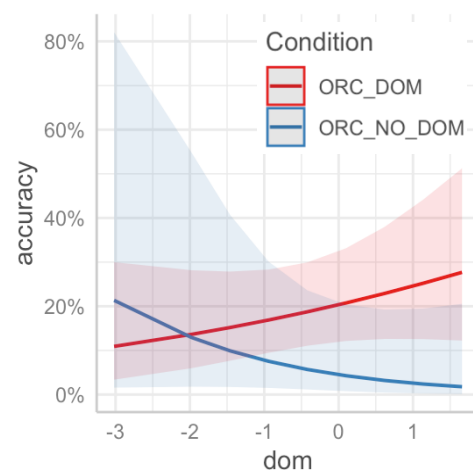
Taken together, these results provide: i) novel evidence that a subject-object asymmetry holds in children’s comprehension of Spanish RCs, extending the empirical coverage of such a broad generalisation; ii) support to the hypothesis that Spanish DOM ameliorates the comprehension of ORCs; and iii) novel insights on the very nature of ameliorating cues in intervention effects. Specifically, our data support the idea that an ameliorating cue is only effective when it is fully acquired and successfully related to its function in the grammar. In light of this, accounts that interpret ameliorations to ORCs as the effect of frequency computations and/or general cognitive, non-language-specific strategies are seemingly excluded. Rather, we claim that the mechanisms underlying the alleviation of intervention effects need to be interpreted as part of our grammar.



**Fig.1**  
Children’s accuracy of subject- and object- RCs



**Fig.2**  
Children’s accuracy of ORCs with and without DOM



**Fig.3**  
Predicted probabilities of accuracy based on DOM mastery

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## Diphthongisation patterns in Venetian and Friulian

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In this paper two main diachronic processes involving diphthongs in Venetian and Friulian varieties will be analysed. It will be shown that the diphthong  $wɔ$  (from a Latin  $\ddot{O}$  sitting in an open syllable) undergoes two main diachronic changes, both in Venetian and Friulian varieties: i) it evolves into  $vɔ$  or  $vɰwɔ$  when in word initial position ii) it evolves into  $jɔ$  after a coronal consonant. It will be argued that the first change is an instance of a *strengthening* process involving  $w$  in word initial position, and that the second process is an instance of *assimilation* of the labial-velar approximant to the preceding coronal C. Both processes have received different interpretations in the literature; it will be shown that an approach couched within Element Theory (Bacley 2011) is better suited to account for these phenomena (with particular respect to the second process).

### $wɔ > vɔ, vɰwɔ$

When in word initial position, the diphthong  $wɔ$  has two possible evolutions:  $vɔ$  or  $vɰwɔ$ , as the following examples serve to show (as can be seen, the quality of the stressed vowel “shifts” between  $[ɔ]$  and  $[o]$ . This alternation has no trivial explanation and will be disregarded hereafter since it has no relevance for the processes under discussion):

(1)

\*ÖVU(M) > ven. 'vovo, 'vɰwɔvo 'egg'

ÖP(E)RA(M) > frl. 'vore 'work'

(with P > Ø as in e.g. SŪPRA > 'sore)

ÖLEU(M) > frl. 'vweli 'oil'

(with  $wɔ > we$  due to a dissimilation process in frl. e.g. SCHÖLA(M) > 'skwele 'school')

The  $w > v$  change in word initial position is a classic instance of a fortition process (Bybee / Easterday 2017, Brandão de Carvalho / Scheer / Ségéral 2008). We propose that also the second output, *viz.* 'vɰwɔ ('vwe in frl.), be interpreted as an instance of a fortition process, this time involving feature spreading: the melodic make-up of the labial-velar approximant (and in particular the element  $[U]$ , responsible for roundness / backness and labiality) spreads to a preceding temporal position (an *x-slot* in classical Autosegmental terms), and gets reinterpreted as  $[v]$  (the sequence \* $wwɔ$  or \* $w:ɔ$  being disallowed in the varieties under investigation; for the relationship between strength and length see Luo / Enguehard 2019 a.m.o. and references therein).

### $wɔ > jɔ$

When following a coronal C, the diphthong  $wɔ$  changes into  $jɔ$ , as shown by the following examples (taken from Baglioni 2016, Ferguson 2007):

(2)

13<sup>th</sup>-15<sup>th</sup> century ven. > 16<sup>th</sup>-18<sup>th</sup> century ven.

*duol(o)* > *diol* 'pain'

*luogo* > *liogo* 'place'

but

*fuogo* > *fuogo* 'fire'

The same can be said for Friulian, with an added caveat: Friulian displays a palatalisation process that targets the coronal C preceding the diphthong. Such palatalisation process can only be accounted for by assuming an intermediate stage in which *jo* was present – the palatal approximant *j* is then responsible for the palatalisation of the preceding coronal C – (as already proposed by Ascoli 1873):

(3)

TÖLLERE > \*twoli > \*tjoli > 'coli 'to take'

(note that diphthongisation in frl. characterises also an *ö* sitting in a closed syllable)

NÖVA(M) > \*nwove > \*njove > 'jove 'new, f.'

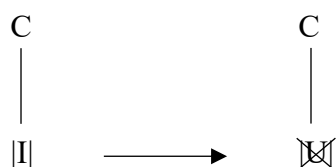
but

CÖCTU(M) > 'kwet not \*'kjet

This process has been variously explained (for a review of the relevant literature see Baglioni 2016). Following Baglioni (2016) (but also see Stussi 2005, Benincà 1989, Gartner 1882), we propose that the change *wɔ* > *jɔ* be interpreted as an instance of an assimilation process driven by the preceding coronal C (note that any other explanation misses the crucial point of this process being phonologically conditioned, in that it only happens after a coronal C).

This process does not have a straightforward explanation in an account that uses Chomsky / Halle (1968) binary features, since there is no feature that a coronal C could spread to a labial-velar approximant to make it palatal (also, in an Autosegmental model, coronal Cs and labial-velars activate different articulatory nodes and should not, in principle, be able to assimilate one another). If one considers Elements, though, the solution follows through quite easily: we take these cases to be instances of languages in which coronal Cs are characterised by the |I| element (for languages with |A|-coronals and languages with |I|-coronals see Backley 2011). It is this element, then, that gets spread from the coronal C to the following labial-velar, resulting in the palatal approximant *j* (the following representation builds on the formalisation presented in Backley 2011):

(4)



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## Disjunction under single referent: voiding the ban on clitic coordination

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The inability of clitic pronouns to be coordinated is taken to be one of their defining properties (Kayne 1975; Cardinaletti & Starke 1994; i.a.), and is usually directly attributed to their deficient syntactic or prosodic status. In this talk we show, based on new data from Italian, Spanish, and Slovenian, that the coordination ban is not absolute: it can be voided with pronouns in a disjunction if the pronouns share a referent and one of their  $\phi$ -features (e.g. gender) is contrasted. We thus argue that the coordination ban is actually tied to differences in size and interpretation between clitic pronouns and their strong pronoun counterparts.

**The coordination ban.** In languages like Italian, where pronouns have clitic and strong counterparts, clitic pronouns cannot be coordinated (1a), while strong pronouns can be (1b). We also see in (1) that this asymmetry is observed with both conjunction and disjunction.

- (1) a. \*Lo e/o la chiamo.                      b. Chiamo lui e/o lei.  
          him and/or her call.1SG                      call.1SG him and/or her  
          ‘I call him and/or her.’                      ‘I call him and/or her.’

This pattern appears to hold universally for languages with clitic and strong pronouns (see Cardinaletti & Starke 1994; we set aside weak pronouns in the abstract for the sake of space).

**Voiding the ban.** What has not been noted before is that disjunction of clitics becomes fully grammatical when the clitic pronouns share an antecedent, but are contrasted with respect to the value of some interpretable feature, such as gender. For instance, in the context of a competition where we do not yet know the identity and gender of the eventual winner, (2) can be felicitously uttered (the judgments come from a survey of 10 speakers).

- (2) Quando decidono chi e' il vincitore, lo o la chiamano sul palco.  
          when decide.3PL who be.3SG the winner, him or her call.3PL on.the stage  
          ‘When they decide who the winner is, they call him or her on the stage.’

In (2) the entire disjunction denotes a single individual (‘the winner’) and the pronouns do not require different referents (they can pick out the same person of unknown gender; there could also be a single competitor left after elimination of the other candidates). This becomes clearer if we replace clitics with strong pronouns, as in (3). Then, the interpretation can only be that there are two individuals, where only one of them can win.

- (3) Quando decidono chi e' il vincitore, chiamano lui o lei sul palco.  
          when decide.3PL who be.3SG the winner, call.3PL him or her on.the stage  
          ‘When they decide who the winner is (of two competitors), they call him or her...’

The singular referent interpretation in (2) is reflected in the impossibility of using a plural pronoun to refer back to the two pronouns, and the infelicity of continuations like *entrambi però riceveranno un premio* ‘both of them, though, will receive a prize’, or *in quanto campioni* ‘as champions’. In contrast, all of the above are felicitous in the case of (3).

Moreover, if a plural antecedent is established in the discourse, like with the conjunction in (4), clitic disjunction is highly degraded and strong pronouns must be used instead.

- (4) Quando Albano e Romina dovranno ritirare il premio,  
          when Albano and Romina have.FUT.3PL pick.up the prize  
          { ??lo o la } chiameranno { lui o lei } sul palco.  
          him or her call.FUT.3PL him or her on.the stage



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‘When A. and R. will have to pick up the prize, they will call him or her on the stage.’

We have so far identified the same pattern also in Spanish and Slovenian, so it is not limited to Italian or Romance. Additionally, disjunction of clitic pronouns similar to (2), but where number or person is contrasted, is also possible with the right interpretation (e.g. ‘the winner’ is an individual vs. a team, or the speaker’s vs. the addressee’s team). The only excluded pattern is disjunction of first/second person with third person. The relevant examples will be discussed in detail in the talk, but what is crucial is that in all the grammatical cases the pronouns in the disjunction count as having the same antecedent (cf. ‘the winner’ in (2)).

**Proposal.** Conjunction of pronouns has to result in the creation of a new plural discourse referent, which is only possible if the conjuncts are distinct referents in the first place. Disjunction, conversely, does not have to create a plural discourse referent (cf. ‘*The soprano<sub>i</sub> or the alto<sub>i</sub> will sing. She<sub>i</sub> will perform Mozart*’; see e.g. Stone 1992, Simons 2000). But the singular referent reading of disjunction is crucially absent when two individuals are identified (cf. ‘*Jane<sub>i</sub> or Maud<sub>i</sub> will sing. #She<sub>i</sub> will perform Mozart*’; Simons 2000). We propose that the distinct behavior of clitic and strong pronouns under disjunction follows from this.

Strong pronouns are semantically more rigid than clitics: they need human referents, cannot be bound variables, and need salient antecedents. This has been linked to extra structure absent in clitics (Cardinaletti & Starke 1994), which we identify as an *index head* (Patel-Grosz & Grosz 2017, Hanink 2018). The index head is what makes strong pronouns only pick out salient linguistic antecedents, and, we argue, marginal with disjunction under the singular referent reading (because disjunction of two pronouns equipped with index heads necessarily create plurality). In contrast, clitics consist of only interpretable  $\phi$ -features (Déchaine & Wiltschko 2002). For this reason, they are semantically more flexible (their reference is achieved via semantic mapping rules, Tomioka 2003, Stegovec 2019). They may also pick out properties rather than specific individuals, which is what distinguishes DPs that allow the singular referent reading under disjunction from those that do not (Simons 2000). Hence, clitics can show up in such disjunctions, but not under conjunction because this needs distinct referents (i.e., indices) as the input to create a new plural discourse referent.

With disjunction of pronouns contrast is always involved, due to the focus-like semantics of disjunction (Simons 2000, Alonso-Ovalle 2006; i.a.): with strong pronouns the antecedents are contrasted, while with clitics the contrast is only between  $\phi$ -feature values and antecedent must be the same for both pronouns. This is because the whole pronoun is focused with strong pronouns, including the index head, while only  $\phi$ -features are focused with clitics, since they do not contain the index head, making the contrast of antecedents impossible. This is because focus can only scope over material that is present in the syntax.

**Discussion.** Our research also has implications for the relationship between the clitic/strong pronoun distinction and focus. Cardinaletti & Starke (1994) have shown that clitics may in fact be contrastively focused, although they do not identify the conditions under which it is a possibility. Our research suggests that this is possible only if the clitic’s  $\phi$ -features are focused under disjunction, which is only possible when the clitics refer to the same referent or property. Our project also contributes to the debate on the nature of clitics. In particular, the possibility of clitic disjunction provides evidence against the Agree-based approach to cliticization (see Paparounas & Salzmann 2023, among others), which would require the presence of two coordinated probes on T, but only with disjunction under a single referent.

**Edition and typological analysis of an oral  
corpus of "genailard" (northern  
Dauphinois) Francoprovençal: an input to  
the internal classification of a severely  
endangered**

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Recherche Scientifique, Université Paris Lumières – France

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\*Speaker

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## Effects of Social Factors on Phonetic Convergence in Language Alternation

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Recent studies have reported on the dynamic nature of bilingual speech (i.e., two languages produced in a single discourse event) compared to monolingual speech (i.e., one language produced in a single discourse event) by multilingual speakers. For example, in monolingual speech, multilingual speakers “maintain language-specific phonetic categories”; meanwhile, in bilingual speech, the speakers displayed “phonetic convergence” [1, pg. 1280-1]. Seemingly, the active usage of multiple languages increases phonetic convergence in the production of multilingual speakers. Other studies on the production of voice onset time (VOT) during language alternation (i.e., language switching and code switching) corroborate the convergence effect observed in bilingual speech [e.g., 2, 3, 4, 5]. However, some inconsistencies have been pointed out [6, 7]. Namely, while some studies find bidirectional convergence, others only find effects in one language. And among those studies with a unidirectional effect, some researchers claim the effect occurs only in the speakers’ L2 (as opposed to the L1) while others claim the dominant language is more susceptible to convergence. The wide array of research tasks used to study this phenomenon makes it all the more difficult to pinpoint the cause of the aforementioned inconsistent directionality of the convergence effect. For example, some studies relied on word list reading tasks [6] or phrase/passage reading tasks [2, 3], and others used speech spontaneously produced during sociolinguistic interviews [4], inter-subject group conversations [4, 5], or puzzle tasks [5].

In order to shine light on the possible effect of task type on the directionality of convergence effects in bilingualism research, the present study analyzes acoustic productions across four of the most popular research tasks (i.e., word list reading, passage reading, puzzle—spot the difference—and casual interview tasks) from a single group of Spanish-English bilingual speakers to obtain VOT measurements for word-initial voiceless stops /p t k/. A total of 60 Spanish-English bilingual subjects participated in the four tasks. Data collection took place in a sound booth at the Berkeley PhonLab. The audio for the word list and passage reading tasks were annotated by hand. The transcriptions for the puzzle and interview tasks were automated with OpenAI’s Whisper automatic speech recognition model. All data were then processed with the Montreal Forced Aligner [8], and VOT measurements for voiceless stop-initial words were obtained in both languages using AutoVOT [9].

A LASSO regression model with a conservative L1 regularization penalty was performed on the VOT values of the training and validation data sets. The trained model was later applied to unseen test data. While the study covers linguistic and social predictors, this presentation focuses exclusively on the social factors. The analysis included all answers and dominance scores from the BLP survey [10] as independent variables. While the data set included 52 variables, LASSO employed variable selection to identify only the most informative predictors. The results show an influence of task on English, with passage reading experiencing the highest level of convergence, followed by the interview (see [figure 1](#)). Spanish showed little variability across tasks. Among the most salient results, the statistical model revealed that those who learned Spanish later in life (i.e., L2 Spanish learners) showed lower VOT productions, suggesting a higher propensity for convergence (see [figure 2](#)). Moreover, older subjects showed higher VOT values with limited convergence in their English speech,

compared to younger speakers. Finally, speakers with more schooling in Spanish and usage of Spanish at home have lower VOT values in Spanish but also showed higher convergence in their English productions.

All in all, this study provides (1) a comparative analysis of the research tasks typically used in code-switching studies to uncover task effects in production studies, (2) a glimpse of the social factors influencing phonetic category productions, and (3) a better understanding of the language processing mechanisms that are engaged during bilingual speech.

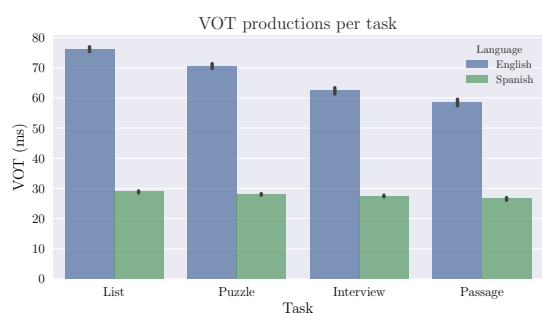


Figure 1: VOT distributions

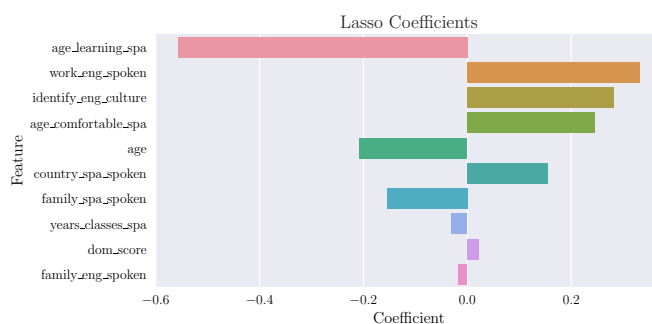


Figure 2: Top 10 social factors

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## Examining the predictive role of Differential Object Marking in Spanish-Catalan bilinguals

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There is evidence that prediction promotes preactivation and, thus, makes processing easier facilitates processing (Kamide et al., 2003, Trueswell et al., 1994 for thematic roles; Lozano-Argüelles & Sagarra, 2021 for prosodic cues, i.a.). The phenomenon of Differential Object Marking (DOM) has been widely investigated in different areas of linguistics (formal linguistics, language contact, etc.), but few have explored its role in processing and fewer its role as an anticipatory cue. To our knowledge only one study showed its role with Spanish native speakers (Andringa & Curcic, 2016) and one with a DOM-artificial language (Andringa & Curcic, 2015). In addition, anticipation processes among bilingual speakers have received less attention (but see Desideri & Bonifacci, 2018; Foucart et al., 2014). The present study is novel for examining DOM in bilingual anticipatory (or predictive) processing with bilinguals with different profiles.

Spanish and Catalan, two typologically close languages in contact, share the DOM marker ‘a’, but present different distributions. In Spanish, DOM can mark all [+animate] objects (*Veo a la mujer* ‘I see DOM the woman’), but not [–animate] objects (*\*Vejo a la mesa* ‘I see DOM the table’). In standard Catalan, only [+animate] personal pronouns can always be marked (*Et veig a tu* ‘I see DOM you’ vs. *Veig Ø la dona* ‘I see the woman’). However, in Catalan, some speakers (especially Spanish-dominant speakers) can mark [+animate] objects due to the influence of Spanish, but not [–animate] objects (Perpiñán, 2018; Puig-Mayenco et al., 2018).

Given that both languages mark [+animate] objects (at a different extent), but not [-inanimate] objects, we explore to what extent DOM is a reliable anticipatory cue of the animacy of direct objects in Catalan and in Spanish in different profiles of Catalan-Spanish bilinguals. Three groups of bilingual speakers (25 Catalan-dominants, 21 balanced, 28 Spanish-dominants), grouped depending on their result in the Bilingual Language Profile questionnaire (Birdsong et al., 2012), performed two sessions (1 in Spanish, 1 in Catalan) of a Visual World Paradigm eye-tracking task with printed words using a Tobii Pro T60XL. Participants heard aural transitive sentence stimuli while looking at 2 words on the screen. After that, they were asked to respond an aural question that assessed accuracy. With a Latin Square design, the task had 2 conditions ( $k=8$ ): animacy of the direct object ([+animate, +DOM] or [–animate, –DOM]) and animacy of the screen words (different animacy, as in (1a, 2a), or same animacy, as in (1b, 2b)). Gender, semantics and number of syllables were controlled, so the only way to anticipate the direct object relied only on the presence or absence of DOM in the aural stimuli. Based on Andringa & Curcic (2016), our prediction was that participants would only anticipate the object in the different animacy conditions, where only one word was grammatically possible. Regarding language dominance, the prediction was that Catalan-dominants would anticipate less than Spanish-dominants, because their dominant language (Catalan) does not mark any of the presented objects.

GAMMs models were run with the proportion of looks in the time window of interest (before the determiner and before the direct object; marked with | in the example) as the dependent variable. Focusing on the different animacy conditions, contrary to our predictions, in **Spanish** when there is DOM, Spanish-dominants anticipate the inanimate object, whereas Catalan-dominants anticipate the animate one; balanced bilinguals do not show a clear pattern. When there is no DOM, the three groups anticipate the inanimate objects. In **Catalan**,

results show that when there is DOM, Catalan-dominants do not anticipate the animacy of the direct object, whereas Spanish-dominants do anticipate it; balanced bilinguals do not show a clear pattern. Again, when there is no DOM the three groups anticipate the inanimate object. Surprisingly, the effect of DOM as an anticipatory cue for [+animate] objects is shown only in the non-dominant language, and it seems to prevail over thematic roles and animacy. We discuss that thematic roles play a role in anticipation (Kamide et al., 2003), but modulated by animacy, since inanimate objects receive higher proportion of looks in different conditions, possibly because objects are usually themes, which are frequently inanimate elements. In addition, our results suggest that Catalan-Spanish bilinguals have DOM in their Catalan and Spanish grammars, even if standard Catalan presents this marker to a lesser extent.

### Examples in Spanish

#### (1) [+DOM, ANIMATE]

Las pianistas escuchan | **a la melódica** | **solista** durante el concierto en la terraza.  
 ('The pianists listen to the melodic soloist during the concert on the terrace')

- a. solista – trompeta ('soloist – trumpet')      DIFFERENT ANIMACY [ANIMATE, INANIMATE]  
 b. solista – soprano ('soloist – soprano')      SAME ANIMACY [ANIMATE, ANIMATE]

#### (2) [-DOM, INANIMATE]

Las pianistas escuchan | **la melódica** | **trompeta** durante el concierto en la terraza.  
 ('The pianists listen to the melodic trumpet during the concert on the terrace')

- a. solista – trompeta ('soloist – trumpet')      DIFFERENT ANIMACY [ANIMATE, INANIMATE]  
 b. trompeta – guitarra ('trumpet – guitar')      SAME ANIMACY, [INANIMATE, INIMATE]

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## Exclamative *Se* Constructions

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**Synopsis** I explore a novel construction that I dub *exclamative se constructions* (ESC). ESCs possess the exclamative quality of *wh*-exclamatives (e.g. “How handsome he is!”), but feature no *wh*- constituent. I illustrate these constructions for standard Italian and Trevigiano, a Northern Italian dialect. An example of ESC is given below for Italian:

- 1) A: “We never talk anymore”  
B: *Se ti chiamo ogni fine-settimana!*  
if you-acc<sub>CL</sub> I-call every weekend  
“What are you talking about, I call you every weekend!”

**Structure & Occurrence in Corpora** In Italian, ESCs are introduced by the morpheme *se* (=if); *se* is also often preceded by the adversative connective *ma* (= but). *Se* is used to introduce both embedded polarity questions and conditional adverbial clauses, yet ESCs are neither: the polarity of the ESC construction is not in question, and unlike actual conditional clauses (see ex. 7), no superordinate main clause functioning as antecedent is present in ESCs. A search for ESC on the Italian online corpus *Paisà*<sup>1</sup> returned a total of 18 relevant structures. The interpretation of 15 out of 18 examples is clearly connected to degrees on a scale, see for example ex. (2). Alongside (2), we also find examples like (3), whose interpretation is not as obviously linked to degrees on a scale:

- 2) *lo zio poi ha cercato di sdrammatizzare, ‘no, era una cacca normale’, ma la zia è intervenuta con le mani appena ripulite ‘normale? ma se era un mare di fango!’*  
“The uncle then tried to play it down, ‘no, it was a normal poop’, but the aunt intervened -she had just washed her hands-, ‘normal? that was a sea of mud!’ ”  
3) *Parlavo di antisemitismo, la gente mi rideva in faccia, anche gli amici. ‘Ma se non esiste!’, dicevano.*  
“I talked about anti-Semitism, people laughed at me, even my friends. ‘It doesn’t (even) exist!’ they said”

**Analysis** I argue that, in ESC constructions, speakers resort to entailments determined on contextually-relevant scales to rebutter an existing conclusion (see Rocci’s (in press) for a typology of counterarguments). A formal analysis is provided in (4a); in (4b), the logic of (4a) is applied to (1). In an ESC exchange, speaker A asserts some proposition *p*. A’s interlocutor B utters a second proposition *q* (the ESC structure). Proposition *q* entails the falsity of the original proposition *p* because it entails the falsity of a third proposition, *r*, whose falsity necessarily entails the falsity of *p*. Importantly, these entailments follow because *Q* and *R* sit on opposite ends of a contextually relevant scale.

- |  |  |
|--|--|
| 4a)  | 4b)  |
| A asserts <i>p</i>   | A: “We never talk” = True                              |
| B asserts <i>q</i> , where   | B: “I call every weekend” = True.                      |
| $p \Rightarrow r \wedge q \Rightarrow \neg r$                          | <i>If “we never talk” is True, then “I never call”</i> |
| Since $q = \text{True}$ , $r = \text{False}$ .                         | <i>must also be True. Yet “I never call” must be</i>   |
| Since $r = \text{False}$ , $p = \text{False}$                          | <i>False, since “I call every weekend” is True,</i>    |
| ( $q \Rightarrow \neg r$ because <i>q</i> and <i>r</i> are on opposite | <i>and “I call every weekend” being True entails</i>   |
| ends of a contextually relevant scale)                                 | <i>“I never call” being False.</i>                     |

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<sup>1</sup> Query: <s>[word="ma"][word="se"], which returns 110 hits. Results were then manually checked to exclude duplicates and actual conditional clauses.



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*Since “I never call” is False, “we never talk” is also False.*

In (4b), *q* being True entails *r* being False because, given a contextually relevant contrast set like {*never, once every month, once every weekend*}, asserting that B calls every weekend renders false all other weaker claims in the set. Similarly, in (2), if we assume the existence of a scale like {*tiny, normal, big, a sea of mud*}, Uncle is asserting *normal(p)*, whereas Aunt is asserting *sea-of-mud(p)*. Asserting *sea-of-mud(p)* renders any weaker claim in the scale false, thus falsifying the original proposition *normal(p)*. I contend that all ESCs operate on a degree-on-a-scale interpretation: this puts ESC in line with *wh*-exclamatives, whose interpretation is also dependent on scales (Portner & Zanuttini 2003). Examples like (3) can also be made to fall in line with this generalization if we assume that the relevant scale in (3) is *degrees of certainty*: A talking about antisemitism presupposes that antisemitism *most likely* exists, and then B asserts that antisemitism *definitely* does not exist.

ESCs thus have the semantics of counterarguments (which explains the frequent presence of the adversative connective *ma* in Italian ESCs), plus the degree-on-a-scale interpretation that is typical of run-of-the-mill exclamative structures.

**Cross-Linguistic Variation** While Italian ESCs are introduced by *se*, in Trevigiano, *co* (=when) is used instead (5). *Co* is syntactically a head and it is used to introduce temporal adverbial clauses (6) [note that *co* is not used to express temporal *wh*- questions; a different element, the *wh*-word *quando* (also =when), is used instead].

- |   |   |
|---|---|
| 5) A: “We never talk anymore”<br>B: <i>Co te ciamo tuti i di!</i><br>When you-acc <sub>CL</sub> I-call all the days | 6) <i>Co te vien te digo</i><br>When you-nom <sub>CL</sub> come you-dat <sub>CL</sub> I-tell<br>“When you get here I’ll tell you” |
|---|---|

*Se/co* are clearly not being used compositionally in ESC: (5), for example, does not situate an event or a state temporally. I suggest that the cross-linguistic variation stems from languages remedying the lack of a specialized ESC structure by readapting syntactic structures, specifically, adverbial syntax. Why would ESC be parasitic on *adverbial* clauses? Adverbials provide information on the (temporal, locative, conditional, etc.) circumstances under which the events depicted in the main clauses (can) take place. For example, in (7), the conditional specifies the circumstances in which the apodosis will return True. Note that certain types of temporal adverbials can also assume a conditional interpretation (see Farkas & Sugioka 1983 on restrictive *when* clauses), see (8), where *when* can be replaced by *if* with no significant change in meaning:

- 7) If I call every weekend, you will be happy  
8) Canaries are popular when they are rare (Farkas & Sugioka 1983:225)

In (4a), I have argued that in ESC, a proposition *p* is rejected by asserting *q*, where *q* is incompatible with *p*. In other words, in all situations in which *q* equals True, *p* must necessarily return False. Both adverbial clauses and ESC thus specify a circumstance that has an effect on the truth conditions of a relevant proposition *p*. The difference between ESC and a conditional like in (7) is that, in the former case, this circumstance is the circumstance that renders *p* false rather than the condition which makes it true.

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**INTRO:** In this abstract, we propose a novel account that relies on a highly local Agree relationship in order to feed copular agreement in double nominal constructions (DP-BE-DP). Using data from Spanish, we show that this language forces agreement with the *intensional argument* (i.e., the referential subject), which we refer to as **DP1**, and consistently avoids agreement with the *extensional argument* (i.e., the predicate nominal of the subject), which we call **DP2**. We show that this local Agree relationship is necessary in order to account for several non-canonical patterns, all resulting in agreement with **DP1** as when: i) the predicate **DP2** is more featurally specified than **DP1** (3>1), an illicit construction in, e.g. German (Keine, Wagner & Coon 2019); and ii) **DP2** undergoes predicate inversion to [Spec,T] yet does not agree with the verb (Hartmann & Heycock 2018, *i.a.*).

**DATA:** Since Higgins (1973), four primary copular types have been the object of considerable investigation: *predicational* (1), *specificational* (2), *identificational* (3), and *equative* (4). Specificational and identificational have often been considered the same category due to the fact that the predicating **DP2** seemingly undergoes inversion to the canonical subject position [Spec,T]. Although it is **DP2** that ends up in preverbal position in (2-3), agreement stems from the postverbal **DP1** (*tú* ‘you’ in these examples). In this sense, Spanish copular agreement may appear ‘omnivorous’ (in the sense of Nevins 2011) with respect to the feature [PARTICIPANT]. Moreover, in 3>3 combinations, Spanish also shows omnivorous behavior with respect to number, agreeing with a DP bearing [PLURAL] over one bearing [SG] (5). However, regardless of which determines agreement, they are parasitic on one another and may not probe and agree with separate DPs as in, e.g. Icelandic.

- (1) Tú eres / \*es mi hermana ‘You are my sister.’  
you be.PRS.2SG be.PRS.3SG my sister
- (2) Mi hermana eres / \*es tú ‘My sister is you.’  
my sister be.PRS.2SG be.PRS.3SG you
- (3) Ésa eres / \*es tú ‘That (one) is you.’  
that be.PRS.2SG be.PRS.3SG you
- (4) Bruce Wayne es Batman ‘Bruce Wayne is Batman.’  
Bruce Wayne be.PRS.3SG Batman
- (5) El problema son / \*es las mesas ‘The tables are the problem.’  
the problem be.PRS.3PL be.PRS.3SG the tables

What some have deemed a subcategory of equatives—so-called *assumed-identity* copular structures—has been the focus of several recent studies (Keine, Wagner & Coon 2019; Béjar & Kahnemuyipour 2017, 2018; Hartmann & Heycock 2018a,b, 2022, *a.o.*). These constructions are unique in the sense that they do not denote real-world scenarios and, thus, their truth conditions are not upheld when the order of the two nominals is reversed.

- (6) Context: You enter a party with a friend and see someone in a costume impersonating your friend.  
¡Mira! ¡Ella es / \*eres tú! ‘Look! She is you!’  
look.IMP.SG she be.PRS.3SG be.PRS.2SG you
- (7) Context: A friend posts pictures of himself in a costume of the four members of KISS.  
Él es / \*son ellos ‘He is them.’  
He be.PRS.3SG be.PRS.3PL they

What we find in (6-7) is unlike the behavior shown above in (1-3, 5) in that the preverbal DP provides verbal agreement despite the fact that the postverbal nominal bears further specification in person and/or number. However, this pattern is also possible in predicational constructions (8).

- (8) Tu tío es / \*son las dos cosas ‘Your uncle is both of those things.’  
your uncle be.PRS.3SG be.PRS.3PL the two things

**PROPOSAL:** Our line of investigation is rooted in a typological distinction whereby agreement may be derived via syntactic relations that feed specific interpretations at the syntax-semantics interface. We claim that some languages (e.g. Spanish) require that **DP1** (i.e., the referential DP) provide agreement

based on an interpretative basis, forcing **DP2** (i.e., the predicate DP) to never participate in verbal agreement. Other languages (e.g. Eastern Armenian (9) & Galician (10)) do not show this restriction, allowing for agreement patterns that do not implicitly reflect which DP is the referential subject but, instead, rely on extra-linguistic information. This is seen in (10), where either nominal may serve as **DP1** based on a given context, although the more specified DP (*ti* & *eles*) will always bear agreement.

(9) ays yeraz-um martaspan-ə yes ei isk goq-ə du eir  
in dream-LOC murderer-SP I be.PST.1SG but thief-SP you be.PST.2SG  
'In the dream, the murderer was me, but the thief was you.'

(10) Ela es / \*é ti (3>2) / Ela son / \*é eles (SG>PL)  
she be.PRS.2SG be.PRS.3SG you she be.PRS.3PL be.PRS.3SG they  
'She is you/You are her.' 'She is them/They are her.'

We claim that an intermediate head bearing a  $\phi$ -probe feeds agreement (i.e., raises and merges with  $T^{\circ}$ ) based on the nature of the copular type, accounting for patterns in which a structurally higher but less specified DP shows agreement with the verb. We take the RELATOR concept (den Dikken 2006; henceforth  $R^{\circ}$ ), which mediates the relationship between a subject and its predicate in the representation of *predication structures*, as this intermediate head. Following the ideas of den Dikken, we claim that this head is present in all copular constructions. What distinguishes predicational and assumed-identity structures from specificational and identificational ones is the presence of what he calls a LINKER ( $L^{\circ}$ ), present in the latter two, which forces predicate inversion in these constructions. We follow Adger & Ramchand (2003), Citko (2008), a.o., in proposing that both DPs are merged in an asymmetrical  $\pi$ P in which **DP1** is merged in the specifier and **DP2** as the complement of  $\pi^{\circ}$ , the head that hosts the copula ( $\sqrt{BE}$ ). We claim that  $R^{\circ}$  selects  $\pi$ P as its complement, forcing agreement with the referential subject in the specifier of  $R^{\circ}$  and obligatory incorporation of the copula in  $\pi^{\circ}$  into  $R^{\circ}$ .

In predicational and assumed-identity constructions,  $R^{\circ}$  incorporates into  $v^{\circ}$  and subsequently  $T^{\circ}$ , followed by movement of **DP1** to [Spec,T] (11). In specificational and identificational structures, however,  $L^{\circ}$  is merged above  $R^{\circ}$  and bears an [EPP]/[ $\bar{A}$ ] feature which brings **DP2** from the complement of  $\pi^{\circ}$  to [Spec,L] above the subject (in [Spec,R]) (12). We claim that this is the first movement-related step in inversion structures before **DP2** is raised further to [Spec,T].

(11) [TP  $\uparrow$  T $^{\circ}$  ... [vP v $^{\circ}$  ... [RP **DP1** $_{[\phi]}$  R $^{\circ}$  $_{u[\phi]}$  [ $\pi$ P  $\overline{DP1}_{[\phi]}$   $\pi^{\circ}$  **DP2**]]]]]

(12) [TP  $\uparrow$  T $^{\circ}$  ... [vP v $^{\circ}$  ... [LP **DP2** $_{[\bar{A}]}$  L $^{\circ}$  $_{u[\bar{A}]}$  ... [RP **DP1** $_{[\phi]}$  R $^{\circ}$  $_{u[\phi]}$  [ $\pi$ P  $\overline{DP1}_{[\phi]}$   $\pi^{\circ}$   $\overline{DP2}_{[\bar{A}]}$ ]]]]]]]

This intermediate movement of **DP2** is not *ad hoc* and may also be found in copular sentences in which both DPs remain postverbal and the highest nominal (**DP2**) does not show agreement with the verb.

(13) Son [la solución] $_{[3,SG]}$  [los dos] $_{[3,PL]}$  'Both of them are the solution.'  
be.PRS.3PL the solution the two

The derivation in (12) mirrors the linear order and agreement found in (13). Assuming  $\phi$ -agreement low in the structure via a functional head such as  $R^{\circ}$ , we are able to explain all copula patterns shown above without adhering to notions of  $\phi$ -feature defectivity of one DP but not another (Béjar & Kahnemuyipour 2017; see Hartmann & Heycock 2018a,b, 2022 for critiques). Furthermore, it puts *assumed-identity* copulas in line with canonical copular agreement more generally (i.e., predicational), allowing us to dispense with agreement theories, e.g. *Feature Gluttony* (Coon & Keine 2021), centered around hierarchical effects and their concomitant ineffable morphological realizations (e.g. \*3>1).

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## Focus, stress assignment, and Spell-Out in Camuno

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**Overview.** The paper discusses the syntax-prosody interface in Camuno (Gallo-Italic). In particular, I argue that the non-canonical stress associated with narrow foci is selected at PF among the potential stresses assigned by a phase-based version of the nuclear stress rule.

**Main pattern.** In Camuno, foci (1-a) appear in a clause-internal, immediately postverbal position, and can only be fronted via clefting (1-b). Focus also aligns with the main sentence stress ( $\Sigma$ ), which in unmarked structures (1-c) falls on the right-edge of the clause ( $\sigma$ ).

- (1) a. l' a fat tcha [AL HO OM] $\Phi$  la hopa  
CL.3SG have.3SG.PRS make.PRT here the her husband the soup  
'It was her husband who made the soup.'
- b. l' è [AL HO OM] $\Sigma$  ke l' a fat  
CL.3SG be.3SG.PRS the her husband that CL.3SG have.3SG.PRS make.PRT  
tcha la hopa  
here the soup  
'It was her husband who made the soup.'
- c. al ho om l' a fat tcha [la hopa] $\sigma$   
the her husband CL.3SG have.3SG.PRS make.PRT here the soup  
'It was her husband who made the soup.'

**Analysis.** Focus in Camuno generally occupies the immediately postverbal position (IAV), which I identify, structurally, as the low focus position at the edge of vP (Belletti, 2004, *i.a.*). The position is typologically known (Zubizarreta, 2010 for a comparison between Italian and Bantu languages), and cross-linguistically often characterized by association with specific prosodic markings (Kula and Hamann, 2016), which in most Romance languages correspond to a specific stress. Differently from other approaches, I consider this non-canonical stress assignment as a contextually-dependent, post-syntactic operation interacting with, but independent from, (narrow) focus marking (cf. Kratzer & Selkirk, 2007; Samek-Lodovici, 2015).

In particular, I propose that in narrow focus structures, stress aligns with the right edge of a phonological phrase  $\Phi$  rather than with the larger prosodic phrase  $\iota$  (Féry, 2013), i.e., the default pattern of Camuno. I argue that phonological phrases are parsed by phases (Chomsky 2001; Kahnemuyipour 2009; Dobashi 2019), and I thus claim that at each Spell-Out cycle, a potential stress (Reinhart 1995) is assigned to the most embedded node of the Spell-Out domain by an adapted version of the Nuclear Stress Rule (Zubizarreta 2014 for an overview).

Following Szendrői (2017), I suggest that PF selects the stress at the edge of the phonological phrase containing the lexical verb, which can adjoin to projections higher than FocP, but lower than higher insertion verbs and adverbials. This stress alone is thus correlated to the syntactic focus-marking, but can independently introduce different pragmatic values.

Consider for instance (2), where the negative marker *mica* appears in post-participial position, and not, as default, after the inflected verb. The distribution in (2) introduces a counterfactual reading that may be an instance of verum focus (Roland Hinterhölzl, p.c.) which, however, I do not consider a standard alternatives-activating focus (Gutzmann et al., 2020). In these cases, stress-selection merely marks contrast, a primitive of information structure, (Neeleman & Vermeulen, 2009), rather than focus.

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- (2) la htceta l' a {mia} majat {mia} la carne  
 the girl CL.3SG have.3SG.PRS NEG eat.PRT mia the meat  
 ‘(No,) the girl didn’t eat meat.’

Further evidence for the independence of stress as a contrast-marking operation comes from (3), where the post-participial adverb *amò* ‘again’ has a counterfactual interpretation that can be translated as ‘before (unspecified)’ when aligning with stress (indicated as ]Σ):

- (3) [[al’ a fat ho amò]Σ al kunitch.]σ  
 cl.3sg have.3sg.prs make.prt up already the rabbit  
 ‘(Of course,) he has made rabbit before.’

These elements cannot be interpreted in the scope of focus-associate particles like *even* or *only* and they are compatible with another focus in the clause, i.e., they are not foci themselves.

**Conclusion.** The question regarding the mapping of syntactic structures to PF is a prominent one (Cinque 1993; Reinhart 1995; Arregi 2002), and extremely relevant for the discussion of narrow focus structures (Szendrői 2017). Future studies will investigate the quality of the non-default stress, and explore the similarities with the IAV position in other languages.

For the time being, the analysis correctly predicts the distribution of focal-stress in Camuno, which is due to interpretative constraints at the interfaces. Variations in the pattern are explained without positing further operations: the additional readings in (2) and (3) are pragmatic consequences of stress assignment. The analysis can also account for the fronting via clefting (1-b): the copula (lexical verb) ensures that the focus, in the most embedded position of the spelled-out CP-phase, aligns with stress.

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**1. Introduction:** Different grammatical devices are reported in the literature to mark the *focus* in a sentence: cleft structures, pseudoclefts, displacements of different sorts, intonation, etc. Recent studies—especially those developed within the Cartographic approach—have argued in favour of the existence of distinct structural positions in the sentence for the valuation of different types of foci. Thus, constituents bearing contrastive and exhaustive features would raise to a dedicated position in the left periphery, namely [Spec,Foc], to have their features valued (Rizzi 1997), while other types of foci (e.g. informational focus) would move to the vP-periphery (Belletti 2004). Nonetheless, the very fact that high adverbs (e.g. the corresponding of *probably, evidently, perhaps* in Romance) can be used as “focusing” adverbs—having scope over their associated DP (see (1))—(Cinque 1999: 30) would question this acknowledgment: their position of merge is IP-internal and the associated focus generally appear to their right (see (1)). In addition to this, the so-called “focusing adverbs” (*only, even, etc.*) can be associated with a constituent which is not necessarily the focus in a given sentence (see (2) where the alleged focusing adverb *solo* ‘only’ takes under its scope the DP<sub>-complement</sub> which is clearly not the focus as the focus is the fronted PP, given Rizzi’s (1997) unicity of focus).

- |     |   |                         |                           |   |              |  |           |
|-----|---|-------------------------|---------------------------|---|--------------|--|-----------|
| (1) | Gianni<br>G.                                      | mangiava<br>used-to-eat | probabilmente<br>probably | la pasta, non la carne<br>the pasta, not the meat | [Italian]    |  |           |
|     | ('G. probably used to eat pasta, not meat.')      |                         |                           |   |              |  |           |
| (2) | [Foc A SUSANA]<br>TO SUSAN                        | (que)<br>that           | Juan<br>Juan              | le dio<br>to-him gave                             | solo<br>only | el libro (no a Adriana)<br>the book (not to Adriana) | [Spanish] |
|     | 'To Susan John only gave a book (not to Adriana)' |                         |                           |   |              |  |           |

**2. Goals:** Given the paradoxical scenario stated in the *Introduction* (on the basis of the data in (1) and (2)), the main goal of this paper is to argue that *focusing adverbs don't exist*—or, to put it in a different way, that the merger of adverbs often associated with focus do not constitute (*per se*) a syntactic strategy to mark the sentence focus. Therefore, the paper aims to argue that, as a syntactic phenomenon, *focalisation* can only be reached by means of internal(not external) merge, the XP bearing the focus feature having to raise—either pied-piping the (alleged focusing)adverb or not—to have its focal features valued either in the low (Belletti 2004) or in the left (Rizzi 1997, 2004) peripheries.

**3. Data and discussion:** In order to show that “focusing” adverbs cannot be considered a syntactic device to mark the focus—because *there are no focusing adverbs at all*—, the first task is to show that an alleged focusing adverb having under its scope a given constituent (which is not the focus) can co-occur with a focalised constituent—here, focalised by means of an uncontroversial strategy to mark the focus (e.g., cleft-structures, focus-fronting movement, etc.). Given the *unicity of focus* (Rizzi 1997)—which is a consequence of a more general principle voiding repetition of categories in a given sentence, say the *decompositionality principle* (Kayne 2005)—, sentences featuring constituents displaced to the low and left peripheries co-occurring with constituents modified by alleged focusing adverbs (e.g. *only, even, mainly* etc.) are good and valid arguments in favour of the contention that there are no focusing adverbs at all. Examples of these sorts include—but are not limited to—the following:

1. the possible co-occurrence of a clefted-XP (thus undoubtedly the focus) with a different phrase under the scope of a “focusing adverb”. This is shown by (3-4), where the focus is the clefted DP (*Paula*, in (3), and *A Sônia*, in (4)), regardless of the presence of the “focusing adverb” *solo/só* ‘only’ and the DP (*un premio/um prêmio* ‘a prize’) it modifies (3,4).

- |     |   |                      |                                |                              |  |
|-----|---|----------------------|--------------------------------|------------------------------|--|
| (3) | Fue [F PAULA]<br>Was PAULA                              | que ganó<br>that won | solo un premio<br>only a prize | [, no Juana!]<br>[not Juana] | [[South American] Spanish]                           |
|     | 'It was Paula who won only a prize [, not Juana]'       |                      |                                |                              |  |
| (4) | Foi [F A SÔNIA]<br>Was [THE SÔNIA]                      | que<br>that          | ganhou<br>was-awarded          | só um prêmio<br>only a prize | [, não a Joana!] [Braz. Portug.]<br>[not the Joana!] |
|     | 'It was Sônia that was awarded only a prize, not Joana' |                      |                                |                              |  |

2. the possible co-occurrence of a fronted focus with a different phrase under the scope of a “focusing adverb”. This is shown by (5-6), where the fronted focus (namely *To Susan* (5)/*Para a Susana* (6)) co-occurs with the DP *a book* (5) or *o livro* ‘the book’ (6) which is under the scope of the alleged focusing adverb.

- (5) [<sub>Foc</sub> TO SUSAN], John only gave *a book* (not to Adriana)  
 (6) [<sub>Foc</sub> PARA A SUSANA] (que) o João deu só *o livro* (não para a Adriana) [Brazilian Portuguese]  
 TO THE SUSANA that the João gave only the book (not to Adriana) (= (5))

3. the possible co-occurrence of a pseudoclefted constituent with an XP modified by an alleged focusing adverb. This is shown in (7) where the pseudoclefted constituent *banana*, the focus, co-occurs with the alleged focusing adverb *só* ‘only’ which modifies the DP-subject *o João*, which is not the focus.

- (7) O que só *o João* comeu foi banana [Brazil. Portuguese]  
 The what only the John ate was banana (‘What only John ate was banana?’)

Given the unicity of focus (Rizzi 1997), according to which there is only one focus per sentence—probably a consequence of the *decompositionality principle*, whereby there is space for only one element from a given category in the structure—the very fact that the three sort of examples above involve an uncontroversial focalised constituent (underscored in the examples in (3-7)) jointly occurring with a DP modified by a(n alleged) focusing adverb (italicised in the corresponding examples) is more than a plausible argument against the contention that focusing adverbs don’t exist.

Now, given the conclusion that focusing adverbs are not focusing at all—as they can take under their scope a constituent which is not the sentence focus—, something else must be said on the integration of the so-called focusing adverbs into sentence structure when they are indeed associated with focus (e.g. in sentences like (8-9), below):

- (8) Juan come solo comida chatarra [South American Spanish]  
 Juan eats only food junk (‘John only eats junk food’)  
 (9) O João come só porcaria (= (8)) [Brazilian Portuguese]  
 The João eats only junk-food (= (8))

In these two examples, the so-called focusing adverb is indeed associated with sentence focus, namely, the DP (corresponding to) ‘junk food’. In this case, given the discussion on the data in (3-7), the focus in (8-9) (only) coincides with the adverbs’ modiffee. The derivation of (8-9) would involve an analysis in the spirit of Kayne (1998) and Munaro (2013) by which the DP modified by the alleged focusing adverb would raise to the specifier of a probing head followed by the merger of the adverb and remnant movement. These steps would only guarantee the modification of the DP *comida chatarra/porcaria* by *only/solo/só*. To value the focusing feature, the chunk *solo comida chatarra/só porcaria* would have to raise to [Spec,FocP] in the left periphery. The raising of the remnant not only guarantees that the sentence be linearised this way at PF but also that the chunk be interpreted as the sentence focus. What makes (8-9) different from (3-7) is that this further movement of the DP *comida chatarra/porcaria* (pied-piping the alleged focusing adverb) do not take place in (3-7) as in those sentences the adverb does not modify the focus.

**4. Conclusion:** All in all, focusing adverbs don’t exist. Therefore, what is informally and mistakenly referred to as a focusing adverb may only occasionally be associated with the focus in a given sentence. One may thus disassociate modification by a given adverb class from focalisation (which involve raising to the left-periphery). Alleged focusing adverbs syntactically behave as ordinary adverbs: they modify a given XP. This XP may be the focus or not.

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## For which speakers do you wonder whether *si* is a syntactic island?

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Filler-gap dependencies are generally unbounded in distance yet subject to locality restrictions with certain structures, known as syntactic islands. For example, in (1) the long-distance dependency is licit, but a superficially similar dependency with a nominal complement is not (2). Islands have been the subject of intense research, but many questions remain. One concerns cross-linguistic differences: some island constraints, like (2), hold in many languages, while others are more variable. For instance, English *whether* presents a barrier to some (but not all) extractions, whereas Spanish *si* ‘whether,’ as in (3), is generally claimed not to (Torrego, 1984).

- |  |                          |
|--|--------------------------|
| (1) ¿Qué tarea escuchaste que Mateo copió ___?                     | <b>Non-island</b>        |
| ‘Which homework did you hear that Mateo copied ___?’               |                          |
| (2) *¿Qué tarea escuchaste <b>el rumor de que</b> Mateo copió ___? | <b>Complex NP Island</b> |
| ‘Which homework did you hear the rumor that Mateo copied ___?’     |                          |
| (3) ¿Qué tarea quieres saber <b>si</b> Mateo copió ___?            | <b>Whether island</b>    |
| ‘Which homework do you want to know whether Mateo copied ___?’     |                          |

The cross-linguistic variation exhibited by *whether* islands is “poorly understood” (Szabolcsi & Lohndal, 2017), and for Spanish the evidence is mixed, with effects ranging from minimal (Pañeda & Kush, 2022) to strong (Rodríguez & Goodall, 2020). English, which often serves as the comparison case, yields similarly mixed results (Michel, 2014; Sprouse et al., 2016). As Sprouse and Villata (2021) point out, the field has not reached a consensus on interpreting these varying effect sizes; they argue “there is real empirical value in systematically re-testing languages for island effects ... to establish the range of variation across languages and ... dependency types.”

To that end, we contribute new experimental evidence on *si* islands in Spanish and compare them to *whether* islands in English. Furthermore, we aim to mitigate some sources of variation that can limit comparability across studies. Different experiments generally test different materials and populations, but we tested the same participants across languages by recruiting Spanish/English bilinguals, and we used uniform materials that were translation equivalents to reduce possible confounds from task effects.

We recruited a single group of Spanish/English bilinguals ( $n = 47$ , data collection ongoing) via Prolific. All reported living in the United States, speaking Spanish in childhood, and spending most of their time before age 18 in the United States. Because Spanish is a minority language in the US context, which can result in language shift toward majority English and consequent Spanish loss, we screened participants for Spanish proficiency by setting a minimum threshold on a Spanish proficiency test and by excluding those who failed two of three screening items (sentences whose known ratings are at the extremes of the scale).

We tested Complex NP islands (2) and *whether* islands (3) in Spanish and English, using a 2x2 factorial design crossing Island (Island/Non-island) and Gap (Matrix/Embedded). Participants judged two sentences per condition, with no lexicalization repeated. (They also judged 24 fillers per language.) Testing took place in a single uniform session, with the order of the languages rotated by participant. Ratings were z-score transformed, and we calculated a differences-in-differences (DD) score as a measure of effect size.

A linear mixed-effects model for each island and language revealed significant interactions between Island and Gap Position, and an interaction plot (Fig. 1) reveals the characteristic



island pattern in all cases. For both languages, however, the Complex NP islands produce strongly unacceptable ratings and large effect sizes (as expected), while the *whether* islands do not provoke strongly unacceptable ratings and evince moderate effect sizes. Despite higher ratings for *whether* island violations in Spanish, both languages display a similar pattern.

Because our participants are bilingual, it is reasonable to ask whether the observed similarity might be due to cross-linguistic influence. However, we compared these results to those of monolingual US English speakers ( $n = 39$ ) and native Spanish speakers in Mexico ( $n = 96$ ) on a similar task and noticed no substantial divergences. We do not think cross-linguistic influence is playing an outsize role.

Moreover, the group-level effects may be masking differences. Examining the distribution of scores by individual (Fig. 2; following Pañeda & Kush, 2022), we observe (rightmost panels) that the ratings for the *whether* island violation in Spanish cluster at the positive end of the scale, albeit not as strongly as those for the non-island cases, while in English we observe a bimodal distribution, indicating substantial variation in the sample, with ratings split nearly evenly.

The individual-level analysis suggests a cross-linguistic contrast that group-level means obscured: English *whether* islands provoke greater variation in ratings, while a much larger proportion of participants accepts the island violation in Spanish. Crucially, because we collected the data for both languages from the same participants using parallel materials, this contrast is unlikely to be due to differences between tasks or samples. Instead, we conclude that the variation we observe provides meaningful evidence regarding variation in the properties of *whether* islands in Spanish and English, which is an empirical contribution toward the larger enterprise of uncovering the source of cross-linguistic variation in island effects.

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Fig. 1: Interaction plots

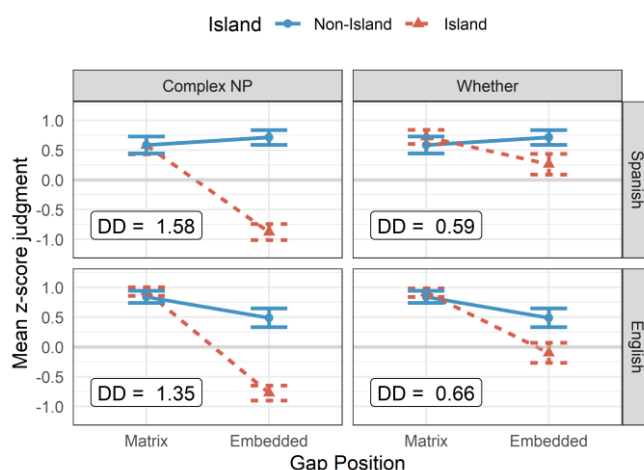
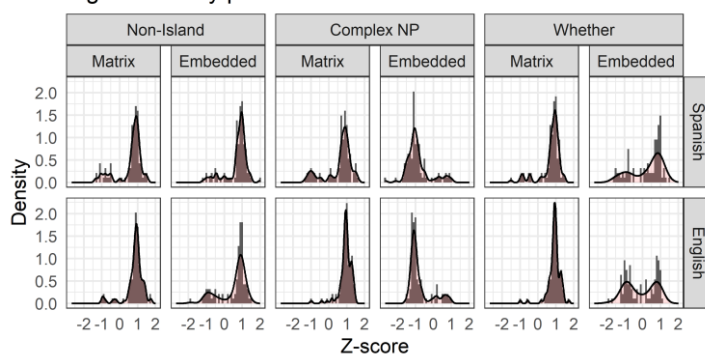


Fig. 2: Density plots



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### Forward from the Past: 21st century take-away from traditional Romance methods

Romance Linguistics, on account of its synchronic richness, contemporary variation, long documented history and scholarly tradition going back to Diez, Schuchardt, and Ascoli serves as a focal of practice and theory for the larger linguistic community as demonstrated in recent collaborative works (e.g. Arteaga 2019; Ayres-Bennett & Carruthers 2018; Barra Jover et al. 2012, etc.) and the recent RGCC2021 workshop on *doing romance* (proceedings in Corr & Schifano 2023) highlights a renewed interest in methodological concerns. Even so, Romance Linguistics, especially Historical Romance Linguistics, faces a unique set of problems: an immense multi-lingual bibliography, the overbearing weight of tradition, an abundance of contemporary dialectal data and a surprising typological opacity in relation to its well documented Latin ancestor. Though historical linguistics has in general become a rather *niche* subbranch of the linguistic sciences, many researchers will at one point or another turn to a venerable manual of the established historical Romance linguistic tradition to provide a baseline of how the languages of today have come to be. In practice this is also the case of most self-identified historical linguists and yet in 2023, the details of how this tradition arose or the foundations on which it rests have often been forgotten—sometimes neglected, relying on the authority of earlier scholars in order to look forward.

Building on Gallo-Romance case studies in anonymous (2022) we present the methodological challenges faced and insights gained from practicing Romance historical phonology in the 21<sup>st</sup> century, with the dual purpose of ① informing colleagues from other specialisations of the paradigmatic changes and ongoing debates in Romance historical linguistics; ② reflecting upon how these methodological concerns may affect the way we do other types of Romance and non-Romance linguistics. Employing discipline-specific case studies from Early Medieval Romance, we highlight the consequences of a changing discipline declined along four themes:

#### 1. Interdisciplinarity:

- On account of beneficial specialisation, modern research is also more myopic than our 19th and 20th century predecessors, whence a need to collaborate with other (social) sciences. On account of social and historical research, the relationship between Latin, Vulgar Latin and Proto-Romance has undergone significant revision in the past 30 years. Likewise, on account of psycho-, socio- and laboratory phonetic linguistic studies, the nature of sound-change itself has been revised (e.g. Labov 1994; Bermúdez-Otero 2020) with important consequences for traditional descriptions of change.

#### 2. The digital revolution:

- On account of digital technologies, the possibility (and a responsibility) to make linguistic data as accessible and verifiable as possible for transparency of the method is of increasing importance. Notwithstanding, some scholarship is less accessible. We present some gains & pitfalls of new data-access and collection methods.

#### 3. 19<sup>th</sup> century positivism and what we learn from the philological enterprise:

- With the explosion in the quantity of data available, the necessity is equally great to qualitatively evaluate and control our dataset. This is visible in linguistic data which has erroneously been cited as keystone evidence supporting the dating of Romance diphthongisation (e.g. Straka 1953), and which is revealed to **a.** have been taken out of context, **b.** have been misinterpreted, or **c.** not exist.

#### 4. The weight of tradition, or why things are not always as they seem.

- There is often significant distortion between what one has said and what other think one has said and thus a danger of cumulative misinterpretation, seen for example in descriptions of sound change. This can be seen for example in the reception of Richter (1934)'s description of Early Romance Vowel Reduction.
- As Lass (1997: 5–6) points out, “[i]n many important cases we may be passing on, as precious and firmly held beliefs, replicas of assertions that someone somewhere once made, transformed into Article of Faith”. And, in the case of Romance, though “[t]he path from Latin to French has been particularly well studied, and [there is an impression that] every possible explanation for each change has been offered, [...] no theoretically unified account is yet available” (Vaissière 1996: 63).
- Even within the strict domain of phonology, the role attributed to linguistic “representation” vs “computation” and the components of each leads to drastically divergent descriptions of the same problem.
- Thus, despite Morin (2003)'s call for methodological renewal over two decades ago, there is still need for a critical evaluation of the intersection of tradition and contemporary methods.

As we move forward in a rapidly changing world, the case study of Historical Romance invites linguists of all specialisations to reflect upon their own scientific practice and the relation between data, theory and accumulated consensus. For Romance diachrony, notably historical phonetics a seemingly “dormant discipline” (Ségéral & Scheer 2016: 7), the confrontation of old texts, modern techs and contexts, far from announcing this discipline's irrelevance in the 21<sup>st</sup> century, invites instead for trans-disciplinary reflection and cautious renewal.

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French Immersion vs. Core French L2 Accentedness:  
A Comparison of Proficiency Scores and Native Speaker Ratings

This study examines the oral proficiency of second language (L2) learners enrolled in French-as-a-second language (FSL) programs in Canada. In particular, we compare native speaker accentedness ratings of the French speech of students enrolled in French immersion and core French high school programs with individuals' proficiency scores, both measured and self-reported, in order to determine whether there are differences in the French oral proficiency of these L2 learner groups.

French immersion and core French programs are the primary FSL programs in Canada and they are offered to all students in English-majority communities. While students in both programs acquire French in formal classroom contexts where students rarely use their L2 outside of class time (Genesee, 1978), the amount of French instruction and the subjects that are taught in French differ between programs (Canadian Parents for French, 2017). Students in core French programs begin learning French in Grade 4 (Ages 8-9) and complete approximately 12% of their studies in French by the end of the program, while French immersion students begin learning French in Grade 1 (Ages 5-6) and complete 50% of their elementary and 33% of their secondary studies in French. Notably, French immersion speakers have been shown to have a particular non-native French accent, distinct from that of core French speakers (Poljak, 2015); however, the structures that distinguish the L2 speech of these groups remain virtually unexplored. A recent study discovered that these learner groups may also differ at the psychological level as French immersion students associate a higher level of social identity with their FSL program than core French students (Walton, 2022). Thus, we seek to build upon previous research to distinguish whether there are, indeed, perceptible differences in the overall accentedness of these learner groups and to determine whether any such differences are the result of L2 proficiency- or program-related factors.

This study has three primary research questions (1) *Are there differences in the accentedness in the French speech of French immersion and core French speakers?*; (2) *If so, do such differences remain significant when speakers are matched for overall proficiency?*; and lastly, (3) *Do speakers' self-reported oral proficiency scores reflect their oral competence as evaluated by native speakers?* To assess these questions, this study examined the French oral production of 58 FSL students enrolled in either a French immersion ( $n = 28$ ) or a core French program ( $n = 30$ ) in an Ontario high school. All students were in Grade 12 at the time of testing and completed the entirety of their studies in their FSL program. Participants were first asked to read the short 144-word French passage "*Mes parents m'énervent*" out loud. It is written in the present tense, contains frequent lexical items and reads at an elementary school level. Next, participants completed a language learning questionnaire as a part of which they were asked to evaluate their French proficiency in the following categories: reading, writing, speaking, listening and overall language ability. Lastly, participants completed a French version of the Vocabulary Levels Test (Nation, 1983; Schmitt, Schmitt & Clapham, 2001; Webb et al., 2017) and the Grammar Gap test within the University of Toronto Test of French (UTTF; Steele et al., 2020) which evaluated vocabulary breadth and grammatical knowledge, respectively, and served as an overall measure of language ability. Recordings of the participants' passage reading were anonymized and underwent an accentedness rating task which was evaluated by six native speaker judges along a 5-point Likert scale from 1 (Definitely non-native; very strong foreign accent) to 5 (Definitely native; no foreign accent).

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Preliminary results indicate that native speakers do, indeed, score the accentedness of French immersion and core French speakers differently. Overall, French immersion speakers were given a lower accentedness rating, indicating that native speakers perceived this group as sounding more native-like. This group also scored higher levels French proficiency in both grammar and vocabulary measures as well as self-reported higher proficiency levels across all categories (reading, writing, speaking, listening and overall language ability) than the core French group. Such results are in line with the fact that the French immersion group received a greater amount of French instruction in their FSL program. However, when participants were matched for level of overall L2 proficiency as evaluated by the UTTF, native speakers associated core French learners with a lower accentedness rating, indicating that they have a more native-like accent than their French immersion counterparts. This is especially interesting due to the reduced amount of L2 input when compared to their French immersion peers. Additionally, Core French participants reported much more variability in their self-reported proficiency scores, particularly as it concerns reading, writing and speaking, while French immersion results were much more homogeneous across all categories. Further analyses will confirm whether there are significant between-group accentedness differences between the French immersion and core French program-level and proficiency-matched speaker groups and will determine whether each group's self-reported proficiency scores reflect their oral competence.

This study evaluates whether differences in the accentedness of L2 speech of French classroom learners are program- or proficiency-based. These findings could lead to further investigation into differences between L2 learner groups and factors that contribute to differential acquisition between them. The significance of the results will contribute to the field of L2 speech learning and could highlight the influence of FSL program on the acquisition of French in the L2 classroom, which could have potential implications for the structure and objectives of FSL programs in Canada.

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## French Subject Doubling: A Third Path

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**1. Introduction.** This paper revisits the status of subject clitics in Spoken French and proposes a new analysis of subject doubling. Based on new evidence from a corpus study, we argue for an analysis reconciling two competing views of the construction, and provide further evidence of how quantitative studies of language use can shed light on long-standing theoretical debates.

**2. The debate.** Subject doubling, where a nominal subject and a coreferential subject clitic co-occur (*Marie<sub>i</sub> elle<sub>i</sub> mange* ‘Mary<sub>i</sub> she<sub>i</sub> eats’) is a common feature of spoken French. Two analyses have been proposed to account for the structure. Researchers like Kayne (1991), Rizzi (1986), De Cat (2005) a.o. analyze it as a case of **dislocation**, where the NP subject is dislocated into a topic position in the left periphery, while the subject clitic is a syntactically argument-bearing pronoun merged in SpecTP and phonologically cliticized to the verb (cf. (1a)). Evidence for this analysis comes from observations such as: 1) in elicitation studies, the subject clitic does not systematically co-occur with a nominal subject, hence behaving like an argument; 2) other clitics, like the negation particle ‘ne’, or object clitics can intervene between the subject clitic and the verb, showing their relative autonomy; 3) it is difficult for the DP to receive a focus reading when the subject clitic is present; and 4) subject doubling obeys the topicality hierarchy: it appears to be incompatible with indefinites and quantified noun phrases, which is expected under a dislocation analysis, since the DP would be a topic (Rizzi 1986).

(1) a. Dislocation:  $[_{TOP} \text{Marie} [_{TP} \text{elle} [_{T} \text{mange} ]]]$

b. Morphological:  $[_{TP} \text{Marie} [_{T} \text{elle-mange} ]]$

Other researchers, in particular Roberge (1990), Auger (1995, 2003), and more recently Culbertson (2010) a.o., argue for a **morphological** analysis, according to which the DP subject occupies the canonical subject position and the subject clitic is an agreement marker base-generated in T (cf. (1b)). Evidence for this analysis includes: 1) in many corpus studies of spoken French, subject doubling is nearly categorical (over 70%), as is the absence of *ne* in negative sentences (under 5%); 2) regardless of whether it is followed by a subject clitic, no phonological or prosodic features single out the subject DP as being dislocated; and 3) the subject clitic is acceptable when the sentence is in broad-focus contexts, showing that DP subject is not necessarily interpreted as a topic (Culbertson 2010). In order to account for subject doubling’s restriction to definites, Culbertson (2010) proposes that French subject doubling is subject to Suñer (1988)’s “matching hypothesis”, whereby agreement morphology and its argument controller must match featurally. Since subject clitics have the feature [+definite, +accessible], their DP controller must also bear these features.

Although some arguments have come from linguists’ intuitions or experiments, corpus studies have played an enormous role in the development of the morphological approach (ex. Auger, Coveney 2003, Culbertson, a.o). This being said, previous quantitative work has only investigated a subset of the relevant aspects of this complex and puzzling linguistic phenomenon. For example, variationist sociolinguistic studies (Auger, Coveney, Zahler 2014) investigate both social factors and grammatical factors; however, they do not take into account more cognitive factors like informativity and frequency. Culbertson has a more cognitive perspective, but the grammatical contrasts that she studies are quite broad, not distinguishing, for example, between different kinds of declarative clauses. In order to get a fuller picture, we therefore decided to track the contours of this phenomenon in one of the most recent corpora of Spoken French: the *Multicultural Parisian French* corpus (Gadet & Guerin 2016).

**3. Subject Doubling in the MPF.** We extracted from the corpus the occurrences of nominal subjects (e.g., *mon père* ‘my father’, *Marie*) or quantified subjects (*certains* ‘certain people’, *personne* ‘nobody’), and annotated whether the subject is doubled by a subject clitic or not (N=3903). In our first analysis, we only considered preverbal DP subjects. Strong pronouns were also excluded. In order to obtain the most complete corpus study of subject doubling to date, we coded all the extracted tokens for the following factors: social factors (age, gender, education, profession), the polarity of the clause (i.e., affirmative, negative with ‘ne’, negative without ‘ne’), verb frequency, DP subject head frequency, the distance (in words) between subject and verb, subject type and clause type (root, subordinate, relative). Speaker and verb lemma were added to the model as random intercepts.

Mixed effects logistic regression analysis of our data reveals significant effects that provide support both to the morphological approach and the dislocation analysis. Supporting the morphological approach: we find a very high rate of subject doubling (74%) and an extremely low rate of doubling with *ne* (0%). In fact, in a secondary analysis, we included postverbal subject doubling cases (e.g., *Il est là mon père*), and the rate of doubling increased to 77%. Furthermore, within the 23% of occurrences without subject clitics, most of them involve ‘ne’ or are about education and religion, signs they come from the formal Standard French register. We also find that verb frequency is positively correlated with subject doubling ( $z = 3.201, p < 0.01$ ), which, we argue, provides indirect evidence in favour of the morphological approach, since high frequency is well known to preserve complex morphosyntactic forms (Bybee, 2003). Supporting the dislocation analysis: we find that doubling is governed by subject type in terms of topicality hierarchy: definite NPs (rate of doubling: 80%) > indefinite NPs (47%) > universal QPs (8%). This being said, recall that Culbertson (2010), who finds the same effect, does not consider this constraint evidence of dislocation, but is rather the product of matching. However, we argue that agreement matching is not sufficient to explain another significant effect arguing for a topicalized DP: clause type. We find that root clauses, including root interrogatives, are associated with the highest rate of subject doubling; whereas subordinate clauses disfavor it. Among them, relative clauses disfavor doubling most, while other subordinate clauses are in-between (root (77%) > other subordinates (63%) > relatives (33%); differences between two adjacent categories being significant  $p < 0.001$  for both subject type and clause type). The matching hypothesis has nothing to say about how clause structure would affect doubling; however, an analysis in which the subject DP is some kind of topic does, since it is well known that there are topics (eg. Cinque 1977’s “hanging topic”) that are only available in root clauses (cf. Albrecht et al. 2012, a.o.).

**4. New proposal.** To account for both the overwhelming evidence that Spoken French subject clitics are agreement markers, and the evidence that subject DPs are topics in doubling construction, we propose an analysis that is a hybrid of the dislocation and morphological analyses. We propose that subject doubling involves an agreement marker generated in T which is doubled by a DP located in low topic position which is only present in root clauses (2).

(2) Our analysis:  $[_{TOP} \text{Marie} [_{TP} \text{pro}_T \text{elle-mange} ]]$

Our analysis correctly predicts that the subject DP will obey the topic hierarchy and that doubling will be strongly disfavoured with relative clauses, since the subject DP acts as an intervener for the relative A-bar dependency. A corollary of our analysis is that the informal register of spoken French is a null-subject language, as proposed by Roberge (1990), Culbertson (2010) and others, and claimed for other subject doubling Romance languages like Picard (Auger) or Northern Italian dialects (Poletto 2000). Our analysis of the subject clitic as an agreement morpheme coupled with a topic-like preverbal subject indeed echoes Alexiadou & Anagnostopoulou (1998)’s hypothesis on null subject languages.

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## French wh in situ: Where are we and where do we go from here?

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We argue that the Q/wh head in the French root left periphery can be licensed by Agree without Move, while embedded Q/wh requires Agree+Move. We show that this property of French explains the distribution of wh in situ in the language.

Most studies of French interrogatives, from Obenauer (1994) on, have either assumed or argued that the wh in-situ forms such as (1a) differ in many respects from their wh-ex-situ counterparts, exemplified by (1b) (Cheng & Rooryck 2000; Mathieu 1999, 2002, 2004, 2009; Boeckx 1999, 2003; Starke 2001; Adli 2006 and Baunaz 2008, 2011, 2016; Baunaz & Patin 2011, 2012; Déprez et al. 2013; Glasbergen-Plas et al. 2021, Faure & Palasis 2021, a.o).

- (1)a. Tu as invité qui?      b. Qui t'as invité?  
You have invited whom    who you have invited  
'Whom did you invite?'   'Whom did you invite?'

It is safe to say that scholars agree on three properties of wh-in situ. (i), it is incompatible with subject clitic inversion, (2); (ii), it never appears with *est-ce que* reinforcement, (3) and (iii), it is excluded from indirect questions, (4).

- (2) \*As-tu    invite    qui?    (3) \*Est-ce que tu    as    invite    qui?  
Have-you    invited    who?    ESKE    you    have    invited    who  
(4) \*Paulse    demande    elle    a    invité    qui.  
Paul REF wonders    she    has    invited    who  
'Paul wonders whom she invited.'

Concerning other syntactic properties of wh in situ, there are fundamental data disagreements in the relevant literature (see e.g., Zimmerman and Kaiser 2019, Glasbergen-Plas 2021, (GP)). One point of disagreement is over the (im)possibility of long construal, as in (5). According to Cheng & Rooryck (2000) (CR), it is ungrammatical. For Bošković (2000), it is restricted to specific verb classes. Other researchers perceive no grammaticality difference between in situ long construal and long movement (Starke 2000, Baunaz 2011).

- (5) Tu penses qu'elle    a    invite    qui    à    sa    fête?  
you think    that=she has    invited    whom    to    her    party  
'Whom do you think she invited to her party?'

Experimental results support the liberal view: Oiry (2011) found that long-construal wh in-situ is possible in adult French (used as controls in her experiment). Tual's (2017) acceptability judgment experiment showed that long construal in-situ questions are as acceptable as their long-moved ex-situ counterparts. GP points to the same conclusions. Tual (2017) and GP also observed that in indirect questions, in situ wh is impossible.

A second point of disagreement regards the availability of wh in situ under the scope of negation. Some work has argued that wh in situ is fine in this configuration (Baunaz 2011, GP, Starke 2001), at least in presuppositional contexts, but since this empirical point has not yet been firmly established, we carried out an experiment to evaluate it. We wanted to ascertain whether long-construal in-situ questions are acceptable under negation in the embedded clause. We explored this point by comparing in situ and ex situ wh on a well-known "intervention effect" that has been described as blocking covert wh movement (Beck 1996 and subseq. work).

Our acceptability judgment experiment tested (7p Likert scale) wh-questions featuring wh-phrase in situ vs. ex situ (*wh-situ*) in 2 syntactic contexts (*syntactic\_context*): in indirect questions vs. in direct biclausal wh-questions with long distance movement. We also manipulated the presence of negation in the embedded clause (*pos. vs. neg. embedded clause*). The target questions were presented within a dialogue (analogous across conditions) that introduced a set of possible values for the wh-element. We created 36 items under 8 conditions.

The resulting 256 stimuli were divided into 8 lists with a Latin square procedure; each list was presented with 32 fillers. We tested 60 native speakers of French (born and living in France).

Our results are shown in Fig 1. A mixed model revealed that in long distance questions, in situ wh phrases are rated no differently from ex situ wh-phrases in negative clauses ( $p > .05$ ), while in positive clauses, in situ wh-phrases were rated even significantly higher ( $p < .01$ ) than ex situ wh-phrases. In contrast, in indirect questions, wh-elements in situ are rated significantly lower than wh ex situ ( $p < .001$ ), independently of the presence of negation.

The following generalizations seem to us at this point to be firmly established empirically: (i) wh in situ is *acceptable* in both short and long construal; (ii) wh in situ is *acceptable* under negation; (iii) wh in situ is *unacceptable* in indirect questions. These can and should be used to evaluate competing analyses of wh in situ as well as to sketch out more clearly the research agenda for future work in this area.

One line of analysis, (e.g., CR 2000), holds that wh-phrases in situ undergo covert (LF) movement. It is, however, difficult to square a covert movement analysis with the ban on wh in situ in indirect questions.

One fact that might be taken to militate in favor of a movement account is the subject-nonsubject asymmetry discussed in Koopman (1983), Plunkett (2000) and Shlonsky (2012, 2017): French wh in situ is considerably less acceptable in (embedded) subject position than it is in object position. Whether this asymmetry is expressed in ECP terms or in terms of Rizzi's *Criterial Freezing*, it constitutes diagnostic evidence for movement. Since covert movement does not seem to be a viable analytic option, consider an overt movement option, with the lowest copy spelled out, instead of the highest one. The unavailability of wh in situ in indirect questions again does not follow and requires a separate explanation. A further problem for "overt movement with low spellout" is that it incorrectly predicts that parasitic gaps should be acceptable in in situ contexts, contrary to fact.

A different perspective is pursued in Bobaljik & Wurmbrand 2015, (BW), who argue that questions with optional wh in situ are not syntactic questions, but declarative sentences in which wh is focalized in situ and the clause containing it is pragmatically interpreted as a question. As the authors note, this view predicts the impossibility of wh in situ in indirect (selected) questions. It also explains why wh in situ is impossible with *est-ce que* and with subject-clitic inversion, both of which are only possible in syntactic questions. No intervention by negation is also predicted since the focalized wh does not undergo movement.

One difficulty we discern with BW is that French in-situ is productive (Huková 2006, Adli 2015, Guryev 2017, a.o.), not only to a much larger degree than English and German, but also in comparison with other optional wh in situ languages like Spanish and Portuguese (Kaiser & Quaglia 2015). Under the proposed theory, the crosslinguistic differences must be pinned to pragmatics but it is far from clear how to do that. Moreover, Italian has a very productive use of focus in situ but wh in situ is unacceptable.

It seems, rather, that French has some syntactic property, not shared by other languages, that favors wh in situ. **Our proposal is that the Q/wh head in the French root left periphery can be licensed by Agree without Move, while embedded Q/wh requires Agree+Move.** This is a familiar point of variation among functional heads both across and within languages and yields the requisite empirical results, namely, no obligatory wh movement except in indirect

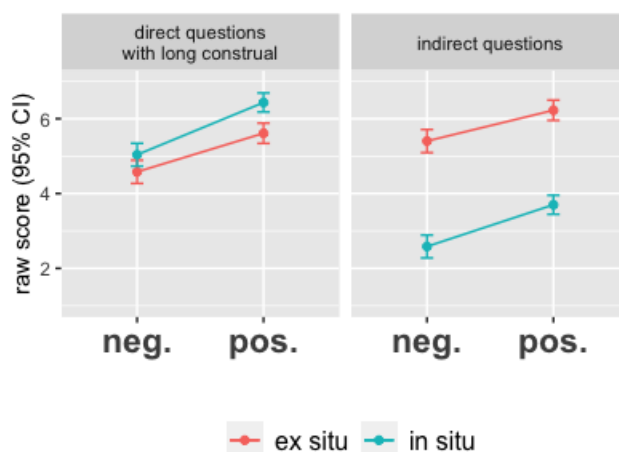


Fig. 1 Acceptability of in situ and ex situ wh-phrases in positive and negative indirect questions and long-distance direct questions

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questions. The ban on subject wh in situ follows from a natural extension of Criterial Freezing:  
An expression in a criterial position cannot be probed.

## GSR and Suppletion in Bolognese Clitics

Gradient Symbolic Representations (GSRs; Smolensky & Goldrick 2016) endow phonological units—typically segments—with degrees of activity ranging from 0 (completely absent) to 1 (fully present). GSRs have been shown to provide accounts of intricate morphophonological interactions (e.g. Faust & Smolensky 2017), and we contribute to this line of research by showing that GSRs can also account for suppletion if activity levels are assigned to allomorphs as a whole.

Bolognese (Romance; Italy) displays complex clitic allomorphy. The 3MS.NOM clitic surfaces as [l] prevocally (1) and [al] preconsonantly (2). This is suppletion: no regular phonological processes in Bol account for the [a]/∅ alternation. Rubin & Kaplan (to appear) treat [l] as the default allomorph; [al] surfaces to satisfy a prohibition on sonorant-initial onset clusters and sonorant-final coda clusters: \*[+son]PERIPH(ERY). Evidence that [l] is the default comes from the fact that it appears in some situations in which [al] would facilitate syllabification. For example, in questions [l] appears post-verbally with an epenthetic [e] (3). Epenthesis satisfies \*[+son]PERIPH, but [al] would have done so, too, without violating DEP. The opposite choice—use of [al] over [e]-epenthesis—is made preverbally, as (2) shows; this satisfies a ban on epenthesis in initial syllables (DEP-σ<sub>1</sub>).

- |              |                   |
|--------------|-------------------|
| (1) l-       | ar'spand          |
|              | 3MS.NOM= responds |
|              | 'he responds'     |
| (2) al-      | 'vad              |
|              | 3MS.NOM= sees     |
|              | 'he sees'         |
| (3) 'vad =el | *'vad =al         |
|              | sees =3MS.NOM     |
|              | 'does he see?'    |

GSRs allow preferences between allomorphs to be encoded as differences in underlying activity. Both /l/ and /al/ appear in the input, and candidates receive penalties according to the activity of the allomorph they contain. For example, if the activities of /l/ and /al/ are 0.5 and 0.25, respectively, DEP will favor candidates with [l] because [l] incurs a 0.5 penalty from DEP (for the addition needed to achieve full activity) compared to [al]'s 0.75. Likewise for MAX: candidates with [l] incur a 0.25 penalty for the deletion of /al/; those with [al] incur a 0.5 penalty for deletion of /l/.

A challenge for this GSR analysis is that DEP governs both allomorph selection and epenthesis—the choice between them cannot be as simple as ranking/weighting the constraint favoring one option over the other. Since Bol uses both epenthesis and allomorph selection to satisfy \*[+son]PERIPH, this language presents an important test for the ability of GSRs to account for suppletion. We constructed an analysis of the facts described above and related data summarized below. Because some clitic alternations involve optionality, we used Noisy Harmonic Grammar (NHG; Boersma & Pater 2016), in which constraint weights are perturbed on each evaluation, potentially generating multiple outputs for one input. This model was successful, showing that GSRs can model the competition between suppletion and epenthesis.

We included two kinds of additional data. The first involves the 3MS.ACC clitic. Like 3MS.NOM, it surfaces as [l] before vowels ([t-l-iŋ'vi:d] 'you invite him') and [al] before consonants ([t-al-'vad] 'you see him'). This, too, must be suppletion. Particularly important are words containing both 3MS.NOM and 3MS.ACC. Before a vowel-initial verb, these clitics behave as expected (4), but with a consonant-initial verb 3MS.ACC unexpectedly surfaces with its prevocalic allomorph [l], necessitating [e]-epenthesis to satisfy \*[+son]PERIPH (5).

Second, under certain conditions 3MS.NOM fuses with a following clitic: e.g. [at] represents both 3MS.NOM and 2S.DAT in (6,8)—Rubin & Kaplan (to appear) call such clitics “duplexes.” Again, Bol’s regular phonological processes cannot account for this fusion, so [at] must be suppletive. [at] is obligatory when 3MS.NOM features occur in the input with both DAT and ACC feature-sets (8), but when just one of DAT or ACC is present, fusion is optional (6,7). We adopt Rubin & Kaplan’s account of this optionality: \*DUPLEX-PPh<sub>min</sub> essentially discourages duplexes adjacent to the verb root.

The underlying activities in (9) reflect the preferences stated above: /l/ is favored over /al/ and therefore has a greater activity in both 3MS.NOM and 3MS.ACC. Because duplexes are always at least optional when the proper morphosyntactic features are present, they have the highest activity among the NOM allomorphs.

(10) lists constraint weights. MAX outweighs DEP, accounting for [ʼvad-el]: it incurs a full violation of DEP and a .25 violation of MAX for /al/’s absence (total penalty: 27.5), compared to \*[ʼvad-al]’s .75 violation of DEP and .5 violation of MAX for /l/’s absence (total penalty: 42.5).

Over 10,000 iterations, our NHG simulation produced all and only the correct outputs in (1–8). This model compares favorably to Rubin & Kaplan’s Lexical Selection (Mascaró 2007) analysis, which places allomorphs on a hierarchy, and the constraint PRIORITY favors the highest-ranked allomorph. GSRs achieve the same result without LS’s extra machinery. Activity, which has utility beyond suppletion, replaces the allomorph ranking. Preferences are enforced not with an allomorphy-specific constraint like PRIORITY, but with MAX and DEP. These results show that nuanced interactions between allomorph selection and other phenomena like epenthesis are possible with GSRs even though the same constraints are responsible for them.

• Boersma, P. & J. Pater. 2016. Convergence Properties of a Gradual Learning Algorithm for Harmonic Grammar, *Harmonic Grammar and Harmonic Serialism*, edited by J. J. McCarthy & J. Pater, 389–434, Bristol, CT: Equinox. • Faust, N. & P. Smolensky. 2017. Activity as an Alternative to Autosegmental Association, Paper presented at the 25th Manchester Phonology Meeting. • Mascaró, J. 2007. External Allomorphy and Lexical Representation, *LI* 38:715–735. • Rubin, E. J. & A. Kaplan. to appear. Lexical Selection in Bolognese Clitic Allomorphy, *Proceedings of Going Romance 2021*. • Smolensky, P. & M. Goldrick. 2016. Gradient Symbolic Representations in Grammar: The Case of French Liaison. ROA-1286, Rutgers Optimality Archive, <http://roa.rutgers.edu>.

(4) al= l= ʼinvi:da  
3MS.NOM= 3MS.ACC= invites  
‘he invites him’

(5) al= le= ʼvad  
3MS.NOM= 3MS.ACC= sees  
‘he sees him/it’

(6) at= ʼdi:z  
3MS.NOM+2S.DAT= says  
‘he says to you’

(7) al= t= ʼdi:z  
3MS.NOM= 2S.DAT= says  
‘he says to you’

(8) at= al= ʼda  
3MS.NOM+2S.DAT= 3MS.ACC= gives  
‘he gives it to you’ \* [al= t= al= ʼda]

(9) Allomorph	Activity
duplexes	.7
/l/ (NOM)	.5
/al/ (NOM)	.25
/l/ (ACC)	.8
/al/ (ACC)	.3

(10) Constraint	Weight
*[+SON]PERIPH	100
MAX	70
DEP-σ <sub>1</sub>	60
*DUPLEX-PPh <sub>min</sub>	22
DEP	10

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## Geminates are not just longer singletons: evidence from Italian articulatory data

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In this paper, we argue, based on articulatory data on Italian singleton and geminate consonants, that geminates are not simply a longer version of singletons, as often assumed in phonological analyses. Geminates differ from singletons along a variety of dynamically specified parameters that are included in the Task-Dynamic model of articulatory phonology [1], such as constriction target, stiffness, and movement amplitude/velocity. Since the differences in dynamically specified parameters persist once duration is taken into account, we propose that they should be part of the phonological representation of geminates.

**Methodology:** Preliminary data was analyzed from a native speaker of Italian who completed two separate experimental sessions. The participant produced six nonce disyllabic words VCV containing all singleton and geminate Italian bilabial consonants: [ipa, ippa, iba, ibba, ima, imma]. Target words were embedded in a carrier sentence [dika \_\_ due volte] “please say \_\_ two times”. Participants were cued to produce trials at five different rates “very slow”, “slow”, “normal”, “fast”, “very fast”. Each word was repeated 10 times at each rate. In total participants produced 6 (target words) × 5 (rates) × 10 (repetitions) × 2 (sessions) = 600 tokens.

Articulatory data were collected at a sampling frequency of 400 Hz using an NDI Wave electromagnetic articulometer (EMA). In this paper, we focus on the articulation of bilabial consonants. Bilabial consonant closures and releases were identified algorithmically using a lip aperture (LA) time series and its velocity zero crossings. LA is defined as the Euclidean distance between the vertical and horizontal components of the Lower Lip and Upper Lip movements.

The following nine dependent variables were extracted for statistical analysis:

- Duration of the consonantal closure and release gestures (1-2).
- Maximum constriction degree of LA (3)
- Amplitude of closure and release (4-5)

$$A_{Closure/Release} = |LA Value_{Onset/Offset} - LA Value_{Minimum}|$$

- Peak velocity of closure and release ( $v *_{Closure/Release}$ ) (6-7)
- Stiffness of closure and release (8-9) [2]

$$k_{Closure/Release} = \frac{v *_{Closure/Release}}{A_{Closure/Release}}$$

All dependent variables were entered in linear mixed-effect regression models. The fixed effects are utterance duration (z-scored) and geminate (with reference as “singleton”). Models were selected in a stepwise pruning procedure by first eliminating the effect of geminates. Random effects are random intercepts for subject session and for voicing/manner, i.e., whether the consonant is [p], [b], or [m]. Entire LA trajectories, time-warped to a fixed length from onset to offset, were also analyzed using generalized additive mixed models (GAMMs) [3].

**Results:** The results of the mixed effect linear regression analyses show that geminates have a significantly longer duration and higher constriction degree than their singleton counterparts. We also observed that geminates have larger movement amplitude, higher peak velocity, and lower stiffness than singletons for both the closure and the release phases. The summary of the result is as follows:

	Closure	Release
<b>Constriction degree</b>	G > S	NA
<b>Amplitude</b>	G > S	G > S
<b>Peak Velocity</b>	G > S	G > S
<b>Stiffness</b>	S > G	S > G

The results of the GAMM analyses shows that the whole LA trajectory of geminates is different from the trajectory of singletons, as shown in Figure 1.

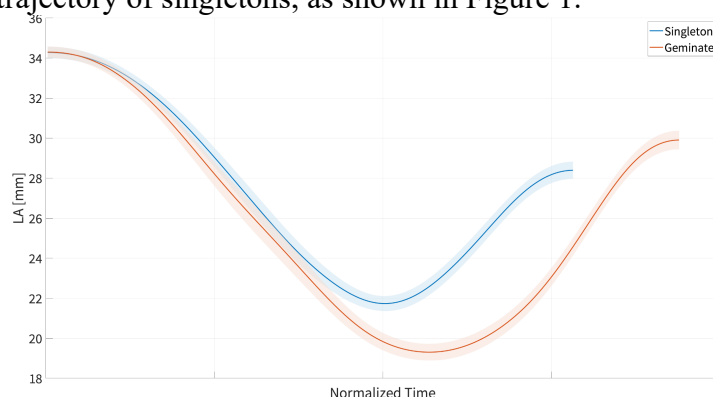


Figure 1. LA trajectories of singletons and geminates and their 95% confidence intervals

**Discussion:** Our results show that geminates are different from singletons, not only in their articulatory durations, but also in their constriction degree, stiffness, and peak velocity. There are two possible interpretations of the results. One interpretation is that underlyingly geminates and singletons are different solely in duration and other differences observed are the by-product of differences in duration. For example, singletons are less constricted, because of an undershoot due to shorter duration. The undershoot can also result in other observed behaviors: lower amplitude, lower peak velocity, and higher stiffness. This interpretation would be in line with phonological representations that analyze geminates as a longer version of their singleton counterparts, such as the representations in Figure 2.

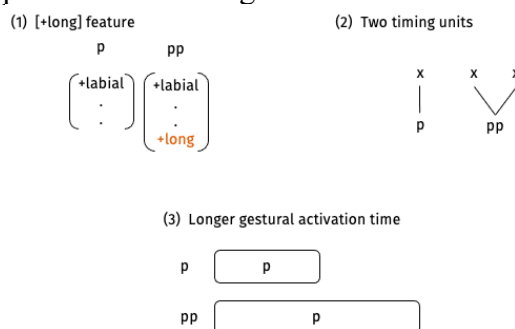


Figure 2. Three phonological representations of singletons and geminates

An important prediction of this account is that singletons that are as long as geminates should have nearly identical kinematic profiles to singletons. Our analyses, however, show that geminates remain distinct from singletons, even once durational effects are taken into account in the statistical models. The conclusion we draw is that the lexical difference is not simply a matter of duration, but also of phonologically specified differences in values of kinematic parameters. In turn, a revised interpretation of the contrast between singleton and geminates suggests that phonological contrasts have a richer phonetic substance than often assumed, in line with the claims of a unified approach to phonology and phonetics, like Articulatory Phonology [4].

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## GERUNDIVE CONSTRUCTIONS IN BRAZILIAN PORTUGUESE AND FRENCH: A COMPARATIVE ANALYSIS

The main objective of this talk is to establish correspondences between the gerund in Brazilian Portuguese (BP) and two forms, in principle, equivalent in French: the *gérondif* and the *participe présent*. To describe the gerund in BP, I took as a base the article by Mória and Viotti (2004), in which the authors present differences and similarities between European and Brazilian Portuguese in the construction with gerunds. First, it is necessary to define what a gerund is: it is a non-finite verbal form and marked by the ending *-ndo*. Other Romance languages have a verb form similar to Portuguese. In Spanish and Italian, we find the same ending *-ndo* for the gerund (Schrott, 2020; Nannoni, 2014); in Romanian, this verb form has the endings *-ând / -ind* (Drăghicescu, 1994; Tenchea, 2012). In French, the equivalent forms are those marked by the suffix *-ant*, which have a very similar definition. For authors like Høyer (2003) and Halmøy (2003; 2008), there are two non-personal and non-finite verbal modes ending with the suffix *-ant*: the *gérondif* [Ger] and the *participe présent* [Ppr]. However, the Ger is always preceded by the preposition *en*. More traditional French-speaking grammarians, such as Maurice Grevisse, Robert-Léon Wagner and Jacqueline Pinchon, describe Ger as being a subcategory of Ppr. Nevertheless, for more modern linguists (including those mentioned above), each of these phenomena (Ger and Ppr) has specific grammatical behavior. After describing the phenomena in Portuguese and French, I focused on the cases of reduced adverbial gerund sentences (predicative and adjunct) and on how they are represented in French. For this cut, I took as a base the analysis of Lobo (2003; 2006) on subordinate adverbial clauses. The classification of the gerund in Portuguese was adopted because it is a more systematic approach within a specific theory than Halmøy's (2008) description of these forms, which, in some moments, becomes vague for not pointing out hypotheses of analysis for the data.

This research has shown that, unlike in BP, phrases containing the *-ant* forms in French never occupy an argument function, as shown in (1). The example in (1b), the literal translation of (1a), is ungrammatical.

- (1) a. *Ele viu o cachorro fazendo um buraco na grama.*  
b. \**Il a vu un chien (en) faisant un trou dans la pelouse.*

Another interesting fact is that the *-ant* forms of French correspond either to the adnominal gerund or to the predicative or adverbial gerund of BP. When analyzed as adverbials, the French forms can work as a sentence adjunct (peripheral clause) or as a predicate adjunct (integrated clause). As a sentence adjunct, the possibility of using the *Ppr* was noted, but not the *Ger* (as seen in example (2a), in BP, and its version in French, in (2b)). In situations in which there is a gerundive sentence with the function of adjunct of predicate in BP (exemplo (3)), preference is given to the *Ger* in French (3b), with no possibility of using the *Ppr* (3c):

- (2) a. **Sabendo** que eu não como carne, ela nunca me convidaria para ir numa churrasceria.  
b. (\**En*) **Sachant** que je ne mange pas de viande, elle ne m'inviterait jamais pour aller dans une churrasceria.  
(3) a. Clarissa fez o bolo **misturando os ingredientes**.  
b. Clarissa a préparé le gâteau **en mélangeant les ingrédients**.  
c. \* Clarissa a préparé le gâteau **mélangeant les ingrédients**.

In the case of the predicative gerund in BP, the preference is for the *Ppr* when the secondary predicate is oriented towards the object and for the *Ger* when it is oriented to the subject, as seen in examples (4) and (5) respectively:

- (4) a. Ele revê **Sophie subindo** os degraus de Cannes.  
b. *Il revoit Sophie montant les marches de Cannes.* (HALMØY, 2008, p. 43)



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(5) a. A criança saiu do quarto **chorando**.

b. *L'enfant a quitté la pièce **en pleurant**.*

Some cases, pointed out mainly by Halmøy (2008), showed the possibility of alternating between Ppr and Ger (as in example (6)) and the impossibility of using Ger (as in examples (7) and (8)).

(6) **(En) rentrant** chez moi, je me suis rendue compte que j'avais oublié mes clés.

(7) **Parlant** / \***en parlant** mal la langue, il n'arrivait pas à se faire comprendre.

(HALMØY, 2008, p. 51)

(8) **Connaissant** / \* **En connaissant** le finnois, il a été invité à l'université de Helsinki.

(HALMØY, 2008, p. 51)

In (6), the alternation is possible because, in fact, each of the sentences will be interpreted as a different type of subordinate construction: with Ger '*en rentrant*' we have a predicate adjunct (integrated clause); with Ppr '*rentrant*' we would have a subject-oriented secondary predicate. In examples (7) and (8), which we could describe as a sentence adjunct (peripheral clause), we do not have the possibility of producing a sentence with Ger because the subordinates ('*parlant mal la langue*' in (7), and '*connaissant le finnois*' in (8)) convey a cause value.

In addition to this syntactic analysis proposal, I propose an analysis that follows a semantic bias, taking into account the lexical aspect (actional classes) (VENDLER, 1967). In those propositions in which the gerund subordinates present homogeneous events with [-telic] feature (activities, like *fumer*; and states, like *connaître*), it is not possible to alternate between Ppr and Ger when these eventualities denote a cause – they admit only Ppr. With punctual events (which have the feature [+ telic]) and non-homogeneous, that is, achievements (like *rentrer*), the alternation was possible.

The adoption of the classification of the gerund in Portuguese to establish parallels with French, taking into account, also, aspectual issues, proved to be promising for the analysis of *-ant* forms in French.

**Key-words:** gerund; *gérondif*; *participe présent*.

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## Goals, end-points and scales

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Fong and Poulin (1998), Folli (2001), and Folli and Ramchand (2005), among others, argue that complex prepositions such as Fr. *jusqu'à* and It. *fino a* are accomplishment prepositions because they can combine with manner of motion verbs to derive telic interpretations:

- (1) *Gianni è/\*ha corso fino a casa*  
Gianni is/has run up.to at home  
'Gianni ran up to his house'
- (2) *Gianni ha camminato \*(fino) a casa in un secondo.*  
Gianni has walked up.to at house in one second  
'Gianni has walked to his house in one second'. (Italian; Folli and Ramchand 2005:page)

The above-mentioned authors argue that (1) and (2) are counterexamples to Talmy's (1985, 2000) typology, because the two verb-framed languages exhibit a construction in which a manner of motion verb appears with a PP introducing a goal, a construction found mainly in satellite-framed languages (e.g., Eng. *John walked to the store*). Beyond Romance languages, Beavers (2008) shows that this sort of preposition exists also in Japanese, another verb-framed language. This author argues that the postposition *-made* is not restricted to denoting goals, since it can also function as a temporal modifier of the duration of the event, equivalent to English *until*. To Beavers, *-made* is a postposition that establishes that an entity is a limit, without necessarily carrying the semantics of a path, so it does not constitute a true counterexample to Talmy's typology. In this paper, I set eyes on the Catalan complex preposition *fins a*, which functions much as the delimiter prepositions described before by Beavers (2008). The objective of this investigation is to extend Beavers's analysis to account for the many meanings that *fins* exhibits in Catalan: *fins* appears in PPs with a goal interpretation as in (4), in PPs denoting a temporal boundary as in (5), modifying NPs as in (6), and as a scalar focal modifier as in (7):

- (4) *Vam arribar fins a Montserrat.*  
Aux.1PL arrive up at Montserrat  
'We arrived at Montserrat.'
- (5) *Hi serem fins a les tres de la tarda.*  
Loc be.1PL up at the three of the afternoon  
'We will be there until three o'clock in the afternoon.'
- (6) *Van arribar tard fins a tres persones diferents.*  
Aux.3PL arrive late up at three different people  
'Up to three people arrived late.'
- (7) *Fins (i tot) la Maria va aprovar l=assignatura.*  
Up and all the Mary aux pass the=course  
'Even Mary passed the course.'

First, I argue that the analysis of *fins a*-PPs as an accomplishment preposition (as proposed in Folli 2001 for It. *fino*) is empirically inadequate. First, the interpretation of *fins a*-PPs as a goal always depends on the verbal type: if the verb does not entail a goal, as *ballar* 'to dance' for example, *fins a*-PPs can also define the limits of the area where the movement takes place,

without necessarily entailing the existence of a path (compare 9 and 10); second, if *fins a*-PPs were accomplishment prepositions, we would expect them to change the aspectual interpretation of the predicate they combine with, contrary to fact. Activity predicates (like *ballar* ‘dance’ in (10)) in combination with *fins a*-PPs can combine with durative adverbials, without necessarily receiving the *series of identical events*’ interpretation (SIE), which it is obtained with accomplishment PPs of the English type (11) (from MacDonald 2008).

(9) *Vam arribar fins a la porta de l=habitació.*  
 Aux.1PL arrive up at the door of the=room  
 ‘We arrived at the door of our room.’

(10) *Vam ballar fins a la porta de l=habitació durant hores.*  
 Aux.1PL dance up at the door of the=room for hours  
 ‘We dance in the space that is limited by the door of our room for hours.’

(11) The farmer dragged a log into the barn for an hour. (fine in the SIE interpretation)  
 The evidence in (9) and (10) shows that the *fins a*-PP is not an accomplishment preposition. Moreover, the examples in (4-7) indicate that the semantics of *fins* goes beyond motion events. Consequently, I propose that the spatial *fins a*-PP is a complex preposition that contains a locative bounded preposition (whose exponent is *a*) and a modifier, *fins*. The status of *fins* as a modifier, and not as a preposition, comes from, first, its cross-categorial distribution as shown in the examples 4 to 7, where *fins* is shown to modify PPs, NPs or CPs; and, second, the fact that *fins* does not drop before complementizers as run-of-the-mill prepositions in Catalan do, (12):

(12) *Me='n vaig oblidar \*(fins) que m'=ho=vas dir.*  
 CL.1SG=cl.OBL aux.1SG forget up that CL.DAT.1SG=CL.ACC.3SG=AUX.2SG say  
 ‘I forgot it until you told me.’

In this paper I put forward that the semantic contribution of *fins* is that of specifying that a particular individual is an end-point, (13), which carries the presupposition that there is a set of ordered points, a scale G, such that x is the maximal point in that scale. The precise content of G depends on the type of individual that *fins* modifies. That the scalar meaning of *fins* is presuppositional is argued on the basis that the scalar meaning of *fins* survives negation, as exemplified here in (14). The definition that we propose is in (13):

(13)  $[[Fins]] = \lambda x: \exists G[x \in G \wedge \forall y [y \in G \rightarrow y \leq x]. \text{End-point}(x)$

(14) *Fins i tot la Maria (no) va venir a la festa.*  
 Up and all the Maria (not) aux come to the party  
 ‘Even Mary (did not) come to the party’

The analysis of *fins* defended here gives us several benefits. The proposal allows us to understand why spatial *fins a*-PPs gives rise to a path interpretation in certain contexts, without having to assume that it inherently has a path semantics. Moreover, it paves the way to a unified analysis of the different uses of *fins* in Catalan, without having to assume multiple lexical entries.

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## Heritage Romanian: the acquisition of object clitic pronouns

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This paper focuses on the acquisition of object clitic pronouns by 16 children (ages 8-11) who grow up in Toronto and are exposed to Romanian since birth (L1) in their home; this is the heritage Romanian (HR). These children use English outside the house (their dominant language). The investigation focuses on the use of single clitic pronouns, as in *L-am citit* 'it.CL-have.1 read?'/ 'I read it'.

**Objective.** Considering that the parametric setting for clitic pronouns (vs. lack of clitic pronouns) is well set in dominant Romanian (DR), the aim of the paper is to establish if the same parameter is also well set in HR.

**Background.** The literature provides the following information: (i) simultaneous heritage speakers are more likely to exhibit language loss or attrition than older bilingual children who had a longer period of monolingualism in their heritage language (Montrul 2008; Flores 2010; Montrul and Bateman, 2020). (ii) The domain of pronominal object clitics is vulnerable to reduced language input and use (Pirvulescu et al. 2014). (iii) In DR the clitic pronouns are acquired very early (by age 3) and with few divergent forms (e.g. Avram et al. 2015).

**Questions.** (i) Is the acquisition of clitics different in HR and DR? (ii) What are the types of divergent forms (morphological or/and syntactic)? (iii) How is the use and interpretation of clitics related to the variables Working Memory and Use of HR?

**Methodology.** Since the heritage speakers' language proficiency and accuracy depend on task modality (e.g. Pérez-Cortés et al. 2019), both comprehension and production were measured: results were compared between a Clitic Elicitations Task and a Comprehension Task (picture choice). The tasks focused on syntax (i.e., whether clitics were or were not produced, and their correct location when produced) and on morphology (i.e., their inflection). In the Comprehension Task, clitic pronouns were compared with strong pronouns for reasons pertaining to their syntactic representation and their development in acquisition. We used a Working Memory Test and a questionnaire provided information on the amount of input and use.

**Results.** Tables 1 and 2 compare results from HR and DR children and show that HR speakers perform extremely well, but less so than DR speakers: the latter group performs at or near ceiling, while the former show, comparatively, lower clitic production, with clitic omission and non-target gender being the main divergence. The HR group displays divergent forms in production as well as in comprehension; the difference in means between the two tasks is not statistically significant ( $t_{(15)} = 1.26$ ,  $p = .227$ ). However, when looking at individual results, we see that more children have a higher percentage of divergent forms in the production than in the comprehension of clitics. Individual performance is also highly variable: some responses are entirely target (3 children), with the rest of the answers presenting different amounts of divergent forms. One child was not able to produce any target clitic, and his correct comprehension was around 50%. The (correct) production and comprehension of direct object clitics is characterized by a certain degree of optionality: while some children omit and/or produce divergent forms in at least one of the tasks, all the children are able to produce and comprehend at least around 50% of the clitics (with the exception mentioned above, in production). The variable Use of Romanian at home significantly predicts (correct) clitic production ( $F_{(2,13)} = 3.79$ ,  $R^2 = .369$ ,  $p = .017$ ). Both variables Working Memory and Use of Romanian at home significantly predict correct clitic comprehension ( $F_{(2,13)} = 10.13$ ,  $R^2 = .609$ ,  $p < .05$ ). For the HR group there is a significant

difference, in the comprehension task, between the correct clitic vs strong pronouns responses, children being much more accurate with strong pronouns than with clitics ( $t_{(15)} = -4.563$ ,  $p < .001$ ).

**Analysis.** The results provide two indications for syntax: (i) Clitics (when produced) are correctly located in the preverbal field, with no exception. (ii) However, clitics are unsystematically omitted. Although the HR group differs from the DR group of comparable age, the results are comparable with those obtained from previous studies on the L1 acquisition of Romanian object clitics: some omissions and some non-target gender forms (cf. Avram et al. 2015, 12.88% omission rate and 12% gender agreement errors for 3 year-old children). For morphology, the results show inflectional errors for gender, while number and person options are correct. Hence, the syntax of clitic pronouns is completely acquired but divergent forms arise and they seem to be placed at the Spell Out. There is no evidence for transfer from English, the dominant language.

**Conclusions.** These results confirm previous ones on effects of reduced input in heritage language acquisition and maintenance (e.g. Rinke and Flores 2014; Unsworth, 2013). Moreover, following Pérez-Cortés et al. 2019, the results are interpreted as resulting from difficulties in accessing and retrieving functional features in the less dominant source grammar.

Table 1. Clitic production task, overall results.

	<b>CL responses</b>	<b>Null responses</b>	<b>DP responses</b>	<b>Pron responses</b>
<b>Heritage children</b> (128 responses)	70.31%	15.60%	11.70%	2.30%
<b>Romanian dominant children</b> (40 responses)	95%	0.025%	0.025%	N/A

Table 2. Correct responses in the Clitic production task.

	<b>Total CL responses</b>	<b>Total correct</b>
<b>Heritage children</b>	90	73.10%
<b>Romanian dominant children</b>	38	100%

Table3. Clitic comprehension task

	<b>Total</b>	<b>Total Correct</b>	<b>Correct %</b>
<b>Heritage children</b>			
Clitics	192	157	81.7%
Pronouns	192	187	97.3%
<b>Romanian dominant children</b>			
Clitics	60	60	100%
Pronouns	60	60	100%

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## Impacts of structure, usage, and phonetics on Italian mid vowels

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Advancements in laboratory phonology have highlighted numerous ways that language-specific patterning extends beyond the symbolic or categorical level into the gradient domain of the acoustic speech signal, leading linguists to reevaluate the scope of the phonological grammar. Findings of gradience have altered even the core concept of phonological contrast, which was traditionally regarded as a binary distinction but now covers a continuum of contrast types.

This presentation explores contrasts among the Italian mid vowels, from a multifaceted perspective considering linguistic structure, usage, and acoustic phonetics. Under a traditional structuralist account, the Italian front mid vowels /e ε/ are separate phonemes, as are the back mid vowels /o o/. However, these height-based contrasts are demonstrably *marginal* due to the paucity of minimal pairs and the variability of the contrasts' phonetic realization, which includes inconsistency of speakers' intuitions compared to their productions (Renwick & Ladd 2016). While native speakers clearly maintain intuitions of higher and lower mid vowels (and can produce both), the factors triggering variability in phonolexical mapping require further exploration.

A phonetic analysis was conducted using data from CLIPS (Leoni et al. 2007), which includes 16 speakers from each of 15 Italian cities. The "read sentences" portion of the corpus was force-aligned using MAUS (Kisler et al. 2016) and hand-corrected, and formant values (F1, F2) were extracted at vowels' midpoint, leaving 66,100 mid-vowel tokens for analysis. Each token was acoustically classified as "high mid" or "low mid" based on normalized F1, F2 data in a kmeans clustering analysis, providing a way compare the standard transcription and acoustics. Since /e ε/ are rendered orthographically as <e> while /o o/ are identical as <o>, phonetic transcriptions were gathered from lexical items in the PhonItalia dataset (Goslin, Galluzzi & Romani 2014). This permitted calculation of functional loads and neighborhood densities using PCT (Hall, Mackie & Lo 2019). Lexical frequency data were acquired from SUBTLEX-IT (Crepaldi et al. 2015).

Functional load results show that the front vowel pair /e ε/ has the weakest lexical contrast among all Italian vowels, a typical sign of a marginal contrast, while /o o/ are separated by considerably more minimal pairs. Acoustic results indicate that while some lexical items are consistently realized with high-mid or low mid vowels, most words are highly variable. Vowel height is negatively correlated with lexical frequency, matching expectations of effort minimization. For both front and back vowels, duration and F1 are also correlated: lower vowels generally appear at longer durations, in line with expectations of intrinsic phonetic length. However, the behavior of front and back mid vowels diverges. Among stressed front vowels, height can vary by syllable structure, which is context-dependent in some Italian varieties (with a "conditioned contrast") but not others (with a "full contrast" or mid-vowel merger). The height of back vowels is negatively correlated to lexical competition metrics of neighborhood density and minimal pair count.

Overall, these corpus-based findings indicate that the marginality of Italian mid vowel contrasts is of *different magnitude* and has different sources across front and back mid vowels. Front vowels have low functional load and are more context-dependent, while back vowels are more affected by usage. The results are interpreted in two ways, first in the context of the systemic, usage-based, and phonetic factors identified by the Multidimensional Model of Phonemic Robustness (Renwick 2014). Second, an OT formalization is proposed, by expanding the scope of effort minimization among stressed vowels in a Dispersion Theory account (Flemming 2004); in this analysis, functional factors compete against perceptual distinctiveness to trigger variable vowel height.



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This talk analyses indefiniteness in a variety of French spoken in Delisle, Mississippi, the MGCF = *Mississippi Gulf Coast French* (see Moreton 2001). This language was spoken by a colonial survival of Canadian and French settlers arrived after 1700, half century before Acadians settled in Louisiana.

The francophone enclave with the dominant English-speaking culture survived into the twentieth century. The aim of our talk is to discuss the indefiniteness (Mass/Count distinction) and the plural marking used in this underrepresented variety of French spoken in Mississippi.

Our data come from Moreton (2001) and from Moreton's sound archive database (which has been unreleased until now). In addition, field-data have been gathered by one of the two authors, who is a native speaker of the MGCF language.

We analyze the status of the indefinite plurality in cognition and in grammar at Phonology/Syntax interface (Feigenson, Dehaene, and Spelke 2004), looking at the role of indefinite determiners, included the so-called 'partitive' article, combined with count, mass, indefinite nouns. We focus on the status and condition of consonantal *liaison* [-z] agglutinated to N in indefinite Pl ('des' [de zwazo] 'some birds'), but also in the singular ([ẽ zwazo] 'a bird'), willing to establish the phonological and morphological structure of nominals.

We argue that MGCF has a grammaticalized system of articles with a striking indefinite / Mass vs. Count system involving phono-morphological properties. This system is noninflectional, but still operative, with fake-Count coerced into indefinite denotation within DPs.

We assume a DP layered structure for partitive/indefinite constructions, in which *de* is a functional head in the SpecDP structure [DP *de* [D 0]]. It seems that the consonantal liaison [z] does not contribute anymore to the morphosyntactic indefiniteness inside the MGCF DPs (see SG N [ẽ zwazo] 'a bird'), even if this is a reminiscent lexical object that referred to the phonological and morphological shape of the indefinite. However, this initial [z] still contributes to the singular count identity of Ns as opposed to Mass identity in V\_ initial Ns, thus Count and Mass nouns are still distinguished on phono-morphological grounds.

Unlike French *du/des* (e.g. [dy sɛl] 'du sel/some salt', [de pɔm] 'des pommes/some apples'), in Mississippi language we find *de* as a marker of indefiniteness in the plural (masculine and feminine), an articleless preposition in the form of a bare 'de'.

In MGCF the indefinite plural determiner *de* 'some', in the meaning of 'more than one N', is also combined with count nouns (see Moreton 2001: 101), see (1):

- |     |  |   |
|-----|--|---|
| (1) | <i>de</i> 'some' + N                                   | [DP <i>de</i> [D 0]]                                    |
|     | <u>de</u> kɔ̃fɔ  | 'some pigs'   |
|     | œs a kutym fer <u>de</u> furno                         | 'they used to build <u>some</u> kilns'                  |
|     | œs a kutym fer <u>de</u> furno                         |   |
|     | Pr3SG Aux3SG NSG Inf Part NSG → MassSG (from count SG) |   |
|     | i apre fte <u>de</u> kaju o fa                         | 'he's throwing <u>some</u> rocks at the cat'            |
|     |  | 'il est en train de lancer des petits cailloux au chat' |

With prenominal adjectives, 'de' is bare as in French (2):

de bon patat dus 'good sweet potatoes/de bonnes patates douces'

A hypothetical plural [z] is sometimes agglutinated at the onset, suggesting an incorrect segmentation of *de* + Art (Indef Pl 'des'), see [de zwazo] in (3):

- |     |  |                                   |
|-----|--|-----------------------------------|
| (3) | Lexicalized Liaison before #V_           |                                   |
|     | <u>de</u> fwa oes tir <u>de</u> zwazo    | 'sometimes they shoot some birds' |
|     |  | 'des fois ils tirent des oiseaux' |
|     | <u>de</u> fwa oes tir <u>de</u> zwazo    |                                   |
|     | des foisAdv Pr3SG Pres3SG INDEF N (PL ∅) |                                   |

However, this initial agglutinated consonant [z] in [zwazo] is not anymore an Indef plural marker, since it does not come straightforward from *de* + Def(Art), as in French [des wazo] some birds, rather [z] is lexicalized on N independent on the D° plurality, as we can see from the singular form [ẽ zwazo], see (4), where [z] in onset position is a result of an early stage of a consonantal *liaison* before a vocalic onset:

- |     |   |                              |
|-----|---|------------------------------|
| (4) | Lexicalized Liaison in singular N and in plural N |                              |
|     | ẽ zwazo a <u>de</u> , <u>de</u> zel               | 'a bird has, uh, some wings' |
|     | a bird some wings                                 |                              |

in (4) [zwazo] is singular. [ɛ zwazo] – French [ɛn ɔ wazo] a bird. This also happens with wings, ailes [ɛl] in French ‘des ailes’ [dez ɛl] and in MGCF [de zel].

The plural indefinite determiner phonological configuration originally contains an indefinite floating object [z] C<sub>2</sub> V<sub>2</sub>:

C <sub>1</sub> V <sub>1</sub> C <sub>2</sub> V <sub>2</sub>	Unfixed [z]
d	z

UR Indefinite CV-Delition before Vocalic Onset

C <sub>1</sub>	V <sub>1</sub>	C <sub>2</sub> —V <sub>2</sub>	+	C <sub>3</sub>	V <sub>3</sub>	C <sub>4</sub>	V <sub>4</sub>
d	e			z	[wa]	z	o

Still in V\_ initial Ns, the lexicalized onset C<sub>3</sub> = [z] is the indefinite spell-out of the MGCF DP in plurals and the spell-out of a countability feature as opposed to Mass in the singular ([d lo] ‘some water’). This implies that there is not a strict modularity between the syntax and the phonological component.

Furthermore, not every count N is marked by an inflectional plural: de kofo ‘some hogs’, de kabri ‘some goats’, de vaf ‘some cows’, de muto ‘some sheep’....

Therefore, in MGCF, nominal plurality is not enough to distinguish count vs. indefinite or mass DPs, since MGCF has poor number inflection. It sometimes borrows plural markers from English: [me ptiz] ‘mes petits/mes grandchildren’. Indefiniteness looks independent on number inflectional marking.

The same indefinite pluralization applies to nominal borrowed from English: [de kho:] ‘some cows’.

The Mass determiner is ‘d’ followed by a set of vowels {œ, y, i, e}: [dy ri] ‘some rice’, [di syk] ‘some sugar’, [de bœr] ‘du beurre/some butter’, [dy kaj] ‘du cottage cheese’ etc.

As in a Count singular [ɛ zwazo] with incorporated [z], we assume in [d lo] ‘some water’ two levels of partitivity [DP *de* [D l]] (in a layered DP), along with a bare D [DP *de* [D 0]] ([de bœr]).

The affixal consonant opposition in the singular onset position [z/l] still distinguishes the count singular ([zwazo] ‘a bird’) from a Mass N ([lo] ‘water’). These originally floating [z] and the lexical Mass [l] previously located higher in the layered DPs become segments inherently specified as Ns and maintain a phonomorphological Mass/Count exponent to be considered in the decompositional analysis of indefiniteness. This suggests that in MGCF Ns are unspecified at the beginning for number marking and must refer to different functional heads in DPs (violating modularity between syntax and phonology) in order to implement the Mass/Count distinction. The lexicalized *liaison* behaves as quantity markers word-initial and indicates that a features relevant for the Mass/Count distinction are also built in the lexicon.

The indefinite bare *de* reminds us of some regional Gallo-Romance languages articleless *de*, that occurs for instance in Franco-Provençal and in some varieties of Occitan. Therefore, we will also illustrate phonological, morphological and lexical cues, to consider if this minoritized language in Mississippi, originated from Canadian and French settlers shortly after 1700, can be brought back to some regional Gallo-Romance languages other than only French. MGCF fixed a language that would have then been preserved, being transferred from France to the United States in the 17<sup>th</sup> century.

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## Influential inflection. Testing the role of overt morphology in the distribution of Italian colour adjectives

This study investigates the distribution of adjectives that do not inflect in Italian and shows that, irrespective of their interpretation, these are confined to the postnominal position. Supported by new quantitative evidence, we show that this pattern finds no satisfactory account in prominent analyses of Romance adjectives (Cinque, 2010; Laenzlinger, 2005). Specifically, we argue that this distribution cannot be captured by solely relating different orders to different types of movement of the noun. Rather, we take these data to suggest that different merge sites of the relevant adjectives are responsible for their distribution. We restrict our attention to colour adjectives (CAs), which represent an ideal test-bed for three reasons: i) this class has a relatively rich number of non-inflecting elements (which can be argued to still be adjectives based on standard diagnostics, Cabredo Hofherr and Matushansky, 2010), ii) CAs all encode the same type of information, allowing us to exclude the role of lexical-semantics in regulating the ordering restrictions in question, and iii) they are a priori compatible with both a prenominal and a postnominal position, despite the former having a stylistically marked status. The relevant contrasts (first noticed by Zamparelli, 1994) are in (1-2):

- (1) Quest'opera descrive **le (grigie) facciate (grigie)** dei palazzi  
This work describes **the.FPL grey.FPL facades.FPL grey.FPL** of the buildings  
popolari.  
working-class  
"This work describes the grey facades of working-class buildings"
- (2) Poche spedizioni hanno esplorato **(gl)i (\*blu) abissi (blu)** dell'  
Few expeditions have.3PL explored **the.MPL blu.∅ abyss.MPL blu.∅** of the  
Oceano Pacifico.  
Ocean Pacific  
"Few expeditions explored the blue abysses of the Pacific Ocean"

In both sentences, the adjective gets an individual-level reading. As (1) shows, this reading is available for direct-modification adjectives in both prenominal and postnominal position (cf. Cinque, 2010). The crucial point is that the non-inflecting adjective *blu* 'blue' in (2) receives the same interpretation, but cannot appear before the noun. From a descriptive perspective, our claim is that the ability to inflect and show Concord with the head noun by itself determines whether an adjective can appear prenominal.

To corroborate the observation, we collected experimental data through an acceptability-judgement task with Italian L1 speakers. Given a suitable pragmatic and semantic context, we predicted inflecting adjectives like *rosso* 'red' to be possible in both pre- and postnominal position. On the other hand, we expected non-inflecting CAs like *blu* 'blue' to receive low acceptability scores in prenominal position, with the postnominal position being virtually the only option. As Figure 1 shows (next page), our expectations were borne out.

The four bars in the plot represent the mean acceptability scores on a 5-point Likert scale in the four conditions we tested. From left to right, these involve 1) postnominal inflecting CA (*facciate grigie* 'grey facades'), 2) postnominal non-inflecting CA (*abissi blu* 'blue abysses'), 3)

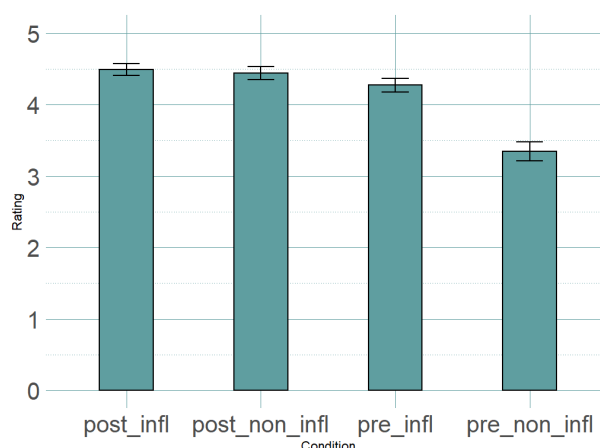


Figure 1: mean ratings on 5-point Likert scale across conditions

prenominal inflecting CA (*grigie facciate* ‘grey facades’), and 4) prenominal non-inflecting CA (*blu abissi*). As is clear from the graph, there is no difference in acceptability between inflecting and non-inflecting adjectives in postnominal position. On the other hand, the expected contrast emerges in prenominal position. Inflecting adjectives have the same mean score as in the first two conditions, while non-inflecting adjectives occurring in front of the noun (rightmost bar) are degraded. Crucially, the pragmatic context is the same in all cases, and the adjectives tested belong to the same lexical-semantic class. As such, the source of the observed difference cannot be semantic. Rather, the only systematic difference is whether or not the adjective can inflect.

These results thus support the broader claim that adjectives that don’t show Concord in Italian cannot appear before the noun. In the discussion, we argue that these results cannot be reduced to apparently similar phenomena like so-called ‘Lazy Concord’ (Nevins, 2011; Rasom, 2008; Savoia et al., 2018), and thus shed new light on the internal morphosyntactic complexity of the DP. More in general, our data represent a new contribution to the literature on the syntax of adjectives by bringing into the picture the role of morphosyntactic constraints, which is arguably still poorly understood in current approaches.

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## Insights into the Acquisition of Simple and Complex Disjunction Markers in Romanian

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**Introduction:** The current paper investigates experimentally the interpretation of the morphologically simplex disjunction *sau* ‘or’ and the complex disjunctions *sau...sau* and *fie...fie* ‘either...or’ in child and adult Romanian (*Găina a împins trenul sau barca* ‘The hen pushed the train or the boat’), a language where the acquisition of disjunction has not been previously studied. Importantly, Romanian includes multiple complex disjunctions: a complex disjunction which consists of a reduplication of the simple counterpart (*sau...sau* vs. *sau*, similar to *ka...ka* vs. *ka* in Japanese), and a complex disjunction, *fie...fie*, which lacks a simple counterpart (similar to *soit...soit* vs. *ou* in French). This makes Romanian an interesting test case for comparing multiple complex disjunctions within the same language, a comparison not targeted by previous studies which focused on simple vs. complex disjunction.<sup>[1,2]</sup> Across a variety of languages, it has been found that adults tend to interpret simple and complex disjunctions exclusively in most contexts (*The hen pushed only one, not both*), while children interpret both inclusively (*The hen pushed one and possibly both*) or conjunctively (*The hen pushed both*), rather than exclusively.<sup>[3-7]</sup> Our study explores whether such findings carry over to multiple types of disjunctions in Romanian.

**Disjunction in Romanian:** Our choice of disjunction markers was informed by a corpus study conducted on Romanian Web 2016. We opted to test *sau* ‘or’ and *sau...sau*, on grounds of frequency, and *fie...fie* given its lack of a simple counterpart. Romanian also employs two distinct prosodic patterns for *sau*: (i) a neutral prosody with no prosodic boundary after the first disjunct, and (ii) a marked prosody, where both disjuncts are stressed (as in complex disjunctions). Given that prosody may lead to interpretive differences,<sup>[8-11]</sup> we tested both marked *sau* and neutral *sau*.

**Current experiment:** Based on the results in [1], we tested the following null hypotheses: (1) [H0-1] Morphological complexity has no effect on children’s interpretation of disjunction in Romanian, thus we expect no difference between simple and complex disjunctions; and (2) [H0-2] Prosodic complexity has no effect on children’s interpretation of disjunction, thus we expect no difference between neutral *sau* and marked *sau*. We tested 52 Romanian-speaking children aged 4 to 6 years ( $M=5;4$ ), and a control group of 115 adults in a between-subjects design targeting neutral *sau*, marked *sau*, *sau...sau*, and *fie...fie*. Following [1], we used a modified Truth Value Judgment Task presented in Prediction Mode rather than Description Mode<sup>[12]</sup> in order to license *ignorance inferences*, which often characterize disjunctive statements. Participants were introduced to a puppet, whose statements were pre-recorded (Fig.1). For each story, Bibi made a guess about what would happen. Participants then saw the outcome and had to say whether Bibi had guessed well.

Fig. 1. Example of an experimental item with neutral *sau* for the 2DT condition

SCENE 1: There once was a hen who loved to play with her toys, and she especially loved to push them around! One day her papa gave her two new toys: a train and a boat! The hen was very happy to play with them. Let’s see if Bibi can guess what happened next!

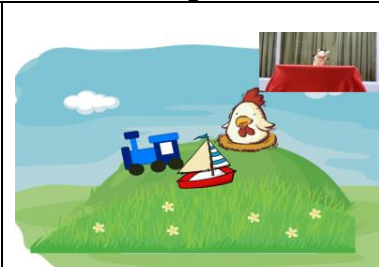
SCENE 2: EXPERIMENTER: Bibi, tell us, what happened next?

BIBI: *Găina a împins trenul sau barca.*

‘The hen pushed the train or the boat.’

EXPERIMENTER: Let’s see if Bibi’s right!

SCENE 3: (following animation of hen pushing both the train and the boat down the hill) Look, the hen pushed this and this! Did Bibi guess well?



Each participant saw a total of 15 sentences: 2 practice trials and 13 experimental items (8 targets, 2 controls, 3 fillers). Disjunctive test sentences (*The hen pushed the train or the boat*) were presented in 1-disjunct-true (1DT) contexts (x4) where only one disjunct was true (the hen pushed only the train), and 2-disjunct-true (2DT) contexts (x4) where both disjuncts were true (*The hen pushed both objects*). Participants also received controls where neither disjunct was true.

**Results (N= 47 children, 115 adults):** Romanian adults generally interpreted both simple and complex disjunctions exclusively, accepting disjunctive statements in 1DT scenarios and rejecting them in 2DT scenarios (Fig. 2). In contrast, children tended to accept disjunctive statements in both 1DT and 2DT scenarios; for *fie...fie* however, they mostly rejected the disjunctive statements in 1DT scenarios, while accepting them in the 2DT scenarios (Fig. 3). We conducted a **group analysis**, comparing children and adults through a generalized mixed effects model with Group

Fig.2. Yes responses given by adults

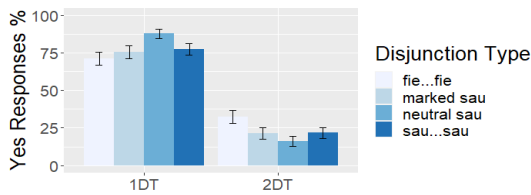
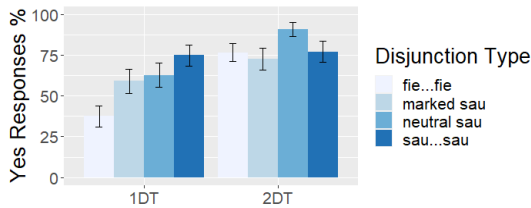


Fig.3. Yes responses given by children



**Discussion:** As predicted by H0-2, we found no difference between neutral and marked *sau*: both were interpreted inclusively. However, H0-1 was disconfirmed. While we expected no difference between *sau* and the complex disjunctions, children interpreted *fie...fie* conjunctively, unlike the other disjunctions. Our results differ from

previous studies which found no difference between simple and complex disjunctions.<sup>[1,2]</sup> Romanian children's overall preference for inclusive interpretations of disjunction can be explained through their interpreting *sau...sau* logically, as 'or, possibly and' and their difficulty with deriving implicatures:<sup>[13,14]</sup> they fail to strengthen the disjunction via negation of the conjunctive alternative *The hen pushed the train and the boat*. Regarding *fie...fie*, we explore several possible explanations. A first possibility is that children never strengthen the meaning of disjunction, and interpret *fie...fie* semantically as a coordination, either by default (see [15]), or in virtue of the syncretism with the present subjunctive form of the verb *a fi* 'to be' (i.e. *să fie*); this would be in line with a one-to-one mapping between form and meaning<sup>[16]</sup>, with children taking the sequence *fie A, fie B* to be the coordination of two subjunctives. The contrast between *sau...sau* and *fie...fie* could then be explained by assuming children draw on the high frequency of simplex *sau* in the input to associate it with inclusivity, subsequently overgeneralizing to *sau...sau*. Another possibility is that children do strengthen the meaning of disjunction, but unlike adults, who consider {A, B, A&B} as alternatives, they consider different alternatives for *sau* and *sau...sau* on the one hand ({A, B}), and *fie...fie* on the other ({only A, only B}) (see [12]). Finally, our results

(Adults/Children) and Scenario (1DT/2DT) as fixed effects and Participant as a random effect. Group, Scenario and their interaction were significant: children gave *Yes* responses in the 2DT scenario more often than adults. Moreover, ANOVA analyses revealed significant effects of Disjunction type in both scenarios. In the 1DT scenario, the *fie...fie* condition showed the most notable contrast between children and adults. These findings were confirmed by an individual analysis of the number of *inclusive*, *conjunctive* and *exclusive participants* (see Table 1): children were mostly conjunctive on *fie...fie*, but inclusive on all other disjunctions.

Table 1: Participants by Interpretation Type

Types	neutral sau	marked sau	sau...sau	fie...fie	Total
<b>ADULTS</b>					
Inclusive	7	3	6	4	20
Exclusive	14	20	23	21	78
Conjunctive	4	1	0	4	9
Mixed	2	3	2	1	8
<b>CHILDREN</b>					
Inclusive	6	5	5	2	18
Exclusive	0	0	1	2	3
Conjunctive	2	3	2	9	16
Mixed	3	3	2	2	10

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cast doubt on proposals that conjunctive readings of disjunction are an experimental artefact,<sup>[17,18]</sup> given the different patterns we observed for the two complex disjunctions despite using the same experimental set-up for both. Our study contributes to a more fine-grained picture of disjunction, motivating further research into various disjunction types within and across languages.

**References:** [1] Tieu et al. 2017. [2] Sauerland & Yatsushiro 2018. [3] Braine & Romain 1981. [4] Chierchia et al. 2001. [5] Gualmini et al. 2001. [6] Paris 1973. [7] Singh et al. 2016. [8] Armstrong 2014,2020. [9] Gotzner et al. 2013, 2016. [10] Meertens 2019. [11] Pruitt & Roelofsen 2013. [12] Singh et al. 2016. [13] Noveck 2001. [14] Papafragou & Musolino 2003. [15] Roeper 2011. [16] Slobin 1973. [17] Skordos et al. 2020. [18] Huang & Crain 2020.



## Integrating phonological and non-phonological factors for a comprehensive model of liaison realization

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Liaison is a sandhi phenomenon in French by which a latent consonant at the end of one word (W1) is realized at the beginning of the next word if the second word (W2) begins with a vowel. Delattre (1966) proposes a typology consisting of three different liaisons: blocked liaison as in (1); obligatory liaison as in (2); and variable liaison as in (3).

(1) <i>l'enfant arrive</i>	/lã.fã a.ʁiv/ → [lã.fã.a.ʁiv]	'the child arrives'
(2) <i>nous allons</i>	/nu(z) al.õ/ → [nu.za.lõ]	'we go'
(3) <i>nous sommes allés</i>	/sɔm(z) a.le/ → [sɔ.ma.le] OR [sɔm.za.le]	'we went'

Many analyses of liaison up to this point are based largely on Delattre's typology with few modifications despite diachronic shifts that have happened since, as well as advancements in our methodologies and the data we can now access. In a reconsideration of liaison typology, Laks and Peuvergne (2017) find some decline in the realization of obligatory liaison, in addition to rapid shifts in the proposed categories of variable liaison, ultimately finding some permeability between the well-established categories. These findings underpin the importance of refining and shifting the established categories. Delattre's typology relies solely on the grammatical categories of W1 and W2; however, more recent work has shown that liaison is affected by other morphosyntactic factors, such as phrase structure (Selkirk 1980; Laks 2005); lexical factors (some expressions always elicit liaison *de temps\_en temps*); sociolinguistic factors including speaker age, sex, level of education, socioeconomic status, and linguistic register (cf. Durand and Lyche 2008 for a more detailed overview of these factors).

In this paper, we propose a revised model of liaison that integrates both phonological and non-phonological factors. Our model not only allows for a more holistic picture of liaison realization but also some degree of porosity between the preestablished categories. Building upon this new model of liaison, we propose an analysis of its realization formalized within the lens of maximum entropy (MaxEnt) grammar (Goldwater and Johnson 2003) to exploit the flexibility and permeability of new approach. MaxEnt is a constraint-based theory of grammar similar to Optimality Theory (OT); however, unlike OT which ranks its constraints in hierarchies of strict domination in which  $C_1$  dominates  $C_2$  which in turn dominates  $C_3$ , MaxEnt allows for a gradient constraint ranking, by which constraints are assigned a numerical weight via an online error-driven machine learning algorithm. It has been suggested that the gradience afforded by theories of weighted constraints allows for the grammar to capture phonologically variable structures – an area of great difficulty for many other formal analyses. Moreover, recent advancements in theories of weighted constraints also allow for the incorporation of extraphonological factors (such as syntactic and sociolinguistic factors) into the grammar as a means of scaling the weight of faithfulness constraints along the lines of the respective variables (Coetzee 2016). We believe that such a framework that can quantitatively account for liaison realization while also accounting for pertinent extraphonological factors may shed some necessary light on our understanding of this complex phenomenon and the need for a new typology.

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Data for this study come from the *Projet phonologie du français contemporain* corpus (PFC; Durand, Laks, and Lyche 2002). A total of eight survey points were selected: four each from Northern France and Southern France. Data were first subject to descriptive statistics before being fit to a series of generalized linear mixed-effects regression models in R which sought to predict liaison realization from combinations of the linguistic and sociolinguistic factors available in the PFC. The purpose of the regression model was to select the appropriate scaling factors to be incorporated into the constraint-based grammar.

The results of this model were then used to inform the formal analysis. We begin with the Optimality-Theoretic grammar of liaison realization proposed by Eychenne (2011) as a point of departure. Eychenne's analysis appeals to markedness constraints on syllable well-formedness (specifically ONSET and NoCODA), alignment constraints, and faithfulness constraints (MAX) that militate against consonant deletion. Coetzee (2016) argues that in the case of phonological variation, nonphonological factors influence speakers' tendencies towards faithfulness: the phonological grammar defines what patterns are possible, while the scaling factors determine how a structure varies within the limits established by the grammar. For this analysis, since older speakers tend to realize more liaisons, a positive scaling factor for speaker age is exerted on the series of MAX constraints to maximize their role in the grammar. We also find that the MAX constraints are weighted more heavily in the north than in the south. The syntactic categories of W1-W2 and the lexical frequency of W1 were also taken into consideration.

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**Goal:** The current study is inspired by Frascarelli & Hinterhölzl (2007), who examine the interface between intonation, syntactic structure, and information structure. For Castro (2003: 43), “nothing is more noticeable than the special intonation” of Spanish in Galicia, and for Ramallo (2007: 25), “pitch accent...sets a Spanish speaker in Galicia apart”. We examine this characteristic intonation in greater detail, with a focus on controlling for information structure as well as syntactic structure. We adopt the Melodic Analysis of Speech (MAS) protocol (Cantero, 2002; Cantero & Font-Rotchés, 2009) in order to facilitate comparisons between males and females and motivate classifications of pitch accent types of the type described in (Pierrehumbert, 1980 *et sequens*). We seek to 1) describe intonation contours for Galician Spanish, and 2) determine whether Spanish-dominant Galicians exhibit similar intonation contours to Galician-dominant Galicians reported on in Gupton (2021).

**Data:** Using a Zoom H4n portable recorder and a Countryman EMW Lavalier microphone, we recorded 21 Spanish-dominant speakers of Galician Spanish (11 female) reading stimuli representing six contextualized information structure contexts:thetic sentences (1), subject narrow focus (2), object narrow focus (3), *in situ* object corrective focus (4), *ex situ* object corrective focus (5), and subject corrective focus (6). Participants read a total of 14 sentences each, netting 294 sentences. Segmentation and pitch ( $F_0$ ) listings were extracted using Praat (Boersma & Weenink, 2015). Here we report on data from 126 sentences.

**Findings:** We follow the claim in Mateo Ruiz (2013) that intonation rises or falls of less than 10% are imperceptible to Spanish speakers. The following results are summarized in Table 1. In our data, 16 participants produced thetic sentences with a pre-tonic fall on the verb and a tonic fall on the object, but with no clear contour pattern for subjects. Subject narrow focus is characterized by a tonic fall for 13 participants, with a pre-tonic rise for 11. Object narrow focus is characterized by a tonic fall for 16 participants and 11 have an accompanying pre-tonic rise. *In situ* object corrective focus is characterized by a general falling contour, with 14 producing a pre-tonic fall and 14 producing a post-tonic fall. For, *ex situ* object corrective focus, 14 participants produced a tonic rise and peak followed by a post-tonic fall in 10 participants. For 12 participants, subject corrective focus was produced with a tonic peak followed by a post-tonic fall.

In summary, results for Spanish-dominant speakers of Galician Spanish are predominantly very similar to Galician results produced by Galician-dominant speakers reported on in Gupton (2021). Additionally, they do not appear to exhibit the level of variation described in previous studies (Sosa, 1999; Face, 2000; Face & D’Imperio, 2005). Differences are present in thetic, “out of the blue” sentences and in object corrective focus sentences. Galician-dominant speakers have a post-tonic intonation rise on subject constituents, while Spanish-dominant speakers have a pre-tonic fall on the verb. Given that this verbal contour was also found in four Galician-dominant speakers in Gupton (2021), we cannot definitively conclude any sort of directionality with respect to cross-linguistic influence or interference, though it is suggestive that this pattern may have its root in Spanish. In *in situ* object corrective focus sentences, Spanish-dominant speakers produced pre-tonic and/or post-tonic falls. Although similar sentences in Galician were produced with tonic (7/11) and/or post-tonic falls (9/11), pre-tonic falls were produced by only 2/11 speakers.

**Conclusions:** The Spanish of Galicia is characterized by intonation contours that are very similar to those found in Galician. While any conclusions regarding directionality of cross-linguistic influence are tenuous at best, we find the similarity evidenced here as further evidence of the covert prestige of Galician, in line with e.g. Loureiro-Rodríguez (2008).

## Examples

- (1) Context: What happened?  
*Lola barrió el lodo.* ‘Lola swept (up) the mud.’
- (2) Context: Who swept (up) the mud?  
*Lo barrió Lola.* ‘Lola swept it.’
- (3) Context: What did Lola sweep?  
*(Lola) Barrió el lodo.* ‘She swept the mud.’
- (4) Context: Lola swept the glass?  
*Barrió EL LODO (no el vidrio).* ‘She swept the MUD (not the glass).’
- (5) Context: Lola swept the glass?  
*EL LODO barrió (Lola).* ‘The MUD she swept (not the glass).’
- (6) Context: Elena swept (up) the mud?  
*LOLA barrió el lodo (no Elena).* ‘LOLA swept the mud (not Elena).’

Table 1. Intonation contours by information structure context

Information structure	Prosodic contour in Spanish of Galicia	Prosodic contour in Galician (Gupton 2021)
All-focus/thetic	subject: N/A, variable object: H+L*	subject: L*+H object: H*+L
Subject narrow-focus	H+L*	H+L*
Object narrow focus	H+L*	L%(?)
Object corrective contrast ( <i>in situ</i> )	H*+L (+L%)	H+L*(+L%)
Object corrective contrast ( <i>ex situ</i> )	(L+)H*+L	H*+L
Subject corrective contrast	H*+L	H*+L

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## ITALIAN VERBS WITH TWO AUXILIARIES: A FORCED-CHOICE EXPERIMENT

Written and spoken contemporary Italian features about one-hundred intransitive verbs that can take either auxiliary (AUX) *avere* ‘have’ (A) or *essere* ‘be’ (E) in compound past tenses (e.g. *passato prossimo*). The examples below feature the same verb accompanied by AUX *avere* (1) and *essere* (2) (AUX bolded):

- (1) *Giovanni **ha** inciampato*  
Giovanni have.AUX.3S stumbled  
‘Giovanni stumbled’
- (2) *Giovanni **è** inciampato*  
Giovanni be.AUX.3S stumbled  
‘Giovanni stumbled’

According to Relational Grammar (Perlmutter 1989; Rosen 1987), AUX in Double Auxiliary Verbs (DAV) depends on the nature (subject vs. object) of the syntactic relation holding between the verb and its only argument in deep and surface representations (‘strata’, in Perlmutter’s terms). According to the Event Structure account, the choice depends on whether and how Spec, Head and Complement positions at Event Phrase level are filled, which is where speaker measures the event, that is, they compute whether the event is telic or atelic (Alexiadou et al 2004; Borer 2004, van Hout 2004). The lexical semantics approach claims that AUX in DAV depends solely on the lexical properties of the verb, namely, the telic vs. atelic contrast and the degree of agenthood of the grammatical subject expressed in a hierarchy of decreasing values from ‘actor’ (highest agentivity) to ‘undergoer’ (least agentivity) (Van Valin 1990). The Auxiliary Selection Hierarchy (ASH, Sorace 2004; 2015) account proposes instead that strongly (or ‘core’) unaccusative or unergative verbs lay at the opposite extremes of a gradient or ‘hierarchy’, while verbs that are less unaccusative or unergative (dubbed as ‘peripheral’) lay in the middle of the gradient, where more factors mix and interplay. The probability of occurrence of either A or E in DAV as peripheral verbs is established compositionally and depends on the interplay between telicity and agentivity, as well as kind of verb completion (i.e., adjuncts). Finally, the frequency at which DAV feature A or E in the input may determine native speakers’ choices between AUX in real time processing, by interacting, competing, and even overriding syntax and semantics. These key-factors motivated four research questions: RQ1: Did the presence of a  $\pm$ telic completion influence participants’ choices of AUX in the case of stimuli featuring change of state and stative DAV? RQ2: Did the presence of a  $\pm$ animate subject influence participants’ choices in the case of stimuli featuring non-motional process DAV? RQ3: Did the frequency of AUX+PP combinations in the input influence participants’ choices? RQ4: Did the presence of transitive or pronominal counterparts of DAV influence participants’ choices among competing stimuli?

For this experiment, 32 DAV were selected from the peripheral verb list compiled by Sorace (2004) and from the verbs indicated by Jezek (2003) as taking both AUX in contemporary Italian. The 32 DAV were divided in two pools: ‘alpha’ and ‘beta’. Pool alpha contained 16 state or change of state verbs, for which  $\pm$ telicity is held to be relevant in the literature. Pool beta contained 16 verbs of non-motional processes, for which subject animacy is held to be relevant. These DAV were entered into a 2x2 factorial design with  $\pm$ telicity (alpha pool) and  $\pm$ animacy (beta pool) as the independent variables, in order to generate four experimental sentences for each DAV, like (3) and (4) below. The frequency of AUX+PastParticiple (PP) combinations in DAV was factorized by using (a) raw frequency scores of each AUX+PP combinations; (b) bidirectional association scores between either AUX and PP and (c) unidirectional backward transition probabilities (BTP) between the PP and either AUX A or E:

- (3) *L'impero romano ha/è sorto in mezzo ai nemici/in mezzo secolo*  
 ‘The Roman Empire rose in the midst of enemies/in half a century’
- (4) *L'atleta americano/l'accordo sui salari ha/è saltato per primo*  
 ‘The American athlete / the salary agreement jumped/fell through first’

Sixty-two subjects (range 19-28, mean age 23.4, SD = 1.28) took part in the experiment. All subjects were undergraduate and graduate students at different universities in Northern Italy and had been living in Northern Italy for at least five years at the time of the experiment. In this prompted forced-choice test, participants saw one pair of sentences at a time on a Powerpoint slide. Participants had to choose between sentence A and sentence B on a Google Drive online questionnaire, while the sentences were still on the screen. Sentences were presented on a PC monitor following a fixation cross. Participants had 9 seconds choose each sentence before an acoustic signal occurred and a fixation cross signaling the next pair was about to come appeared.

A binary logistic regression ((function glm, package ‘car’, software R version 4.1.0) showed that: **(A)** participants preferred one auxiliary over the other without the oscillations predicted in the literature 40% of the time, with verbs *aumentare, diminuire, funzionare, ingrassare, sopravvivere, sorgere, appartenere, durare, marcire, trionfare, continuare, migliorare*; **(B)** verb semantics impacted selectively on AUX: in presence of telic completions, the likelihood of participants choosing stimuli containing AUX E increased significantly (df 1,  $z = 3.703$ ,  $p = 0.0002$ ). In contrast, the same interaction was not found with atelic completions, whose presence did not significantly increase the probability of choosing AUX A; **(C)** frequency of verbs and association scores between the AUX and the PP in the input straightforwardly determined the remaining preferences, and especially the choice of *essere* (all  $p = \approx 0$ ); **(D)** having a pronominal counterpart (but not a transitive counterpart) was a significant factor for the choice. When selecting E, participants were probably considering whether or not the DAV had a pronominal counterpart in Italian, and they probably elaborated on the similarities between the unaccusative and pronominal configurations at some abstract level. Based on these data one may conclude that (1) among educated young adult native speakers living in Northern Italy, there is much less optionality in the choice of the auxiliary than it is assumed by some linguists; (2) AUX *essere* is significantly more permeable to both frequency effect and verb semantics than AUX *avere*.

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**Imperatives.** Imperatives (IMPs) are peculiar structures. Despite being non-finite, they are root constructions (Di Domenico 2004). They are usually assumed to raise to CP, mainly to check imperative force (Rivero 1994b, Zanuttini 1997, Platzack & Rosengren 1998, Salustri & Hyams 2003, Belletti 2009) and to account for enclisis, a core property of IMPs in Romance (Rooryck 1992, Belletti 2009). Their morphologically meagre form has been analyzed as the lack of some (Platzack & Rosengren 1998, Belletti 2009) or all (Di Domenico 2004) inflectional projections. Moreover, IMPs are among the very first verbal forms children acquire (Belletti & Guasti 2015, Salustri & Hyams 2003, 2006).

**Acquisition.** It has been empirically observed that linguistic development is not gradual, but proceeds in three clear-cut stages which follow the geometry of the cartographic tree, in a bottom-up manner (Growing Trees approach, Friedmann et al. 2021). In the first stage, children are able to produce structures involving vP and IP. The second stage comprises structures involving the first portion of the Left Periphery (LP), up until the Q/Foc head (Rizzi & Bocci 2017). In the third stage, the syntactic tree becomes fully mature with the availability of the highest portion of the LP, up until ForceP.

Salustri & Hyams (2003, 2006) notice that IMPs are analogues of Root Infinitives (RIs) in a universal developmental stage that holds cross-linguistically. Around the 2<sup>nd</sup> and 3<sup>rd</sup> year of age, children acquiring different languages robustly overproduce tenseless verbal forms: RIs in non-null-subject languages, IMPs in null-subject languages. Rizzi (1993/1994, 2006) argues that the preference children exhibit w.r.t. RIs is due to their economical nature: RIs are the result of a Truncation operation available in development, whereby higher layers of a clause are cut off to reduce the computational cost. Taken together, the maturation of the syntactic tree (Friedmann et al. 2021) and the Truncation mechanism (Rizzi 1993/1994) show that higher layers of the clause represent a source of complexity for children.

**The issue.** If one follows the traditional assumption that IMPs raise to the LP, what emerges from acquisition is unexpected. How is it possible that IMPs appear early but occupy an area of the clause which is acquired only in later stages? Additionally, how is it possible that children going through the same developmental stage, in one case overproduce a truncated, more economical form (the RI), while in the other case (IMPs) they need to project the structure up until ForceP? This work is aimed at reconciling the tension between evidence from acquisition and current assumptions on the structural analysis of the imperative.

**Corpus study.** A longitudinal corpus study was carried out to investigate whether children produce IMPs before the LP is acquired. Spontaneous production from four Italian children was obtained from the CHILDES database (MacWhinney 2000) and examined in a semi-automatic way, searching for occurrences of imperatives and syntactic structures ascribable to the three GTs stages (Friedmann et al., 2021). Results show that all four children produce imperatives before the highest part of the LP is acquired (ex. relatives, why-questions). One of them utters IMPs before the whole CP layer becomes available (before yes/no questions, wh-questions, relatives, why-questions). Since these results form a Guttman Scale (Guttman 1944; 1950; Friedmann et al. 2021), they are incompatible with IMPs raising to CP.

**Proposal.** On these grounds, I suggest that (Italian) IMPs do not raise to the LP. Rather, they are “literally reduced” structures, borrowing Cecchetto and Donati’s (2022) terminology: they

do not involve CP, nor higher IP projections. Interestingly, it was already suggested by Salustri and Hyams (2006, footnote 17) and Di Domenico (2004, footnote 31) that imperatives could remain in the low IP area of the clause, where the low Focus and low Topic heads are located (Belletti 2004). Following Belletti (2009, building on Kayne 1991), imperative morphology is checked in a low IP position (ImpP). Imperative clauses are also endowed with a Jussive head (JussP), which provides imperative subjects with 2<sup>nd</sup> person restrictions (Zanuttini et al. 2012). I argue that the imperative verb raises past the low Focus and low Topic heads (as in 1), checks its morphology in ImpP and finally lands in JussP (2). These positions cannot be located in the LP, on the basis of acquisition data. Moreover, intermediate IP projections are absent in IMPs (Belletti 2009, Di Domenico 2004): the structure is radically reduced, comprising only VP and a few positions in the low IP area (2).

- 1) Porta=la TU! (Italian)  
 bring-IMP- you-  
 2SG=it.CL.F.2SG FOCUS.2SG [Ex. from Di Domenico 2004]  
 ‘YOU bring the suitcase!’

- 2) [JussP [ImpP [TopP [FocP [VP...]]]]
- 

At present, this analysis is limited to 2<sup>nd</sup> person singular imperatives in Italian, i.e. imperatives with dedicated morphology, as they are the ones which cannot be negated and are overproduced by children.

**Discussion.** This present work highlights how a cartographic approach to acquisition may fruitfully feed into theoretical syntax, making it possible to revise older analyses and generate new research questions. Moreover, core properties of IMPs in Romance are all expected if we consider IMPs as radically reduced structures:

- ❖ IMPs cannot be embedded nor questioned: this follows from the lack of CP;
- ❖ IMPs with distinctive morphology cannot be negated: the structure is not high enough to accommodate NegP (NegP needs a TP complement, Zanuttini 1997);
- ❖ IMPs cannot host a subject clitic (c.f. Di Domenico 2004 on Veronese): such clitics occupy a higher IP position, i.e. AgrS, which is too high to be present in IMPs;
- ❖ Enclisis: Belletti’s (2009) account of Italian/Romance cliticization works with lower structures as well. IMPs check their imperative morphology in a low position, and subsequently left-adjoin to the clitic in AgrPstPrt, yielding the order Verb-Clitic. In this analysis, AgrPstPrt should be located between JussP and ImpP (c.f. 2).

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TITLE. *J'va share mon étude sur les anglicismes avec vous autres!* A sociolinguistic approach to the use of morphologically unintegrated English-origin verbs in Quebec French.

ABSTRACT.

This study explores variation in the use of English-origin verbs in Quebec French. Generally speaking, we can say that all lexical borrowings from English, including the verbs, are integrated into the French language; this has been the common practice in Quebec French. When a lexical item is borrowed from a donor language, the speaker assigns it a grammatical category (noun, verb, adjective, etc.) and proceeds to making it conform to the morphology and syntax of the receiving language (Sankoff, 2016). For instance, in the case of a verb borrowed from English, the borrowed verb is assigned inflection from French (person, tense, mood). This integration into the French language can be audible (and readable), as in (1-2) for instance, with the ending *-é* that marks the past participle in “watch” and the ending *-ais* that indicates the first person of the imperfect in “pitch”:

- (1) *J'ai **watché** un programme avant que tu viennes.*  
(2) *Ah moi je me **pitchais** partout là.*

(Poplack 2016: 392)

But in recent years, verbs borrowed from English have been used differently by French-speaking Quebecers, especially among the youth in the Montreal area: the borrowed verbs are not integrated into the French language. Instead, speakers use the bare form of the verb; the verb is inserted into the syntax but it remains morphologically unintegrated. The following two sentences (3-4), which were overheard in the speech of young Quebecers, illustrate what I refer to in this paper as the use of the bare verbal form:

- (3) *Comment ça que ma connexion a **crash**?*  
(4) *Je reçois pu mes appels, je vais **reboot** mon téléphone.*

The present article examines the use of the morphologically unintegrated English-origin verbs in Quebec French from a sociolinguistic perspective. The objectives of this study are twofold. First, it aims to identify a possible correlation between the evaluation of different uses of English-origin verbs and speakers' characteristics. The second objective is to determine who the users of the morphologically unintegrated English-origin verbs are and what social factors constrain this use. The research questions are:

RQ1: How do French-speaking Quebecers evaluate the use of morphologically unintegrated English-origin verbs?

RQ2: What social factors (if any) constrain the use of morphologically unintegrated English-origin verbs?

This study is the first to identify and analyse social factors associated with the morphologically unintegrated English-origin verbs as used in Quebec French. The social factors included are: age, gender, education level, English proficiency, hometown, and current place of residence. Results from statistical analysis indicate that young Quebecers from Montreal with a high level of proficiency in English are the ones who use it the most and evaluate it more positively.

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**1. Overview** This paper contributes to the growing literature on Balkan Romance by examining differential object marking (DOM) in a dialect of Balkan Judeo-Spanish (BJS). Balkan and Romance groups exhibit (i) synchronic and diachronic microvariation, and (ii) divergent typological possibilities for expressing DOM. Most Balkan Romance varieties behave according to the **Balkan type** (1a) except (Daco)-Romanian (1b), which displays a **mixed profile**, with typological and theoretical implications (Hill & Mardale 2019, 2021, henceforth H&M).

- (1)a \*(L)-am vizut Ø {Petre / filmu / un film}. (Megleno-Romanian)  
 ACC=have.1SG seen Petre film-DEF / a film  
 ‘I’ve seen {Petre/the film/a *specific* [\**non-specific*] film}’ (from Tomić 2008:84)
- b (L)-am văzut **pe** {Ion/ studentul inteligent/ um bărbat}. (Daco-Rom)  
 ACC=have.1SG seen PA Ion/ student-DEF intelligent a man  
 ‘I’ve seen Ion/the intelligent student/ a [ $\pm$  *specific*] man’ (based on Irimia 2020:429,438)
- c Ciccillə (la) aschənni \*(a) {jèddə/ Ggrazzièllə/ \* la bbəscəclèttə}. (Barese)  
 Frankie ACC=hid PA her/ Graziella the bicycle  
 ‘Frankie hid her/Graziella/\*the bicycle’ (based on Andriani 2015:64-5,70)

Balkan DOM (1a) involves clitic doubling (CD) of the (indirect *or* direct) object, triggered by **definite, specific** and/or **discourse/givenness** properties of the object (Tomić 2006; Kallulli & Tasmowski 2008), and is *orthogonal* to animacy. The primary mechanism for Romance DOM (1c) is the ‘prepositional accusative’ (PA), which can *broadly* be characterized as an **animacy**-based strategy (H&M) that flags (highly-)referential, human/animate DOs to the general exclusion of inanimate arguments; Romance PA can also optionally co-occur with a co-referential clitic, although under different conditions from the Balkan pattern. (Daco-)Romanian (1b) DOM involves a dependency whereby iff a human DO is already marked by PA, then CD (in most cases, obligatorily) occurs. Although DOM is typologically characteristic of Spanish as a dialect group, BJS developed independently from Spanish from 1492 onwards. Preliminary investigation has established considerable microvariation, including loss of DOM, across BJS. Given this background, this paper reports a qualitative and quantitative study into the structural and typological profile of (Balkan) Judeo-Spanish DOM in relation to the syntactic-semantic properties of the DO in a single dialect, viz. that of Monastir (Bitola, North Macedonia), in a corpus of oral texts (Luria 1930; Crews 1935) collected 15 years prior to the decimation of Monastir’s entire Jewish community in the Holocaust (Kolonomos 2006).

**2. Data** In Monastirli transitive structures with a postverbal DO, all demonstrative (2a) and strong quantifier expressions involving animate DOs **obligatorily** trigger PA, but **optionally** incur CD. With lexical definite DPs, PA is **obligatory** for DPs specified as [+human] (2b), but **optional** for [–human] animate DPs, whilst CD is **optional** for definite DOs, including inanimates (2c). CD correlates with ‘givenness’ of the DO in all cases except for non-dislocated personal pronouns (2d), where both PA and CD are **obligatory**. Indefinite DOs, however, never incur DOM, *irrespective* of triggering factors (e.g. humanness, specificity) that can license DOM in Spanish or Romanian, as with e.g., specific indefinite DPs (2e):

- (2)a (La) mató y \*(an) este (mujer). [+human, +PA,  $\pm$ CD]  
 her= killed also PA this.FSG woman
- b (La) buškó \*(a) la novye i la tupó asintade [+human, +PA,  $\pm$ CD]  
 her= looked.for PA the fiancée and her=found sat.down.FSG
- c Tumó la pïedre y (lu) tapó il podzu [-animate, –PA,  $\pm$ CD]  
 took the stone and it.MSG= covered the well
- d para \*(ti) cumer \*(a) ti vini [+human, +PA, +CD]  
 in.order.to you= eat.INF PA you came.1SG

e Si tumó otre ves **une mujer** la quale ere firmoze, buene y uneste  
 REFL=took again a WOMAN[+SPECIFIC] the which was beautiful, good and honest

Focusing only on definite animate Art+NP and Poss+NP tokens ( $n=187$ ) in our corpus, DOM is found in 92.76% of human DOs (141/152), 97.87% (138/141) of which involve PA and 66.67% (94/141) CD, i.e. DOM always incurs PA with human DOs in Monastirli, indicating an animacy requirement for PA. In non-human animate DOs, the occurrence of DOM drops to 62.86% (22/35), of which 86.36% (19/22) involve CD, and only 40.91% (9/22) involve PA. When these variables are combined, we find that Monastirli admits two possible conditions [+PA, ±CD] for licensing human DOs; two further (distinct) conditions [-PA, ±CD] for inanimate DOs; whereas *four* conditions [+PA, ±CD] are available for introducing non-human animate DOs.

**3. Implications** Monastirli exhibits a novel (undescribed) mixed Balkan-Romance typological type for DOM, unlike that of Romanian (and other Balkan Romance patterns as described in H&M 2021). While the animacy requirement for Monastirli PA aligns it with Romance, Monastirli diverges from Romance and Romanian DOM in that (i) CD can be decoupled from PA, and (ii) it displays the Balkan pattern in admitting CD-only DOM with non-human animates and inanimates. Unlike the predominant Balkan and Romance patterns, however, the overriding conditioning factor for Monastirli DOM is definiteness, such that indefinite DOs are excluded and specificity plays no role. Theoretically, the uncoupling of CD and PA in this variety challenges *Kayne’s Generalization* (Jaeggli 1982:20), which states that an object NP can be clitic-doubled only if preceded by a preposition, a dependency that has been argued to hold in Romance even for apparent exceptions (e.g. Di Tullio *et al.* 2019).

**4. Analysis** To capture the empirical facts for Monastirli, and focusing on its nominal-internal licensing, we take up H&M’s proposal to account for Romanian DOM in terms of the internal structure of the DP. We assume a double DP structure (e.g. Martín 2012) whose internal organization (3) is based on H&M, after Bernstein *et al.* (2018), but additionally incorporates a QP-layer between D-projections, following Kallulli & Rothmayr (2006):

(3) [KP K-clitic[+F] [DP1 D1-PA [QP Q [DP2 D[+DEF] [NP ...]]]]]

The higher and lower D-layers are associated with individuation (D1) and definiteness (D2) respectively. H&M argue that, in Romanian, PA is a prenominal particle requiring an activated [PERSON] feature in D1, whilst CD involves a second trigger, viz. activation in K of a discourse feature, to license the doubling clitic. Since Monastirli DOM is only licensed with definite DOs, we propose that both PA and CD are contingent in Monastirli on an activated [DEFINITENESS] feature on D2, which we represent in (3) as D[+DEF]. In the spirit of Ledgeway *et al.* (2019), we further propose that 1/2 pronouns (which are [+human] by ‘default’, cf. Harley & Ritter 2002), 3 person pronouns referring to [+human] DOs, and other 3 person nominals that are *optionally* specified as [+human], involve the activation of [PERSON] and thus are able to trigger PA. In other words, [PERSON] corresponds to a humanness requirement (intrinsic to 1/2 person; optionally specified in other nominals) in Monastirli, as it does in Romanian. Since non-human animate lexical DPs can display PA in Monastirli, we assume that these DOs are specified [+human] when marked with PA, but do not carry this specification when unmarked. Like Romanian, Monastirli CD is triggered by an activated discourse feature [+F] on K, but, *unlike* Romanian, is uncoupled from PA (cf. (2d)), yielding the three overt DOM marking strategies summarized in TABLE 1.

We conclude with brief comment on the language contact scenario, noting that Monastirli’s ‘mixed’ type exhibits structural **parallels** with, but is **non-identical** to, (i) CD of the Balkan (Macedonian; Greek) type; (ii) PA in pre-1492 Old Spanish.

Overt DOM strategies	Features activated in KP/DP		
	K	D1	D2
[+PA, -CD]		[+PERSON]	[+DEFINITE]
[+PA, +CD]	[+F]	[+PERSON]	[+DEFINITE]
[-PA, +CD]	[+F]		[+DEFINITE]

TABLE 1: *Licensing of DOM strategies in Monastirli*

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## ***Lluito en català pero amo en castellano: Language Ideologies and Registerial Repertoire in the Linguistic Landscape of Barcelona***

Prior research on linguistic repertoires in Catalonia has revealed a lower usage of Catalan as compared to Spanish in vulgar or informal registers (Frekko 2009; Newman, Patiño-Santos, and Trenchs-Parera 2012). This phenomenon has been attributed not to lexical gaps among this region's highly bilingual population, but rather to the idea that Spanish terms "carry connotations that the Catalan equivalents might not" (Woolard 1989, 65).

Furthermore, it is prudent to consider how increased socio-political tensions resulting from the contentious 2017 Catalan independence referendum (Oller, Satorra, and Tobeña 2021) have influenced current language ideologies and their effect on linguistic repertoires. Ianos, Huguet, and Lapresta-Rey (2017) indicate that Catalan and Spanish (national) identities remain divided, and that language ideologies reflect competition rather than coexistence between the Catalan and Spanish languages. This adumbrates a reversal of prior trends that showed weakened ideological ties between native Catalan ethnicity and Catalan usage (Woolard 2009; Pujolar and González 2013), a shift from in-group language preferences to positive perceptions of Catalan-Spanish bilingualism (Newman and Trenchs-Parera 2015; Davidson 2019), and a desire to depoliticize the Catalan language (Woolard 2016).

The present research contributes to post-referendum sociolinguistic scholarship on language ideologies in Catalonia's public sphere by examining the linguistic landscape (LL) of two demographically distinct neighborhoods in Barcelona: Vila de Gràcia (predominance of Catalan-L1 speakers) and El Barri Gòtic (predominance of Spanish-L1 speakers). The aim of this study is to analyze the relationship between linguistic repertoire and identity construction in graffiti on public walls. The author photographed all publicly-visible transgressive artifacts<sup>1</sup> (N=1,587) from every street in both communities and coded the language(s) and theme of each message in Adobe Lightroom Classic. Prominent themes across graffiti were identified via a qualitative content analysis (Ben Said and Kasanga 2016), and these themes were then extrapolated to corresponding identities (i.e., romantic messages to an *amorous self*). Correlations between languages and different themes in the graffiti were inferentially verified via Chi-Squared analyses in R (v4.2.2; R Core Team 2022).

Findings reveal that while the Catalan-dominant Vila de Gràcia had a statistically significantly higher representation of Catalan in its LL, the distribution of themes for which Catalan was used in Vila de Gràcia was not statistically significantly different from that of El Barri Gòtic. Spanish and English artifacts showed thematic representation patterns that were distinct from Catalan, but parallel to each other. Language-theme relationships in the data indicate that Catalan graffiti represent *socially-minded*, *politically-oriented*, and *community-conscious* identities, whereas Spanish and English artifacts are used to index *sentimental*, *romantic*, and *rebellious* identities. These findings evidence the difficulty of developing a complete registerial repertoire in public discourse for minority languages that, despite official status, must compete with both state (Spanish) and global (English) hegemonic languages. The results also shed light on how contexts of socio-political tension in multilingual regions may solidify an association between the minority language and higher, socially-oriented registers.

**Key words:** Linguistic landscape; Catalonia; identity; language choice; Catalan

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<sup>1</sup> Signs on public walls that disrupt official discourse (Scollon and Scollon 2003), including graffiti, posters, stencils, stickers, and other ephemeral items outside the official and commercial realms.

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**Majorcan Catalan and corpora analysis:  
a window to analyse past participle agreement as an epiphenomenon**

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The main goal of this presentation is to present the analysis of 4 diachronically successive corpora, with Majorcan Catalan data on past participle agreement (PPA), and to provide a formal analysis for PPA, flexible enough to explain these and other data from other Romance varieties.

These corpora show that, in Majorcan Catalan, the use of PPA has been decreasing over the last hundred years, but it keeps stronger in some contexts (object preposing) than in other ones.

As for PPA with the object *in situ* (PPA<sub>OIS</sub>), I develop the concept of *conditioned PPA*, distinguishing two types of constraints: information structure and aspect. I start from DE CIA's (in press) observation that, in Friulian, PPA<sub>OIS</sub> is not optional (*pace* LOPORCARO 1998), but conditioned by the topicality of the object: PPA<sub>OIS</sub> is only licensed if the direct object can be interpreted as a *given topic* (*G-topic*) or as an *aboutness-shift topic* (*A-topic*), in the sense of FRASCARELLI & HINTERHÖLZL (2007), but PPA<sub>OIS</sub> is ungrammatical if the object is under *narrow focus* (either informative or contrastive). Strikingly, a similar constraint applies to Majorcan Catalan — examples (1)*a* and (1)*b* display PPA<sub>OIS</sub> with a G-topic and with an A-topic, respectively; while (1)*c* shows that PPA<sub>OIS</sub> is ungrammatical under narrow focus —, although with some differences: (i) in Friulian, PPA<sub>OIS</sub> with G-topics or A-topics is *mandatory*; conversely, in current Majorcan Catalan PPA<sub>OIS</sub> is conditioned but *optional*; and (ii) Majorcan Catalan can display PPA even with fronted objects with contrastive focus or with any kind of *wh*- object [(2)]; so, in this variety, the topicality condition only applies to PPA<sub>OIS</sub>.

- (1) a. —Els heu vist(s) sempre, an es cossiers?  
 CL.ACC.MAS.PL have.you seen(.PL) always DOM the “cossiers”.MAS.PL  
 —Sempre... Sempre **he vists es cossiers i es dimoni.**  
 always always have.I seen.MAS.PL the “cossiers” and the devil  
 ‘Have you always seen the “cossiers”’ ‘Always, I have always seen the “cossiers” and the devil’
- b. I llavò **he vists «hombres licenciados en carrera» de Montuiri:**  
 and then have.I seen.MAS.PL men graduated in degree from Montuiri  
 Cases de senyors: [...]. Frares: [...]. Metges: [...]. Notaris: [...]. Apotecaris: [...]. Missers: [...].  
 houses of lords friars doctors notaries pharmacists lawyers
- c. —Què has rebut? —**He {rebut/\*rebudes} dues multes.**  
 what have.you received have.I received.{MAS.SG/\*FEM.PL} two fines.FEM.PL  
 ‘What have you received?’ ‘I have received two fines’
- (2) NA MARIA, he vista, i no en Joan.  
 ART.PERS.FEM Maria have.I seen.FEM.SG and not ART.PERS.MAS Joan  
 ‘It is Maria who I have seen, not Joan’

A similar phenomenon can be found in Sanvalentinese and Ripano (D’ALESSANDRO 2017) and in some Bantu varieties like Manyika (BAX & DIERCKX 2012) and Swahili (MURSELL 2018). DE CIA, following MURSELL and D’ALESSANDRO, claims that *v/v\** in Friulian enters the derivation with [*uφ*: <sub>] features and with an extra [*uδ*: <sub>] feature, which looks (through the operation *Agree*) inside its c-command domain for the nearest DP/NP with a [Givenness] or [Aboutness] interpretable *δ* (discourse) feature. By contrast, BAX & DIERCKX prefer an analysis based on the incorporation of a pronominal clitic (which doubles the object) into the verb, which resembles the kind of analysis that I assume to explain optional PPA<sub>OIS</sub>, PPA with clitics and PPA with *wh*-movement in current Majorcan Catalan, following the analysis proposed by GEORGI & STARK (2020) for French. In long-distance movement, both in French and in current Maj. Catalan, PPA with a *whP* is just possible with the most embedded participle, but not with the highest participle:</sub></sub>

- (3) [Quines cadires — has — {dit/\*dites} — [que ha {repintades/repintat}]]?  
 which chairs.FEM.PL have.you said.{MAS.SG/\*FEM.PL} that has repainted.{FEM.PL/MAS.SG}  
 ‘Which chairs have you said that (s)he has repainted?’

According to GEORGI & STARK, the syntactic mechanism that explains *optional PPA* with *wh*-Ps or with clitics in French is not *Agree* (unlike unaccusative constructions, auxiliated robustly with *être* and with *mandatory PPA*), but *resumption by sub-extraction, stranding and incorporation* of an H functional head (from the highest DP layer) into the participle. Crucially, this mechanism cannot be applied to already moved constituents, which are “islands for sub-extraction”: Freezing Principle and Condition on Extraction Domains.

The main conclusion is that PPA is not a unified phenomenon, but an *epiphenomenon*, which can be regarded as the by-product of several syntactic mechanisms. One of these mechanisms is *Agree* (CHOMSKY 2000, 2001; LONGENBAUGH 2019), which explains mandatory PPA within unaccusative constructions in French and Italian (*Sono {arrivate/\*arrivato} le ragazze*), and even those cases of systematic or categorical PPA<sub>OIS</sub> (like in Old stages of Maj. Catalan); but PPA could also be the result of *Concord* (GIUSTI 2008) or ZEIJLSTRA’s (2012) *Reverse Agree* — as in passive constructions, where PPA is mandatory even in current Spanish (*La ciudad fue destruida*), as in any other case of Concord between a noun and an adjective (*La ciudad es bonita*). Moreover, optional PPA could come from *resumption by extraction, stranding and incorporation* of an H functional head, as a strategy for marking information structure.

Finally, for some speakers of current Majorcan Catalan, PPA<sub>OIS</sub> can only be used for marking those internal arguments that, besides being topics, are also affected by a dynamic event with [+bounded] or [resultative] Asp [(4)a and (4)b]; by contrast, PPA<sub>OIS</sub> is excluded with states and dynamic events with [–bounded] aspect [(5)a and (5)b]. So PPA<sub>OIS</sub> is also conditioned by aspect.

- (4) a. Hem {cantada/cantat} aquesta cançó {en dos minuts / tres vegades}.  
 have.we sung.{FEM.SG/MAS.SG} this song.FEM.SG in two minutes three times  
 ‘We have sung this song {in two minutes / three times}’  
 b. Ja hem {untades/untat} ses persianes.  
 already have.we spread.{FEM.PL/MAS.SG} the blinds.FEM.PL  
 ‘We have already spread the blinds (with oil)’
- (5) a. Na Teresa sempre ha {temut/\*temudes} ses bubotes.  
 ART.PERS.FEM Teresa always has feared.{MAS.SG/\*FEM.PL} the ghosts.FEM.PL  
 ‘Teresa has always been afraid of ghosts’  
 b. He {menat/\*menada} sa furgoneta tot s’ horabaixa.  
 have.I driven.{MAS.SG/\*FEM.SG} the van all the afternoon  
 ‘I have been driving the van all afternoon’

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1. In Italian, an exceptional prosodic pattern is observed in direct fully fledged wh-questions with bare wh-elements: Main Prominence (MP) fails to be assigned to the wh-element and to the default rightward position. In these structures, MP is rather typically assigned to the lexical verb: the latter, however, is not interpreted as narrowly focused (cf. Calabrese 1982, Ladd 1996, Marotta 2001, Bocci, Bianchi & Cruschina 2021; by MP we mean at once nuclear pitch accent and sentential stress):

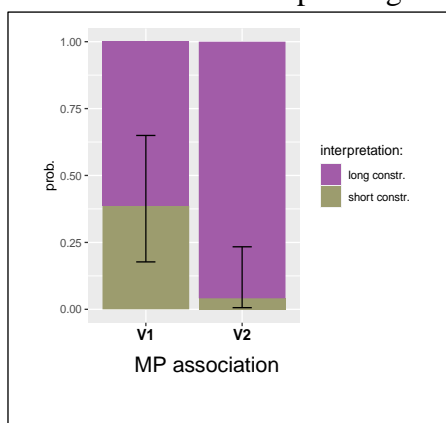
- (1) A chi hanno **chiesto** un aumento (MP marked by boldface)  
 to whom have.3PL asked for a pay rise

This spectacular dissociation of MP and focal interpretation raises the question of whether and how hearers are sensitive to this marked prosodic pattern in understanding a question. Our starting hypothesis was that MP placement is an *effect of cyclic wh-movement* and in particular, it marks a lexical phase head whose edge hosts an intermediate link of the wh-chain, as required by the Phase Impenetrability Condition. Furthermore, data from a production experiment (cf. Bocci, Bianchi & Cruschina 2021) showed that in biclausal questions with long distance wh-movement, main prominence can be assigned to the lexical verb either in the embedded clause or in the matrix clause. In contrast, in case of biclausal wh-questions with short distance wh-movement, MP is invariably assigned to the lexical verb in the matrix clause.

2. To assess the role of prominence distribution in comprehension, we tested trials containing shorts dialogues ending with a bi-clausal *wh*-question like (2B), which is compatible with both a long-movement and a short-movement construal, due to the optionality of the goal arguments (highlighted in italics in the context sentence (2A)):

- (2) A: Ho detto *all'amministratore* che i Bianchi hanno mandato una diffida *a Carla*.  
 have.1SG said to-the building manager that the Bianchi have sent a formal-notice to Carla.  
 B: Scusa, non ho capito. A chi hai detto\_\_ che hanno mandato\_\_ una diffida?  
 sorry, neg have.1SG understood to whom have.2SG said that have.3PL sent a formal-notice  
 'To whom did you say that they sent a letter of formal notice?'

Given the context (2A), two answers are congruent with the question in (2B): one involving the goal argument of the matrix predicate (e.g. *to the building manager*) and the other involving the goal of the embedded predicate (e.g. *to Carla*). Participants were asked to listen to the dialogue and answer a wh-question like (2B) taking Speaker A's role. The collected answers were recoded as corresponding to a short or long construal interpretation of the wh-question.



We manipulated MP placement in the wh-questions: MP falls either on the matrix verb **V1** (e.g. *detto*) or on the embedded clause verb **V2** (e.g. *mandato*). The prediction is that, if MP marking is relevant in comprehension, it should affect the participants' interpretation: in particular, MP on V2 would mark long-distance movement, invariably inducing the long construal. We tested 8 items under two conditions (MP on V1 vs. V2) and 40 native speakers of Italian. The results (Fig. 1) show that MP placement is a clue that hearers exploit to parse the structure in input. When MP is placed V2, a mixed effects



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### Middle constructions, dative possessors and word order in Spanish

Middle constructions are stative, generic predicates denoting intrinsic properties of the verb's internal argument, which is necessarily determined and surfaces preverbally as the grammatical subject; this is due to this argument's status as a sentential topic (Sánchez López 2002). Although the participation of an implicit agent in the event is understood, it is impossible to introduce this argument explicitly by means of a *by*-phrase.

(1) *What happens?*

- a. (Que) \*(Sus) cicatrices se ven fácilmente (\*por Luis).  
     that his scars RFL see easily by Luis  
     ‘His scars are easy to see.’
- b. ?(Que) se ven sus cicatrices fácilmente.

When a relational noun occurs in these sentences, it can be internally or externally possessed by means of a possessive determiner (1), or a dative possessor (2), respectfully; the dative DP in these contexts tends to occur preverbally.

(2) *What happens?*

- a. (Que) a Marta<sub>i</sub> se le<sub>i</sub> ven [las cicatrices]<sub>i</sub> fácilmente.  
     that Marta.DAT RFL 3SG.DAT see the scars easily  
     ‘Marta’s scars are easy to see.’
- b. (Que) a Marta<sub>i</sub> [las cicatrices]<sub>i</sub> se le<sub>i</sub> ven fácilmente.
- c. (Que) [las cicatrices]<sub>i</sub> a Marta<sub>i</sub> se le<sub>i</sub> ven fácilmente.
- d. ?(Que) [las cicatrices]<sub>i</sub> se le<sub>i</sub> ven a Marta<sub>i</sub> fácilmente.

The subjecthood of preverbal datives in Spanish has been discussed extensively; Masullo (1992) notes that negative quantified dative experiencers lose their quantificational scope when dislocated, therefore being interpreted referentially. The same applies to dative possessors in middle contexts. It seems sensible to propose two configurations for these sentences: one in which only the dative DP surfaces preverbally in subject position, presumably SpecTP, forcing the theme to remain inside the VP (3a), and another where both the dative DP and the theme occur preverbally, the latter in subject position, and the former being left-dislocated (3b).

- (3) a. [<sub>TP</sub> A nadie<sub>i</sub> [<sub>T</sub> se le<sub>i</sub> ven [las cicatrices]<sub>i</sub> fácilmente].  
     ‘Nobody’s scars are easy to see.’
- b. \*A nadie<sub>i</sub>, [<sub>TP</sub> [las cicatrices]<sub>i</sub> [<sub>T</sub> se le<sub>i</sub> ven fácilmente]  
     ‘Nadie’s scars are easy to see.’

Inalienable possession between a dative argument and a relational noun has been analyzed in terms of control (Demonte 1988), predication (Vergnaud & Zubizarreta 1992), and possessor raising (Sánchez López 2007). Cuervo (2003), based on Pylkkänen (2008), notes that dative possessors pattern with datives in double object constructions, which are introduced by a low applicative head merging as the root's complement. Thus, she proposes the semantic derivation in (4) for a low applicative introducing dative possessors.

(4) APPL<sub>AT</sub> (Possessor applicative):

$\lambda x.\lambda y.\lambda f_{\langle e, s, t \rangle}.\lambda e.f(e, x) \ \& \ \text{theme}(e, x) \ \& \ \text{in-the-possession}(x, y)$

The derivation for the sentence in (2a) is shown in (5), where the applicative head – spelled-out by the dative clitic *le*– relates the possessor in its specifier (*a Marta*) with the possessum in its complement position (*las cicatrices*); ApplP merges as the complement of the root, and T° probes the dative DP –being the closest– to its specifier to check its EPP feature, and assigns nominative to the theme via Agree.

(5) [<sub>TP</sub> [**a Marta**]<sub>i</sub> se le<sub>i</sub> ven [<sub>VP</sub> ~~se~~ [<sub>VP</sub> [<sub>AppIP</sub> [**a Marta**]<sub>i</sub> [<sub>AppI</sub> *le*<sub>i</sub> [las cicatrices]]]  $\sqrt{\text{ver}}$ ]]]

While (5) successfully accounts for (2a), the derivation where both the dative DP and the theme appear preverbally is subject to intervention effects, as shown in (6). Should the

possessor DP merge *in situ* outside the TP, an empty pronominal would have to sit in SpecAppIP to preserve the relationship of possession with the theme; this pronominal, being closer to T<sup>o</sup>, would then be probed to SpecTP, instead of the theme DP, bringing about an undesired word order. In other words, minimality would be violated.

- (6) **A Marta**<sub>i</sub> [TP [las cicatrices] [T<sup>o</sup> se le<sub>i</sub> ven [vP ~~se~~ [vP [AppIP [**pro?**][AppI' ~~le~~<sub>i</sub> [las cicatrices]]] ~~vP~~]]]]

A possible way to overcome this challenge is to assume that nothing merges in SpecAppIP, and that the applicative head alone suffices to generate the possessor reading; however, that would go against the semantic definition of the low applicative of possession in (4). Instead, I provide evidence supporting an analysis along the lines of Barbosa's (2009) for preverbal subjects in Romance consistent null subject languages, namely, that these are clitic left-dislocations (CLLDs) coindexed with empty pronominals inside the sentence. For instance, the sentence in (6) allows recomplementation, reinforcing the idea that these preverbal DPs are extra-sentential.

- (7) a. Dice que a Marta, que las cicatrices, (que) se le ven fácilmente.  
 says that Marta.DAT that the scars that RFL 3SG.DAT see easily  
 b. Dice [CP que [**a Marta**<sub>i</sub>] [CP que [las cicatrices]<sub>k</sub> [CP que/∅ [TP **pro**<sub>i</sub> [T<sup>o</sup> se le<sub>i</sub> ven [vP ~~se~~ [vP [AppIP [**pro**<sub>i</sub>][AppI' ~~le~~<sub>i</sub> [**pro**<sub>k</sub>]]]]] fácilmente]]]]]]

When the dative DP contains a negative quantifier (3a), this argument originates in SpecAppIP, raises to SpecTP to check its EPP feature, and subsequently undergoes A'-movement, for these quantificational expressions belong to a subset that do not require contrastive Focus (Martins 1994; Uriagereka 1995).

- (8) [CP **A nadie**<sub>i</sub> [TP ~~a nadie~~<sub>i</sub> [T<sup>o</sup> se le<sub>i</sub> ven [vP ~~se~~ [vP [AppIP [~~a nadie~~<sub>i</sub>][AppI' ~~le~~<sub>i</sub> [las arrugas]]]]] fácilmente]]]]]]

On the other hand, when the dative DP occurs preverbally, with a theme containing a negative quantifier, the latter would also move to an A' position skipping over the null possessor in SpecTP, as sketched in (9).

- (9) a. Dice que a Marta que ninguna cicatriz (\*que) se le ve fácilmente.  
 says that Marta.DAT that no scars that RFL 3SG.DAT see easily  
 b. Dice [CP que [**a Marta**<sub>i</sub>] [CP que [ninguna cicatriz]<sub>k</sub> [C' ∅ [TP **pro**<sub>i</sub> [T<sup>o</sup> se le<sub>i</sub> ve [vP ~~se~~ [vP [AppIP [**pro**<sub>i</sub>][AppI' ~~le~~<sub>i</sub> [ninguna cicatriz]]]]] fácilmente]]]]]]

Evidence for the raising of these quantificational expressions to an A' position is the fact that it triggers proclisis in languages like Asturian, where this phenomenon is attested in contexts where phrases undergo A'-movement, such as *Wh*-questions (10c).

- (10)a. A Marta véense-y les engurries fácil.  
 Marta.DAT see.RFL-3SG.DAT the wrinkles easy  
 b. Diz que a Marta que nenguna engurria se-y ve fácil.  
 c. A Marta, ¿qué se-y ve?

To conclude, an analysis of preverbal subjects and dative DPs as CLLDs avoids the minimality conflict in (6) while, at the same time, supports classic proposals about the position of preverbal subjects in Spanish, including Contreras (1976), Olarrea (1996) or Ordóñez & Treviño (1999).

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**Background and aims:** While morphological approaches to reduplication, as found in Inkelas&Zoll (2005), obtain their descriptive and theoretical insights from partial reduplication patterns, very little attention has been given to the grammatical properties of full reduplication. The bias against full reduplication is made explicit in Katamba (1993), who claims that phenomena where the entire word is repeated, is ‘nothing more than constituent copying’ and therefore too ‘simple and theoretically unchallenging’ for morphological analysis. Contrary to this view, the literature has shown that full reduplication is morphologically more complex (Kouwenberg 2003, Luís 2019). This study lends further support to this claim with evidence from Kriyol, a Portuguese-based creole spoken in Guiné-Bissau, in which fully reduplicated verbs undergo a significant range of morphological operations. Crucially, they also exhibit non-optional and fully superfluous multiple exponence (ME). As defined by Caballero and Harris (2012), ME is “the occurrence of multiple realizations of a single feature, bundle of features, or derivational category in more than one position in a domain”. Fully superfluous multiple exponence is problematic for linguistic theory and has been claimed not to exist (Stiebels 2015). The focus of this study will be to explore an analysis of ME on reduplicated verbs and show that, while redundant marking constitutes effectively a challenge to morphological theory, the mismatches between form and meaning can be accommodated within Construction Morphology (Booij 2010).

**Full reduplication and multiple exponence:** The doubling of identical parts raises an important methodological question, namely whether the two parts give rise to one morphologically complex lexeme or to a syntactic string comprising two identical words (Gil 2005). In Kriyol, fully reduplicated verbs constitute genuine lexemes: they can be semantically non-compositional and serve as input to morphological processes. In (1b), the meaning of the reduplicated form cannot be derived from the meaning of its parts. In (2b), conversion induces change of category and leftward migration of stress, and in (3b) the reduplicated form carries a participle suffix.

- |     |  |   |
|-----|--|---|
| (1) | a. <i>falá</i> ‘say’                             | b. <i>fala fála</i> ‘rumours’                 |
| (2) | a. <i>djumna djumná</i> “always arrive too soon” | b. <i>djumna djúmna</i> “running competition” |
| (3) | a. <i>dana daná</i> “destroy”                    | b. <i>dana daná-du</i> “destroyed”            |

The relevant data for our study is shown in (4b), where the reduplicated verb undergoes causativisation carrying the causative suffix *-nta* both on the base and on the reduplicant. While the suffix is morphologically repeated, the semantics of the causative suffix is not reduplicated. As such, the reduplicated form in (4b) and the non-reduplicated form in (5b) share on property, namely that they only allow a non-reduplicated reading of the causative.

- |     |   |   |
|-----|---|---|
| (4) | a. <i>ianda ianda</i> “walk all over the place” | b. <i>ianda-nta inanda-ntá</i> “cause to walk all over the place” |
| (5) | a. <i>iandá</i> “walk”                          | b. <i>inanda-ntá</i> “cause to walk”                              |

Indicating that the causativised reduplicated verb constitutes one single verb form is the fact that it can undergo participle formation (6) like reduplicated verbs in (3).

(6) *ianda-nta inanda-nta-du* “was made to walk all over the place”

Given that the same causative marker is realized in more than one position within a word domain, it will be argued that (4b) and (6) illustrate an instance of non-optional multiple exponence (ME). In line with Caballero & Harris’ (2012) taxonomy of multiple exponence, we further claim that ME in Kriyol is “fully superfluous” (rather than “partially superfluous” or “overlapping”) since both causative makers express exactly the same feature.

**Analysis:** Since very little attention has been paid in the literature to the interaction between ME and full reduplication (Caballero&Inkelas 2013), this study explores an account within Construction Morphology (Booij 2010). The goal will be to capture the morphological complexity of full reduplication and also the form-meaning mismatch observed on causativised reduplicated verbs. Following insights formulated in Booij (2010), we propose the general schema shown in (7) in which the reduplicant and the base are coindexed. The coindexation captures the observation that both sub-constituents are members of one single lexeme and mapped onto a non-compositional meaning carrying the index *j*.

(7)  $[[V]_i [V]_i]_{V,j} \Leftrightarrow [RED]_j$

For reduplicated verb forms which have undergone Past Participle formation, we will assume the unification of two schemas (8).

(8) VV reduplication:  $[[V]_i [V]_i]_{V,j} \Leftrightarrow [RED]_j$

Past Participle formation:  $[[V]_j du]_{V,k} \Leftrightarrow [PASS]_j$

However, to account for the causativised reduplicated verb must be analysed without reduplicating the meaning of the causative to capture the mismatch between the morphological structure and semantics. The causativisation schema proposed for reduplicated verbs is shown in (9) which maps two causative markers in the morphology with one causative meaning in the semantics.

(9) VV reduplication:  $[[V]_i [V]_i]_{V,j} \Leftrightarrow [RED]_j$

Causative formation  $[[V]_i nti [V]_i nti]_{V,j} \Leftrightarrow [CAUSE]_j$

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## Multiple *wh*-clauses: insights from Rudin constructions in Romanian

**OVERVIEW** In this paper, we describe and analyze the syntactic and semantic properties of an understudied non-interrogative *wh*-construction requiring multiple *wh*-expressions, to which we refer as ‘Rudin constructions’. We show that they differ from other multiple *wh*-constructions studied to date and argue that they denote identity between the extensions of two relations.

**DATA** The multiple *wh*-construction we investigate is illustrated in (1)-(2):

- (1) a. Trăncănește [**cine ce** vrea].                      b. Mănâncă [**cine ce** vrea]. (*Rudin 2008:260*)  
blabs                      who what wants                      eats                      who what wants

‘Everyone’s blabbing whatever they want.’ ‘Let everyone eat whatever they want.’

- (2) La picnicul de duminică a mâncat [**cine ce mâncare** a pregătit]. (*Caponigro & Falaus 2022:55*)  
at picnic-the of Sunday has eaten                      who what food has prepared

‘At the picnic on Sunday each person ate the food (s)he prepared.’

This is a typologically rare construction that, on the other hand, is extremely productive in Romanian, with the bracketed clause allowing for two or more (argument or adjunct) *wh*-expressions. Following Caponigro & Falaus (2022), we use the label ‘Rudin construction’ since to the best of our knowledge Catherine Rudin was the first scholar to describe it (Rudin 1986, 2007, 2008). It has been largely neglected since with the exception of recent semantic analyses (Caponigro & Falaus 2020, 2022, Nicolae 2020).

**COMPARISON WITH OTHER *WH*-CONSTRUCTIONS** Semantically, the sentences in (1)-(2) are similar to multiple *wh*-**correlative clauses** (Dayal 1996, Brasoveanu 2012), which are also very productive in Romanian (3):

- (3) a. [**Cine ce** vrea], *acela aia* mănâncă.                      b. [**Cine ce** mâncare a pregătit], *acela aia* mănâncă.  
who what wants that-one that eats                      who what has prepared that-one that eats

‘Everyone eats whatever they want.’ ‘Everyone eats the food they prepared.’

Syntactically however, correlatives differ from Rudin constructions. First, in correlatives the *wh*-clause is obligatorily left-dislocated, whereas in Rudin constructions the *wh*-clause always follows the main clause. Second, the *wh*-expressions used in a correlative clause have corresponding anaphoric (typically demonstrative) markers in the matrix clause, as shown in (3) above.

We also show that Rudin constructions exhibit differences with the kind of multiple *wh*- **free relative clauses** (FRs) studied in Caponigro & Falaus (2020), illustrated in (4):

- (4) Bunica a împachetat [**ce cui** dă de Crăciun].

Grandma has wrapped                      what who.DAT gives for Christmas

‘Grandma wrapped the things she’ll give to the appropriate people on Christmas.’

The first difference lies in the relation between the *wh*-expressions and the two predicates. In (1)-(2), each *wh*-expression is related to an argument of *both* the matrix and the embedded predicate: the people blabbing/eating are the ones that want to blab/eat and the things they blab/eat are the things they want to blab/eat (1). In contrast, multiple *wh*- FRs satisfy only one argument of the matrix predicate and the lower *wh*- is in no way related to the matrix predicate. E.g., in (4) the receiver of the gifts is an argument of the predicate ‘give’ and not an argument of the predicate ‘wrap’. The second difference is semantic: multiple *wh*- FRs are referential, like definite DPs, whereas Rudin constructions seem to be akin to universal/free choice quantifiers.

We conclude that, at least in Romanian, Rudin constructions cannot be reduced to any other kind of multiple *wh*-constructions attested in the language and require a different analysis.

**SYNTACTIC ANALYSIS** Rudin constructions are always biclausal, with two fully tensed clauses:

- (5) Diseară la petrecere \_\_ mănâncă \_\_ [**cine<sub>1</sub> ce<sub>2</sub> \_\_<sub>1</sub> aduce. \_\_<sub>2</sub>].  
tonight at party                      eat                      who what brings**

‘Tonight at the party each person will eat what (s)he brings.’

In (5) for instance, each of the two clauses has a fully inflected transitive verb ('eat', 'bring'). Both predicates are missing their subject and object arguments—highlighted with underscores. The bracketed clause (Clause<sub>2</sub>) is introduced by two (bolded) *wh*-expressions that are linked to its missing subject and object—highlighted with the subscripts “1” and “2”. The other clause (Clause<sub>1</sub>) doesn't have any overt clause-internal marker correlating with its missing subject or object—highlighted with plain underscores without subscripts. Crucially, if either argument in Clause<sub>1</sub> is realized, the whole sentence becomes fully unacceptable, as shown in (6):

(6) a. \*Maria mănâncă \_ [**cine<sub>1</sub> ce<sub>2</sub> \_<sub>1</sub>** aduce \_<sub>2</sub>]. b. \* \_ mănâncă desert [**cine<sub>1</sub> ce<sub>2</sub> \_<sub>1</sub>** aduce \_<sub>2</sub>].  
 Maria eat who what brings eat dessert who what brings

This is due to the fact that in a Rudin construction Clause<sub>1</sub> and Clause<sub>2</sub> must have the same number and kind of missing constituents—at least two. If not, the whole construction is ungrammatical, as shown in (6) where Clause<sub>1</sub> has only one missing argument, whereas Clause<sub>2</sub> has two missing arguments (and corresponding *wh*-expressions). In (7), we illustrate the opposite situation: Clause<sub>1</sub> has only one missing argument (the subject), while Clause<sub>2</sub>, with a transitive predicate, has two missing arguments. Moreover, the two clauses in a Rudin construction also need to match in terms of the kind of missing arguments: in (8), both predicates require a subject and an object, but crucially the predicate in Clause<sub>1</sub> requires a direct object, while the predicate in Clause<sub>2</sub> an indirect object. The combination of the two results in unacceptability.

(7) \* \_ Vine [**cine<sub>1</sub> ce<sub>2</sub> \_<sub>1</sub>** aduce \_<sub>2</sub>]. (8) \* \_ A atacat \_ [**cine<sub>1</sub> cui<sub>2</sub> \_<sub>1</sub> îi** place \_<sub>2</sub>].  
 comes who what brings has attacked who who.DAT CL.3SG likes

The two clauses of a Rudin construction do not have the same syntactic status. Clause<sub>2</sub> always occurs to the right edge of Clause<sub>1</sub> and—we show—behaves like an adjoined *wh*-clause (a CP). Clause<sub>1</sub>, which always occurs first (left-most), allows for topicalized constituents or moved *wh*-constituents and acts as the main clause, determining the semantic and pragmatic features of the whole Rudin construction: if Clause<sub>1</sub> is declarative, then the whole Rudin construction is declarative, as in all the examples above. If Clause<sub>1</sub> is interrogative, as in (9), or imperative (10), then the whole Rudin construction will be interrogative or imperative, respectively.

(9) Când mănâncă [**cine ce** aduce]? (10) Mănâncă [**ce când** pregătesc]!  
 when eat who what brings eat.IMP.2SG what when prepare.1SG  
 ‘When does everyone eat what they bring?’ ‘Eat whatever I prepare whenever I prepare it!’

**SEMANTIC ANALYSIS** We argue that Rudin constructions assert (or question or demand) identity between the extensions of two *n*-place relations (i.e., sets of ordered pairs)—one relation being denoted by the Clause<sub>1</sub>, the other being denoted by Clause<sub>2</sub>, as schematized in (11).

(11)  $[[\lambda x_1 \lambda x_2 \dots \lambda x_n \mathbf{Clause}_1(x_1, x_2 \dots x_n)]]^{w_0} = [[\lambda x_1 \lambda x_2 \dots \lambda x_n \mathbf{Clause}_2(x_1, x_2 \dots x_n)]]^{w_0} \quad n \geq 0$

The sentence in (5) for example is interpreted as asserting that each eater at the party tonight eats only the food that (s)he brings. I.e., the sentence asserts the identity between the set of ordered pairs of <eater, eaten-food> associated with the first clause and the set of ordered pairs <food-bringer, brought-food> associated with the second clause. Given the variable number and nature of missing *wh*-constituents within a Rudin construction (i.e., two or more arguments or adjuncts), the notion of identity and the type of relation involved needs to be flexible. In the proposed implementation, we show that identity can be established between relations of variable *n*-ary and variable semantic type, as long as they are the same across the two relations associated with the two clauses involved in a Rudin construction.

Rudin constructions seem to be attested in other Balkan languages, but their properties remain understudied. The data described and analyzed in this paper pave the way for further crosslinguistic investigation on Rudin constructions and a comprehensive typology of multiple *wh*-constructions.

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## NASALITY AND NASALITY TRIGGERED BY /ɲ/ IN THE PORTUGUESE SPOKEN IN SAO TOME AND PRINCIPE: SOME EVIDENCE FOR AMBISYLLABILITY

**Background:** This study describes and analyzes the nasality triggered by /ɲ/ in the Portuguese spoken in São Tomé and Príncipe (PSTP). PSTP is a Portuguese variety from São Tomé and Príncipe (STP) widely spoken and transmitted as a mother language. Considering this, we aim to (i) propose a phonological analysis of nasality triggered by /ɲ/ in PSTP, (ii) investigate the presence of ambisyllabic structures and (iii) compared nasality triggered by /ɲ/ and nasality triggered by /m/ and /n/, nasal consonants syllabified in coda and onset (see Author Year). There are few descriptive studies on Romance languages spoken in Africa. Therefore, this paper is justified for it contributes with a description and a phonological analysis of PSTP, thus expanding the literature on nasality and linguistic analysis of Portuguese varieties, especially those spoken in Africa.

**Methodology:** This study is based on a corpus collected during fieldwork conducted in STP in October and November of 2016 and January and February of 2019. The corpus comprises 160 lexical items with oral vowels or nasalized vowels triggered by the palatal nasal and 129 lexical items bearing oral or nasalized vowels triggered by /n/ and /m/. The words were recorded inside carrier sentences such as **Eu falo X baixinho** (I say X softly), where X was replaced for the target item. All words were repeated three times by each speaker and the first round of repetition was discarded. We recorded six female speakers (young adults; age range: 18 to 23 years), resulting in 62 occurrences per informant for the data containing /ɲ/. Besides, we also recorded five female and five male speakers (young adults; age range: 18 to 23 years), resulting in 258 occurrences per informant for the data containing /m/ and /n/ in coda and onset. The corpus obtained by controlled methods created random segmental and suprasegmental contexts for obtaining the linguistic variable in evidence. Thus, we analyzed the data using Laboratory Phonology (Albano 2017; Ohala 1995). Using the software Praat (Boersma; Weenick 2015), we manually analyzed the spectrogram of each occurrence. We observed nasalization considering sound environment, such as segments co-articulated to the nasalized vowel, and the direction of nasal spreading, verifying the possibility of a progressive spread of the [nasal] feature of /ɲ/. Additionally, we also examined some suprasegmental factors, such as syllable stress, comparing the phonological behavior of nasality triggered by /ɲ/ and nasality triggered by /m/ and /n/.

**Discussion:** PSTP has five nasalized vowels [ĩ, ê, ã, õ, û] identified in stressed and unstressed syllables. We have argued that nasality is not an inherent phonological property of the vowel in PSTP, but instead nasality results from a coarticulatory phenomenon (see Author Year). Vowel nasality in both varieties is triggered by adjacency to a nasal consonant of Portuguese - /m/ and /n/ - that may be associated with a tautosyllabic coda as in (1) *cantar* /kaNtar/ [kẽ.'tar] ~ [kẽn.'tar] 'to sing' or with an onset of a different syllable as in (2) *cama* /kama/ ['kẽ.mɐ] ~ ['ka.mɐ] 'bed'. The tautosyllabic nasality in (1) occurs regardless of word stress. However, heterosyllabic nasality is determined by stress, since the phenomenon cannot be produced if the target is in unstressed syllables. Nasality is not purely an accidental process, but it is implemented under segmental or suprasegmental constraints in PSTP. Based on 372 occurrences of words with palatal nasal, we observed that /ɲ/, in the same way as /m/ and /n/, triggers nasality in PSTP: (3) *banho* /baɲo/ ['bẽ.ɲo] ~ ['ba.ɲo] 'shower' and (4) *dinheiro* /dijero/ [dĩ.'je.ro] ~ [di.'je.ro] 'money'. The nasality is triggered by /ɲ/ in stressed (3) and unstressed targets (4). It indicates that this phenomenon is more similar to tautosyllabic than to heterosyllabic nasality since unstressed syllables are the domain of the phenomenon. In addition, data in (3-4) allow us to conjecture the possibility of /ɲ/ being in coda in PSTP. As

heterosyllabic nasality is not implemented in unstressed syllables in both varieties, if the palatal nasal were associated only to the onset, words such as (5) **ganhar** [gẽ'nar] 'to win' and (6) **dinheiro** [dĩ'neru] 'money', produced with the nasalized unstressed vowels ([ẽ] and [ĩ]), would be agrammatical. In case /ɲ/ is only in onset, the expected outcome of data in (5) and (6) would be unstressed oral vowels: **ganhar** [ga'nar] 'to win' and **dinheiro** [di'neru] 'money,' which are possible but not unique occurrences. In PSTP, nasality triggered by /ɲ/ is a result of a coarticulatory phenomenon, as it has been suggested by studies on nasality triggered by /m/ and /n/ (see Author, Year). For this reason, the feature [+nasal] or [-nasal] is not an inherent phonological property to the vowel in this variety. As well as other nasal consonants in PSTP, the process triggered by /ɲ/ is conditioned by the coarticulation between the vowel and the nasal consonant. This coarticulation normally happens because of the articulatory movement involved in the speech production of /ɲ/, since producing a nasal consonant requires velum lowering, palatal velum port opening, and allowing airflow through the nose and the mouth (Styler, 2008). This is not an inherent characteristic to these varieties, since /ɲ/ has been analyzed as a consonant associated simultaneously with a coda and an onset in Brazilian Portuguese (BP) (Wetzels, 1997; Collischonn and Wetzels, 2017). PSTP is a variety whose syllable coda can be /l, r, N, S/ and present diverse phonetic productions (see Author, Year). An evidence supporting the ambisyllabicity of /ɲ/ is that words carrying [ɲ] are only observed word-medially and do not occur in sequences comprising coda /l, r, N, S/ + /ɲ/ or /l/. Still regarding the ambisyllabicity of /ɲ/, we observed some outputs carrying [j] as a consequence of a phenomenon of vocalization. These examples suggest that the trigger consonant /ɲ/ can be produced as [j] after spreading its nasal feature: (8) **banho** /baɲo/ ['bẽ.ju] 'shower'. Based on the features of the palatal nasal, it is possible to understand /ɲ/ → [j] as a consequence of the disassociation of the consonantal features (or c-place) of /ɲ/. The palatal nasal is usually understood as a complex segment, presenting in its structure a primary and secondary articulation (see Matzenauer, 1996), both associated with two temporal units (xx) (see Wetzels, 1997; Collischonn and Wetzels, 2017). Due to the complex structure of /ɲ/, the geometrical organization of the palatal nasal features implies a simultaneous association with a primary consonantal node and a secondary vowel node (see Clements and Hume, 1995). It occurs in such a way as to favor the production of [j], as the features of vowels comprise the secondary node. During the vocalization of /ɲ/, the complex articulation that characterizes the palatal nasal is undone. Then, the palatal nasal has the c-place node disassociated and lose its consonantal features - except for the [nasal] feature, which can be associated with the vowel of the preceded nucleus. As a result, [j] is produced. In case of [ɲ] output, which is also possible in PSTP as in ['bẽ.ju] 'shower', c-place is disassociated from v-place, but it does not lose its consonantal features, resulting in [ɲ]. The secondary articulation is thus divided into two: one consonantal, generating [ɲ], and another vocalic, resulting in [j]. In this paper we observed that /ɲ/ behaves in some respects differently from /m,n/. Even though all nasal consonants in PSTP trigger nasality, when triggered by /ɲ/ the phenomenon is similar to tautosyllabic nasality and is not conditioned by the stressed syllable as heterosyllabic nasality. In this regard, considering the multilingual context in which PSTP is spoken, we noted that nasality in this variety can be phonologically similar to the nasality in local languages (see Agostinho 2015; Bandeira 2017). To summarize, PSTP has different processes of nasalization. Similar as Brazilian and European Portuguese, the data of PSTP show that the palatal nasal occupies an ambisyllabic structure and is simultaneously associated with onset and coda positions in a syllable. Thus, the palatal nasal can nasalize left contiguous vowels, whether or not in stressed syllables. It is possible because /ɲ/ is in the coda, resulting in a CVN syllable structure and triggering tautosyllabic nasality. Thus, even though it is optional, the nasality triggered by /ɲ/ occurs independently from the vowel quality and the word stress, as described for BP (Wetzels, 1997; Collischonn and Wetzels, 2017).



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## Negation and Spanish zero event deverbal nominals

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This paper deals with the interaction of negation with Spanish zero deverbal nominals that refer to an event (e. g. *ataque* ‘attack’, *descenso* ‘drop’, *envío* ‘shipment’, *uso* ‘use’, etc.). Firstly, it is shown that this type of nominals can be preceded by the negative particle *no* (1).

- (1) a. La DGT multó el no uso del cinturón de seguridad.  
the DGT fined the no use of.the seatbelt of security  
‘The SVLA fined the non-use of the security seatbelt.’  
b. El no descenso de los precios del alquiler preocupa a los españoles.  
the no drop of the prices of.the rental worries DOM the Spanish.people  
‘The non-drop of the rental prices worries the Spanish people.’

Regarding the interpretation(s) that arise(s), I claim that <*no* + zero event deverbal nominal> does not give rise to the negative or inhibited eventuality reading, contrary to what happens with verbal predicates (2). This reading consists in affirming that there is an eventuality that takes place: the external argument—or initiator, in terms of Ramchand (2008)—refrains itself from triggering the corresponding positive eventuality, which was expected to happen in the first place (Higginbotham 1983; Przepiórkowski 1999; Fábregas & González Rodríguez 2020, a. o.). Among the predicates that force this reading, we find perception verbs, as they select an eventuality that takes place (3). Thus, in (3), it is expected that the designer will send the suit, but he finally refrains from doing so.

- (2) El diseñador no envió el traje.  
the designer not ship the suit  
‘The designer did not ship the suit.’  
(3) El asistente vio al diseñador no enviar el traje.  
the assistant saw DOM.the designer not ship the suit  
‘The assistant saw the designer not shipping the suit.’

Contrary to what happens within the verbal domain, the ill-formedness of sequences in (4) shows that the inhibited eventuality reading does not arise with <*no* + zero event deverbal nominal>, as this construction is incompatible with perception verbs.

- (4) a. \*El asistente presenció el no envío del traje por parte del diseñador.  
the assistant witnessed the no shipment of.the suit by part of.the designer  
b. \*La policía vio el no uso del cinturón de seguridad por parte del conductor.  
the police saw the no use of.the seatbelt of security by part of.the driver  
‘The police saw the non-use of the security seatbelt by the driver.’

I claim that <*no* + zero event deverbal nominal> gives rise to the negated eventuality reading. This interpretation consists in denying that an eventuality took place. Thus, in a sentence such as (1a), where *no* precedes a zero event deverbal nominal, it is denied that the eventuality consisting in using the seatbelt took place. That no eventuality takes place is shown by the incompatibility of <*no* + zero event deverbal nominal> with frequency modifiers. Examples in (5) are ungrammatical, as it is not possible to measure the frequency of an eventuality that does not happen.

- (5) a. \*La frecuente no firma de acuerdos solo empeora la situación.  
the frequent no signing of agreements only makes.worse the situation  
‘The frequent non-signing of agreements only makes the situation worse.’  
b. \*El frecuente no uso del cinturón de seguridad ha incrementado los accidentes.  
the frequent no use of.the seatbelt of security has increased the accidents  
‘The frequent non-use of the security seatbelt has increased the accidents.’

Following Ramchand's (2008) VP structure, Fábregas & González Rodríguez (2020) claim that, for the inhibited eventuality to arise, *no* must occupy a NegP which merges with InitP, so it refutes the causative relation between the causative (InitP) and the process (ProcP) subevents, turning it into an inhibition relation (6).

(6) [TP [... [NegP *no* [InitP [ProcP [...]]]]]]

I assume a syntactic analysis for event deverbal nominalizations (Alexiadou 2001; Fábregas 2016). Thus, given that a verbal base such as *enviar* ('to ship') denotes a dynamic eventuality, ProcP must be projected. I also assume that the initiator is placed within InitP (7).

(7) *envío* <---> [ClassP [NP [InitP [ProcP ... [ $\sqrt{789}$ ]]]]]

I claim that, in parallel fashion to what happens with VPs, the inhibited eventuality reading arises with event deverbal nominalizations when NegP is merged over InitP. I propose that the reason why zero event deverbal nominals do not give rise to this interpretation lies in the configuration of the exponent which spells out the projections of their syntactic structure. Following Fábregas' (2014, 2016) analysis for these nouns, for a nominal such as *envío* 'shipment', there is a single exponent /*enví-*/ which acts as a portmanteau morpheme that does Phrasal Spellout of the constituent formed by the root, InitP, ProcP, and NP, which must be hierarchically ordered and adjacent. The inhibited eventuality reading does not arise with zero event deverbal nominals because if NegP is merged over InitP, *no* breaks the constituent: NP and InitP are no longer adjacent, given that there is no projection that dominates NP and InitP without also dominating NegP (8). As a result, the syntactic configuration cannot be materialised, and the inhibited eventuality reading does not arise.

(8) /*enví-*/ <---> \*[NP [NegP [InitP [ProcP [ $\sqrt{789}$ ]]]]]

The analysis predicts that the inhibited eventuality reading should be available with event deverbal nominalizations with explicit derivative suffix (e. g. *comparece-ncia* 'appearance'). For a nominal such as *comparecencia* 'appearance',  $\sqrt{compar-}$  spells out the root, /*-ec-*/ InitP and ProcP, /*-nci-*/ the NP, and /*-a*/ the ClassP. Thus, when negation is merged over InitP, no constituent is broken. Therefore, the inhibited eventuality reading should be available.

(9) [ClassP *-a* [NP *-nci-* [NegP *no* [InitP *-ec-* [ProcP *-ec-* [ $\sqrt{compar-}$ ]]]]]]]

This prediction is borne out, as the grammaticality of (10) shows. From the compatibility of <*no* + event deverbal nominal with explicit derivative suffix> with perception verbs (10), it follows that the inhibited eventuality reading arises. In (10), it is expected that the president will appear, but he finally refrains from carrying out the corresponding affirmative eventuality.

(10) Los periodistas presenciaron la no comparecencia por parte del presidente.  
 the journalists witnessed the no appearance by part of the president  
 'The journalists witnessed the non-appearance by the president.'

Secondly, our proposal supports the claim that Spanish lacks a zero nominalizer suffix (- $\emptyset$ ) (Fábregas 2014, 2016). If it did, it would lexicalise NP, thus, negation would not break the constituent, and the inhibited eventuality could arise. The analysis also predicts that this reading will not arise in other languages in which - $\emptyset$  does not form zero nominals, such as English (Borer 2013). This prediction is borne out, as sequences in (11) show.

(11)a. \*The journalists witnessed the non-capture of illegal immigrants by the police.  
 b. \*The teacher saw the non-use of calculators by the students.

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Nominal constructions in (non-)standard Brazilian Portuguese: A case of contact? But with which languages?

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It is widely known that standard Brazilian Portuguese (BP), despite having plural morphology and definite and indefinite determiners which inflect for gender and number, allows non-referential bare singular count nouns (BN) in argument positions (see Schmitt & Munn, 1999; Müller & Oliveira, 2004; more recently, Cyrino & Espinal, 2015; Brito & Lopes, 2016; Ferreira & Correia, 2016; among many others), as in (1). However, BNs are not found in other Romance Languages, including European Portuguese.

(1) a. Rosa é uma flor.

*rose is a flower*

‘Roses are flowers’

b. Tem maçã na cesta.

*have apple in-the basket*

‘There is/are “one or more apples” in the basket.’

Bare referential constructions are found in very specific pragmatic conditions in the standard variety (see Lopes, 2019; Wall, 2013); nonetheless, they are extremely productive in non-standard varieties, in communities which were historically forged by the presence of Brazilian indigenous people and enslaved people from Africa.

It seems natural to consider that BNs in BP are a product of contact with other languages, but which? By examining two non-standard varieties of BP – a riverine community in the middle western part of the country (Baixada Cuiabana) and an AfroBrazilian community that lived in Bahia, a northern state, in the 19<sup>th</sup> century (Helvécia) – we will show that different and specific historical conditions produced the same results in the grammar.

As has been presently discussed by many (Avelar, 2019; Negrão & Viotti, 2014; among many others), BP owes much of its grammar to the contact with African languages, especially of the Bantu family. But we will show that the historic processes that came to constitute BP are deeply connected to economic conditions that determined social interaction, which seems crucial to understand the shaping of the language.

The emergence of Baixada Cuiabana (BC) was due to the discovery of gold in the 18<sup>th</sup> century by *paulistas* – natives of Sao Paulo state, who spoke *Lingua Geral*, a Tupi-based lingua franca. The region was disputed by Spain and Portugal, which motivated the Portuguese government to establish villages and encourage the formation of families. For the gold exploration, enslaved men were brought, but populational maps of the 18<sup>th</sup> and 19<sup>th</sup> centuries show high percentages of indigenous people, mainly women. BC is a nice case for the study of BP due to the diversity of its population. The corpus we analyzed was recorded between 1995 and 1996 and is composed of 9 speakers, all of which had none or very little schooling and ranged from 53 to > 90 y.o. (Santiago-Almeida corpus, 2001). 1,468 nominal constructions were analyzed, being 34.6% cases of bare constructions.

Semantic interpretation	Presence of a determiner		bare		Total
	N	%	N	%	N
Specific/definite	542	82.1	118	17.9	660
Non-specific referential	279	73.8	99	26.2	378
Proper names	29	35.4	53	64.6	82
Generic	81	34.3	155	65.7	236
Existential	7	13	47	87	54
Attributives	22	37.9	36	62.1	58
<i>TOTAL</i>	960	65.4	508	34.6	1,468

There are similarities between the BC variety and standard BP, especially with respect to the presence of generic and existential bare singular count nouns in argument position, as in (2-3), and with proper names, which varies geographically even in standard varieties.

(2) Criança é bicho danado. (A.G.S., male, 66 y.o.)

*Child is animal naughty*

‘Children are naughty creatures’

(3) Ainda não tinha dotô (A.M.S., female, > 90 y.o.)

*yet not have doctor*

‘There were no doctors yet’

However, 44.1% of the BNs were referential, which is not found in standard BP:

(4) Aí soldado pegô nós pra carregá esse defunto. (A.B.C., male, 73 y.o.)

*then soldier got we to carry this corpse*

‘Then the policeman made us carry the corpse’

Comparing these results from BC, which benefited from the contact with indigenous languages, to those of Helvécia (Ribeiro & Lopes, 2012, a.o.), an isolated rural community, we find very similar results. Helvécia was established in 1818 as a Swiss coffee plantation and, according to Lucchesi et al. (2009), was composed of 200 Europeans and 2000 African and Afrobrazilians. There are generic (5) and existential (6) BNs but also definite, specific referential ones (7):

(5) Boca é pá botá pirão.

‘mouth is to put *pirão*’

A mouth is made to eat *pirão* [*manioc mash*]

(6) Tenho fiado, minha irmã, eu tenho é fiado!

have godchildren, my sister, I have is godchildren!

*I have lots of godchildren!*

(7) Operação deu em cima

‘*surgery* gave in up’

*The surgery was a success.*

According to Baxter & Lopes (2009), over 40% of nominal constructions in Helvécia were determinerless, including referential instances as (7). Thus, it is clear that in both varieties the only constraint to use a determiner is to bear a plural mark, otherwise inexistent in nouns and adjectives, a feature spread throughout non-standard varieties. In standard varieties the plural mark is redundantly found in all elements of the nominal construction.

The reasons why the referential BNs did not make it into standard BP are yet to be explained. However, data from BC and Helvécia show how different social historic processes can produce similar grammars. One of the reasons could be the fact that Bantu and several Brazilian indigenous languages do not have overt determiners. We assume, nevertheless, that the mere coincidence of linguistic features among these languages is not enough to converge into a sole language contact hypothesis for BP. It seems crucial to understand the social historic conditions that made possible the emergence of Brazilian dialects.

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**Nominal placeholders in South American Spanish varieties:  
the case of Rioplatense *coso* and Chilean *este***

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**General issue.** A *placeholder* is a dummy element that speakers use to fill a syntactic slot corresponding to a target expression that they are unable or unwilling to produce (Seraku 2022). In this paper, we present novel data depicting the grammatical behavior of two of these elements in South American Spanish: *cosa* ‘thing’, which is typical for Rioplatense Spanish, and *este* ‘this’, which is characteristic for the Spanish dialect spoken in the central area of Chile. While these placeholders are similar in that they both have a noun-like distribution, they differ in a number of morphosyntactic properties. These differences lead us to propose two distinct analyses for them: we contend that while *cosa* is the head of the NP in which it appears, structures with *este* involve a null noun. Overall, our account illustrates the array of alternative underlying representations that nominal placeholders may have in Spanish.

**The patterns.** Both placeholders under study derive from existing words in (General) Spanish. To begin with, *cosa* ‘thing’ is a noun common to all Spanish varieties; Rioplatense Spanish, however, further displays its masculine counterpart *coso*, which is roughly equivalent to elements such as German *Dingbums* or English *thingy*, e.g., (1). Similarly, *este* ‘this’ is a demonstrative pronoun that is found in all Spanish dialects; Chilean speakers, however, may seemingly use this form as a nominal placeholder preceded by a determiner, e.g., (2). Both *coso* and *este* are highly colloquial in their varieties.

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|--|---|
| <p>(1) No encuentro el            <i>coso</i>.<br/>not find.1SG the.M.SG thing.M.SG<br/>‘I don’t find the thingy.’</p> | <p>(2) No encuentro el            <i>este</i>.<br/>not find.1SG the.M.SG this.M.SG<br/>‘I don’t find the thingy.’</p> |
|--|---|

Both elements can be used with indefinite determiners, e.g., (3) and (5). However, they need to be interpreted as specific indefinites in these contexts, i.e., their referent must be fixed or already determined (Von Heusinger 2002). Thus, they cannot trigger free choice interpretations and reject elements like *cualquier* ‘any’ associated to them, e.g., (4) and (6).

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|---|--|
| <p>(3) Dejé un <i>coso</i> en la mesa.<br/>left.1SG a thing.M.SG in the table<br/>‘I left a thingy on the table.’</p> | <p>(5) Dejé un <i>este</i> en la mesa.<br/>left.1SG a this.M.SG in the table<br/>‘I left a thingy on the table.’</p> |
| <p>(4) *Dame cualquier <i>coso</i>.<br/>give.2SG.me any thing.M.SG<br/>‘Give me anything.’</p>                        | <p>(6) *Dame cualquier <i>este</i>.<br/>give.2SG.me any this.M.SG<br/>‘Give me anything.’</p>                        |

The specificity requirement distinguishes these placeholders from the more generally available noun *cosa* ‘thing’, e.g., (7). Additionally, notice that *cosa* may refer to propositional objects, e.g., (8).

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|--|--|
| <p>(7) Dame cualquier <i>cosa</i>.<br/>give.2SG.me any thing<br/>‘Give me anything.’</p> | <p>(8) Prometiste una <i>cosa</i><sub>i</sub>: [<sub>S<sub>i</sub></sub> que irías].<br/>promised.2SG a thing that go.2SG<br/>‘You promised one thing: that you’d go.’</p> |
|--|--|

On the contrary, *coso* and *este* cannot refer to propositions.

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|---|---|
| <p>(9) *Prometiste un <i>coso</i><sub>i</sub>: [<sub>S<sub>i</sub></sub> que... ]<br/>promised.2SG a thing.M.SG that<br/>‘You promised one thingy: that...’</p> | <p>(10) *Prometiste un <i>este</i><sub>i</sub>: [<sub>S<sub>i</sub></sub> que... ]<br/>promised.2SG a this.M.SG that<br/>‘You promised one thingy: that...’</p> |
|---|---|

*Coso* and *este* can be placeholders for proper nouns, although they exhibit different properties in these contexts. On one hand, *coso* can function as both a masculine or a feminine proper noun, e.g., (11); the noun *cosa* cannot be used to refer to female entities, e.g., (12). This contrasts with the behavior of *este*, which does inflect for feminine, e.g., (13) and (14).

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|--|---|
| (11) Coso dijo eso.<br>thing.M.SG said.3SG that<br>‘The individual you know said that’ | (13) El este dijo eso.<br>the this.M.SG said.3SG that<br>‘The male individual you know said that’   |
| (12) *Cosa dijo eso.<br>thing.F.SG said.3SG that<br>‘The female you know said that’    | (14) La esta dijo eso.<br>the this.M.SG said.3SG that<br>‘The female individual you know said that’ |

Notice that while Rioplatense *coso* does not require a determiner in these contexts, Chilean *este/esta* do. This correlates with the patterns of co-occurrence of definite articles and anthroponyms in both varieties (e.g., De Mello 1992). Basically, while proper nouns referring to humans do not typically accept determiners in Rioplatense, this is the norm in Chilean Spanish (Oroz 1966: 371).

A further difference between *coso* and *este* is that morphological processes that define the nominal class are exclusive to the former. For instance, only *coso* can host diminutive morphology.

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|--|--|
| (15) el cosito de la silla<br>the thing.DIM.M.SG of the chair<br>‘the thingy of the table’ | (16) *el estito de la silla<br>the this.DIM.M.SG of the chair<br>‘the thingy of the table’ |
|--|--|

These elements also exhibit distinct distributions regarding demonstrative pronouns within the nominal phrase. The placeholder *coso* behaves like most nouns in Spanish, allowing for demonstrative pronouns to precede it, e.g., (17), and to follow it, e.g., (18). In contrast, *este* cannot be combined with demonstratives no matter their position, e.g., (19) and (20).

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|--|--|
| (17) el coso ese<br>the thing.M.SG that<br>‘that thingy’ | (19) *el este ese<br>the this.M.SG that<br>‘that thingy’ |
| (18) ese coso<br>that thing.M.SG<br>‘that thingy’        | (20) *ese este<br>that this.M.SG<br>‘that thingy’        |

**Analysis.** We take that there is a projection NumP occupying a position between  $D^0$  and  $N^0$  (Ritter 1995). Furthermore, we follow Panagiotidis (2000) in assuming that (i) demonstratives occupy the Spec, NP position, and (ii) the order N-Dem obtains from moving  $N^0$  to Num $^0$ . With this background, we propose that Rioplatense *coso* is syntactically a nominal head  $N^0$ , e.g., (21). In contrast, Chilean *este* is a demonstrative pronoun licensing an empty noun  $e$  which is the true responsible for the placeholder interpretation, e.g., (22); see Panagiotidis (2003), Saab (2019), i.a., for discussion on empty nouns.

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|---|--|
| (21) [DP el [NumP <i>coso</i> [NP ese [N' <del>/θ/</del> ]]]] | (22) [DP el [NumP $e$ [NP este [N' /θ ]]]] |
|---|--|

This allows to capture the morphosyntactic properties discussed so far. That is, the data in (11) to (14) are expected if both *coso* and  $e$  are nominal heads that may carry  $[\pm F]$  features for gender. Moreover, under the assumption that there is a single position for demonstratives within the NP, the structure in (22) derives the unacceptability of (19) and (20). Finally, the proposal straightforwardly explains the contrast in (15) and (16): *estito* cannot be formed because *este* is a pronoun, not a noun.

We take that the behavior observed from (3) to (10) follows from the hypothesis that placeholders compose units with meta-linguistic reference (Seraku 2023). Roughly speaking, they denote expressions under discussion pertaining to a certain class, i.e., *coso* and  $e+este$  point to salient nouns in a context.

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In this paper I propose an analysis of the modification of nouns by negative prefixes in Italian and English, of the kind exemplified in (1), in terms of dimensionality:

(1) *non-metodista* ('non-Methodist'), *non-luogo* ('non-place'), *non-evento* ('non-event')

I argue that the outcome of this prefixation depends upon the number and kind of dimensions (in the sense of Morzycki 2012) that participate in the lexical semantics of the noun, and upon how many and which of these dimensions are targeted by the negative affix. This permits a unified analysis of Italian *non* as a contradictory negative marker, and derives its unusual semantic variability in nominal modification as a function of its interaction with the variable semantic construal of the noun §Negative prefixes like *non-* and *un-* have often been described in their capacity as adjectival modifiers (Zimmer 1964, Horn 1989, Kjellmer 2005, De Clercq 2013), but they have received far less attention as nominal modifiers (with notable exceptions, cf. Horn 2002, 2005, Zimmer, Carson & Horn 2011). With respect to adjectival modification, *non-* conveys contradictory negation and is a degree modifier (De Clercq 2013) while *un-* conveys contrary negation (e.g., one must be either *American* or *non-American*, but it is possible to be neither *American* nor *un-American*, or neither *happy* nor *unhappy*) §The situation with nominal modification seems at first sight problematic for an analysis of *non* as a uniformly contradictory negator. In some cases, *non-* prefixation does convey contradictory negation, as with a *non-Methodist* vs a *Methodist*, defining complement sets. Instead, a noun like *non-event* does not describe something that is 'not an event', but rather an event that is unrepresentative or disappointing in some of its aspects. A *non-place* is a place, but one that lacks some properties of 'placehood'. Thus, while in the first case *non-* individuates the *complement set* of the positive base, in the second it defines a *subset* of the category to which the noun belongs, one whose members are poor examples of the category §To understand this behaviour, I will refer to degree modification of nouns in general. Morzycki (2009, 2012) describes cases like (2), where *real* and *big* seem to refer to a degree to which John qualifies as a smoker:

(2) John is a *real/big* smoker

Gradable adjectives have been associated with a degree argument (Kennedy & McNally 2005), which can be bound by elements, like *very* or *more*, that are merged in a DegP in the extended AP projection (Corver 1997). Nonetheless, the idea that nouns possess a degree argument and a dedicated DegP is problematic since their semantics are not inherently gradable. For this reason, Morzycki (2012: 187) proposes that nominal degree modifiers either manipulate derived scales of prototypicality or retrieve a scalar meaning from the lexical semantics of the noun. A modifier like *real*, for instance, defines a high similarity of the referent to the prototype of its category, and is ill-formed with nouns that do not have a prototypical instance (e.g., #*Floyd is a real resident/male nurse*, cf. Kamp & Partee 1995). Size modifiers like *big* or *huge*, on the other hand, target one of the properties that constitute the lexical semantics of the noun, or one if its *dimensions* (cf. Sassoon 2007, Moltmann 2009). A modifier like *big* may qualify several dimensions of bigness; *Canada is bigger than the US* is true if referred to size by area, but false if *big* refers to size by population, GDP, and so on. Likewise, a *big smoker* can be a physically large smoker, or somebody who smokes much. That is because being a smoker necessarily comes with a number of dimensions (how frequently or how much one smokes, how enthusiastic one is about smoking, etc.). This multidimensionality is an effect of the verbal origin of the noun, which permits to indirectly retrieve this set of degrees for 'smokerhood'. Accordingly, the semantics of *Clyde is a big smoker* will be as in (3) (Morzycki 2012: 193), which is true if Clyde exceeds a measure  $\mu$  along one of the dimensions that qualify one as a smoker, not necessarily physical size:

- (3) a.  $\llbracket \llbracket \text{DegN } \textit{big} \rrbracket \rrbracket^c = \lambda f_{\langle e, t \rangle} \lambda x. \exists D [D \in \text{dimensions}(f) \wedge \text{large}_c(\mu(D)(x))]$   
 b.  $\llbracket \llbracket \textit{Clyde is a big smoker} \rrbracket \rrbracket^c = \exists D [D \in \text{dimensions}(\text{smoker}) \wedge \text{large}_c(\mu(D)(\textit{Clyde}))]$   
 c.  $\text{dimensions}(\text{smoker}) = \{\text{frequency-of-smoking, enthusiasm-for-smoking, etc.}\}$

Dimensions are thus criteria that define the degree to which an entity qualifies as a member of its category. Not all nouns are (multi)dimensional, though: *sportscar*, or *chair*, do not have several, or even a single quality that alone defines 'chairhood' or 'sportscarhood' (cf. also Hamann 1991). *Real sportscar*, with a prototype modifier, will be fine, because a prototypical sportscar can be retrieved, but a *big chair* will only be understood as a physically large chair, because no dimension(s) of chairhood are retrieved §I propose that dimensionality, understood in this sense, is the origin of the variability of *non-*nouns. Italian employs *non* as a syncretic marker for all types of contradictory

negation (De Clercq 2013). It thus corresponds to English *n't*, *not*, and *non-*. Nonetheless, its interpretation is radically different as a nominal modifier vs as a sentential negator:

- (4) a. Un giglio non è un luogo (‘A lily is not a place’)  
 b. #Un giglio è un non-luogo (‘A lily is a non-place’)

The reason for this opposition lies in the fact that in the case of sentential negation, the wide scope of *non* defines a contradictory relation between the predications contained in *p* and  $\neg p$ . In the case of *non-luogo* and *non-evento*, on the other hand, *non-* either retrieves a scale of prototypicality, or results in the construal of the nouns *luogo* and *evento* as multidimensional. In both cases, dimensionality is forced upon a zero-dimensional noun (like *chair* above), so that some degrees of *placehood*, *eventhood*, etc. are indirectly attributed to it. In the case of *non-evento*, the noun *evento* is construed as composed by a set of dimensions (say, being entertaining, being participated, and so on) and *non* targets one of these dimensions. Crucially, *non* will only apply to one of the dimensions, but it will not affect the membership of the referent to the set of events, places. That is why in this case *non* defines a subset, rather than complement set relation: a *non-event* is an *event* that has a low or non-existent measure in one of its dimensions, or else is distant from the event prototype, but is otherwise an event. That is also why (4b) is infelicitous: since a non-place *is* a place, and given (4a), (4b) can only be false §What remains to be explained is the *non-Methodist* case, where a contradictory reading regularly obtains. The point is that a single dimension goes into making one a Methodist: affiliation to Methodism. Applying the contradictory import of *non* to this monodimensional noun results in defining the complement set of the positive base. Thus, while both a Muslim and a lily are ‘not a Methodist’, only the former can be a non-Methodist, since only the former shares with non-Methodists a defining dimension, religious affiliation (to Methodism):

- (5) a. Un musulmano/un giglio non è un metodista. (‘A Muslim/lily is not a Methodist’)  
 b. Un musulmano/#un giglio è un non-metodista (‘A Muslim/#lily is a non-Methodist’)

Thus, while Morzycki considers *#real non-Methodist* to be infelicitous because its category lacks a prototype, the contribution of *real* is more likely to be vacuous because of the inherent non-gradability of a contradictory opposition, which a degree modifier like *real* cannot operate upon §It is important to stress that both mono- and multidimensional construals are in principle available for the same noun: for instance, a *non-entity* can denote something which is not an entity in the philosophical sense, but also, colloquially, a boring individual. In the latter case, *entity* is creatively construed as a multidimensional concept that involves some properties (e.g., being lively, being likeable, and so on). If someone is lacking in one of these properties, then, while still being an ‘entity’, they will also qualify as a ‘non-entity’, or a bad example of the category. Speaker creativity is thus an important ingredient in nominal modification by negative affixes, precisely as expected: since nouns possess no degree argument, speakers can apply various strategies to retrieve one or more, resulting in different dimensional construals. Speakers can easily produce online *non*-nouns, e.g., *non-inverno* (‘non-winter’, a particularly warm winter) or *non-lavoro* (‘non-job’, a poorly done job). As a result of this freedom of construal, nouns can also behave differently with positive and negative degree modification. While with *big smoker* one among many possible dimensions is quantified upon by the modifier, in the case of *non-smoker* a single dimension, arguably frequency of smoking, is retrieved from the lexical semantics of the noun *smoker*. When *non-* applies to this single dimension, this again results in the definition of a complement set, in line with the contradictory import of *non*. Thus, while at kind level both a (devout) Sikh and a lily are ‘not a smoker’, only the former will felicitously qualify as a *non-smoker*, since a degree of ‘frequency of smoking’ can be retrieved both from the lexical semantics of Sikhs and smokers, but not for lilies:

- (6) a. Un Sikh è un non-fumatore (‘A Sikh is a non-smoker’)  
 b. #Un giglio è un non-fumatore (‘#A lily is a non-smoker’)

Likewise, a kind-level predication like *A Muslim is a non-smoker* will simply be undefined since no dimension of smoking goes into making someone a Muslim §An analysis of degree modification of nouns in dimensional terms thus permits to explain how it is possible to apply a contradictory degree modifier like *non* to nouns, and also naturally explains the different semantic outcomes of this modification, allowing for a unified analysis of Italian *non* as a contradictory negator.

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## Null/ overt subject realization in Spanish heritage and L2 children

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In null subject (NS, *pro*) languages, mastery of null/overt subject (OS) use is late learned and may require prolonged acquisition (Montrul, 2016; Tsimpli, 2014) because complex syntax often involves maturation of extra-linguistic pragmatic-discourse interface faculties. To investigate such a late discourse-pragmatics phenomenon, we examine subject realization in spontaneous production data from Spanish heritage (HL) and second (L2) language children (9-10 years).

Monolingual Spanish adults prefer omission when the topic is not changed or focused, e.g., 80% NSs to OSs in Spain and Mexico (Carvalho et al. 2015). First and third person (Ip, IIIp) differ in rate of OSs (Lastra & Martín Butraguño, 2015; Shin & Erker, 2015; Travis & Torres Cacoullos, 2018), a trend reflecting a range of variables (e.g., dialect, discourse strategies lexical choice). Younger (2-3 years) and older (8-10 years) monolingual children gradually approximate adult usage of NSs (Paradis & Navarro, 2003; Sorace et al., 2009), while English-Spanish bilingual children in an English dominant environment overuse lexical and pronominal subjects when compared to monolinguals (Montrul & Sánchez-Walker, 2015; Silva-Corvalán, 2014). HL and L2 learners often use discourse inappropriate OSs whereas monolinguals prefer NSs (Montrul, 2004; 2016). Past research on Spanish L2 and HL verbal domain has focused mainly on adults, whereas this study compares subject realization by Spanish HL and L2 children following a 50:50 Spanish-English Dual Language Immersion (DLI) program. It aims to determine the impact of this rich input setting on the acquisition and maintenance of these verbal phenomena by L2 and HL learners.

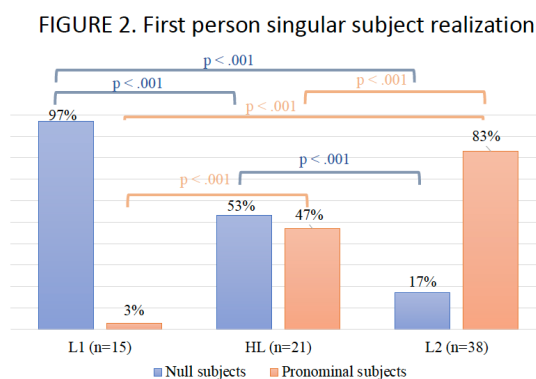
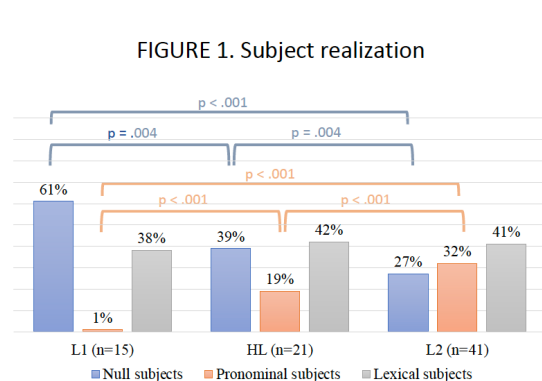
Participants were 21 HL and 41 L2 children in a DLI program of a medium-size US city. A control group of 15 children born and raised in a Spanish majority L1 setting also participated in the study. All children completed the same meaning-based writing production task, a letter to a penpal, intended to elicit spontaneous production. Results are scrutinized for discourse appropriateness of NSs/OSs and I/III person distribution.

The results for IIIp lexical subject realization were comparable for the three profiles, but the overall findings for pronominal subject expression reveal significant differences between all three groups (see Figure 1). Although *HL children* did not lose the prodrop feature, they produced a significantly lower rate of NSs (39%) than L1 children (61%) ( $t = -3.0677$ ,  $df = 32.44$ ,  $p = .004$ ). *L2 children* produced a significantly lower rate of NSs (27%) than both L1 (61%) and HL (39%) children ( $t = 6.5526$ ,  $df = 25.425$ ,  $p < .001$ ;  $t = 3.0161$ ,  $df = 36.786$ ,  $p = .004$ ). They produced a similar rate of lexical subjects (41%) as HL children (42%), but a significantly higher rate of pronominal subjects (32%) than both HL (19%) and L1 children (1%) ( $t = -3.7404$ ,  $df = 48.296$ ,  $p < .001$ ;  $t = -11.903$ ,  $df = 43.455$ ,  $p < .001$ ).

A different picture emerges upon the comparison of Isg and IIIsg, the two most frequent forms in the data. There were no significant differences between the two groups for IIIsg subject realization in topic shift and topic continuity contexts. NSs in topic continuity contexts were favored by L1 (100%), HL (96%), and L2 (94%) children; and overt lexical subjects were preferred in topic shift contexts (L1 children 90%, HL and L2 children 93%). However, the three groups behaved differently in their realization of Isg subjects (see Figure 2). HL children produced significantly more pronominal subjects (47%) than L1 children (3%) ( $t = 4.7582$ ,  $df = 35$ ,  $p < .001$ ). L2 children produced significantly more pronominal subjects (83%) than both L1 and L2 children ( $t = 10.813$ ,  $df = 52$ ,  $p < .001$ ;  $t = 15.976$ ,  $df = 58$ ,  $p < .001$ ).



In sum, our data show that despite the DLI setting, HL children have difficulties with the pragmatic distribution of null and overt subjects, as also noticed in previous similar research with adults (De Prada Pérez, 2020; Montrul, 2004; Otheguy & Zentella, 2012) and children (Montrul & Sánchez-Walker, 2015), but only for Ip singular. We argue that the differential distribution of NSs and OSs is related to the complexity of this syntax-pragmatic interface area (Sorace et al., 2009) and the influence of English, and explain the preponderance of Isg pronominal subjects in HL and L2 production in relation to frequency in the input (Shin & Erker, 2015; Travis et al., 2018).



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## On Italian *di*+art nominals

### Cross-linguistic and cross-categorial explorations

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**Aim and main goals.** This talk compares Italian *di*+art nominals with Romance bare nouns (BNs) and French *des*-phrases. Despite their assumed unified structure (Cardinaletti & Giusti 2016, *et seq.*; Espinal & Cyrino 2022a,b), we show that – like *des*-phrases – *di*+art DPs are referentially stronger than BNs (Dobrovie-Sorin & Beyssade 2012; Carlier 2021) in that they can introduce stable discourse referents. Yet, in contrast to their French counterparts, *di*+art nominals are also referentially bounded, since they can specify the spatial limits of their referents. We argue that the above differences, and the resulting contrasts these nominals are involved in derive from a unique account: they are due to the specific, referentially-anchored readings contributed by choice functions (CH(f)s).

**The comparison.** As for the contrasts between BNs and *di*+art expressions, we point out that BNs never convey specific readings, while *di*+art DPs easily do (1). Furthermore, *di*+art nominals, in contrast to BNs, can appear unmodified in preverbal subject position (2), they can yield wide scope readings when interacting with intensional predicates (3), negation (4), and quantifiers (5); they function as coreferential antecedents for pronominal anaphora (6), and they are compatible with telic aspect (7).

- |        |  |                                       |
|--------|--|---------------------------------------|
| (1) a. | <i>Oggi ho incontrato <b>dei ragazzi</b> che mi avevano presentato ieri.</i> |                                       |
| b.     | * <i>Oggi ho incontrato <b>ragazzi</b> che mi avevano presentato ieri.</i>   |                                       |
|        | 'Today I met some children someone introduced me yesterday.'                 | (Pinzin & Poletto 2021: 4-5, (10-11)) |
| (2) a. | <i><b>Dei bambini</b> suonavano le campane.</i>                              |                                       |
| b.     | * <i><b>Bambini</b> suonavano le campane.</i>                                |                                       |
|        | '(Some) children were ringing the bells.'                                    |                                       |
| (3) a. | <i>Gianni cerca <b>dei professori</b> che sappiano/sanno l'inglese.</i>      | Narrow / Wide scope                   |
| b.     | <i>Gianni cerca <b>professori</b> che sappiano/#sanno l'inglese.</i>         | Narrow / #Wide scope                  |
|        | 'Gianni is looking for some professors that know English.'                   |                                       |
| (4) a. | <i>Non ho letto <b>dei libri</b>.</i>  | Narrow / Wide scope                   |
| b.     | <i>Non ho letto <b>libri</b>.</i>  | Narrow / #Wide scope                  |
|        | 'I didn't read some / any books.'  |                                       |
| (5) a. | <i>Tutti gli studenti hanno letto <b>dei libri</b>.</i>                      | Narrow / Wide scope                   |
| b.     | <i>Tutti gli studenti hanno letto <b>libri</b>.</i>                          | Narrow / #Wide scope                  |
|        | 'All the students read (some) books.'  |                                       |
| (6) a. | <i>Luca ha letto <b>dei libri</b>, e anche Claudia <b>li</b>, ha letti.</i>  | Coreference                           |
| b.     | <i>Luca ha letto <b>libri</b> e anche Claudia <b>ne</b> ha letti.</i>        | #Coreference                          |
|        | 'Luca read (some) books and also Claudia read them.'                         |                                       |
| (7) a. | <i>Ho raccolto <b>delle more</b> (in un'ora) / (??per un'ora).</i>           |                                       |
| b.     | <i>Ho raccolto <b>more</b> (*in un'ora) / (per un'ora).</i>                  |                                       |
|        | 'I picked up (some) blackberries (in an hour) / (for an hour).'              | (C&G 2018: 143, (12b)-(14b))          |

Considering these differences, a comparison with French *des*-phrases – a language that does not allow argumental BNs – is revealing. As Carlier (2021) has recently observed, *des*-phrases behave differently from BNs regarding their ability to occur in preverbal subject position; to convey wide scope readings when interacting with intensional predicates and negation; and to function as coreferential antecedent for pronominal anaphora. However, differently from Italian *di*+art nominals and in parallel to BNs, they can only license narrow scope readings in the presence of other quantifiers; and they are (generally) incompatible with telicity. To account for this behavior, Carlier (2021) argues that *des*-phrases are referentially stronger than BNs: they can introduce stable discourse referents, allowing them to function as preverbal subjects, as coreferential antecedents, and to enter scope relations with intensional predicates and negation. Nevertheless, on a par with Romance BNs, *des*-phrases cannot specify the spatial limits of their referent. Such referential unboundedness prevents them from entering scope interactions with quantifiers and to appear in telic contexts (see Table 1 for a summary of such contrasts).

**Proposal and discussion.** Extending Carlier's (2021) line of reasoning to Italian, we defend that, in contrast to *des*-phrases, Italian *di*+art nominals are referentially strong, but also referentially bounded. As for *referential strength*, we reason that – especially due to the coexistence of BNs in the grammar – this is the property that allows *di*+art to specialize for the expression of specificity (although a non-specific interpretation is not excluded). We subscribe to a definition of specificity in terms of von Heusinger's (2011, 2019) notion of 'referential anchoring', according to which a specific reading is brought about by

the anchoring of a referent to another sentence-internal element (e.g., the subject, quantified expressions, or the speaker). More concretely, we assume that the specific readings allowed by *di*+art are the result of the application of a semantic CH(f) (Reinhart 1997; Winter 1997; von Stechow 2011 a.o.), since CH(f) express referential specificity (Winter 2001). A CH(f) takes a non-empty set as its input and returns a specific (sub-)set of individuals which are members of the initial set. This assumption not only explains why *di*+art nominals can enter scope interactions with other operators, but it also accounts for an empirical observation that, to our knowledge, has gone unnoticed: *di*+art expressions apparently escape scope islands. Since, as (8) shows, CH(f)s can be existentially bound in all scope sites, *di*+art is able to interpretatively scope out of the relative clause and above the universal quantifier (8a).

- (8) *Tutti i professori hanno sentito la notizia che degli studenti hanno copiato.*  
 a.  $\exists f[\text{CH}(f) \wedge \forall x[\text{professors}(x) \rightarrow \text{heard}(x, \text{the news that } f(\text{students}) \text{ copied})]]$  – widest scope: specific reading of the indefinite  
 b.  $\forall x[\text{professors}(x) \rightarrow \exists f[\text{CH}(f) \wedge \text{heard}(x, \text{the news that } f(\text{students}) \text{ copied})]]$  – intermediate scope: non-specific reading of the indefinite  
 c.  $\forall x[\text{professors}(x) \rightarrow \text{heard}(x, \text{the news that } x\text{'s students copied})]$  – narrowest scope: bound variable interpretation of the indefinite

As for referential boundedness, this property correlates with telicity (Krifka 1989, 1992). Also in this case referential specificity is at play. Despite the lack of a quantificational structure providing referential boundaries, if the referent of *delle more* in (7a) is specific (i.e., referentially anchored), then the speaker has in mind a specific set of blackberries s/he picked. Hence, no proper subpart of *delle more*<sub>specific</sub> constitutes the same specific set denoted by *delle more*<sub>specific</sub>; and the sum of *delle more*<sub>specific</sub> + *delle more*<sub>specific</sub> cannot give, as a result, the same specific set (i.e., the same specific quantity of blackberries). That is, when *di*+art nominals are interpreted specifically, their reference is quantized (Krifka 1989): they refer to a specific quantity known by – i.e., referentially anchored to – either the speaker or the subject. Consequently, they can appear in telic contexts (see also Ihsane 2021 with respect to minor examples in which French *des*-phrases are just barely compatible with telicity). What is more, our hypothesis also explains why *delle more* in (7a) is also (marginally) compatible with an atelic aspect: in this case, *delle more* gets the (dispreferred) non-specific interpretation. Its reference is thus not quantized (or bounded), but cumulative, as it is always the case with BNs.

The present proposal also accounts for the “small quantity” meaning, which – despite the lack of a quantificational structure – is generally associated with *di*+art (C&G 2016, *et seq.*). Such quantity meaning is implied by *di*+art’s bounded reference, as attested – although not discussed in the literature – by their ability to generate quantity-based scalar implicatures (as it is usually the case with quantitative elements like *some* Chierchia 2017, a.o.). When a speaker utters a specific *di*+art nominal as in *Dei miei amici sono venuti* ‘Some friends of mine came’ (and not the universally quantified *Tutti i miei amici sono venuti* ‘All my friends came’), it generates the scalar implicature that ‘not all students came’. When not at issue, (i) implicatures do not arise in downward-entailing environments and (ii) they can be easily cancelled (Grice 1975, Rett 2020). As expected, this is what happens with *di*+art nominals, as shown in (9).

- (9) a. *Non ho letto dei libri.* b. *Ho letto #(dei) libri. In realtà, ne ho letti moltissimi.*  
 INT. ‘I didn’t read any book.’ ‘I read some books. In fact, I read lots of them.’

In (9a), when the nominal is interpreted under the scope of negation (i.e., non-specifically), its quantitative meaning disappears (i.e., the speaker didn’t read any book). Hence, the quantity-based scalar implicature does not arise under negation, a prototypical downward-entailing context. Conversely, in upward-entailing environments, *di*+art – in contrast to other nominals that do not carry any quantitative meaning, like BNs – can be substituted by a stronger, entailing element of the quantity scale <*di*+art/some, a lot, most, all>, as attested in (9b). This shows that the implicature is indeed present and can be cancelled.

	BNs	Des-phrases	Di+art
Specificity	-	+	+
Pre-verbal subject	-	+	+
Coreferential anaphora	-	+	+
W.S. with intens. preds.	-	+	+
W.S. with negation	-	+	+
W.S. with Qs	-	-	+
Telic aspect	-	-	+

Table 1. Romance BNs, French *des*-phrases, and Italian *di*+art nominals.

**Sel. Ref.** Cardinaletti, A. & G. Giusti. 2016. The syntax of the Italian indefinite *dei*. *Lingua* 181, 58-80.  
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**On Tense, agreement, and the syntax of null and overt subjects:  
Evidence from Romance infinitives**

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As is well known, in languages like Spanish or Italian, subjects can appear in both preverbal and postverbal positions and may also be null (see e.g., Rizzi 1982), as illustrated in (1):

- (1) a. Juan habla italiano      b. Hoy habla Juan      c. Habla italiano  
       John speaks Italian        today speaks John        speaks Italian

Despite the fact that this parameter has been thoroughly studied, the exact syntactic properties responsible for this variation in the realization of subject DPs remain unclear. Although previous research has focused on finite clauses, in what follows I argue that examining the syntax of adverbial non-finite clauses actually provides a better opportunity to understand these phenomena. While finite clauses in Italian, Spanish, Galician, and European Portuguese seem to be similar in terms of agreement and the properties illustrated in (1), adverbial non-finite clauses all behave differently; Italian is similar to English in that overt subjects are disallowed, Spanish and Galician allow postverbal overt subjects, Galician allows null subjects in inflected infinitives, and European Portuguese allows preverbal, postverbal, and null subjects in inflected infinitives.

Here I argue that postverbal overt subjects in non-finite clauses in Spanish, Galician, and Portuguese are licensed by a separate Agr(eement) head with a full set of  $\phi$ -features, and only when the Agr head is realized by overt  $\phi$ -features or by verb movement can a null subject be licensed. Previous proposals have assumed  $\phi$ -features in infinitival T (see e.g., Torrego 1998 for Spanish) but it is not clear how these Western Romance languages differ from Italian or how PRO is still possible in the presence of these  $\phi$ -features. Here I explore these and related issues.

The analysis I propose here assumes that T(ense) and Agr are separate heads in these languages (see e.g., Belletti 1990). The main motivation for this analysis comes from the fact that variations in tense do not affect agreement morphology (see Bobaljik 1995: 263). Moreover, in some of these languages existential verbs inflect for tense but not for agreement, and Galician and Portuguese even allow inflected infinitives. Here I make the novel proposal that non-finite clauses also involve a separate Agr head, which in regular non-finite clauses would be  $\phi$ -defective and license PRO. Evidence for this approach comes from the fact that in Spanish and Galician the infinitive of the existential verb *haber* seems to project more structure than its finite (Agr-less) counterpart. As shown in (2), a non-agreeing quantifier is allowed with *be* (2a) but not with *haber* (2b); interestingly, it is allowed post-verbally with *haber* in the non-finite adverbial clause in (2c):

- (2) a. Todo son hombres en ese despacho (cf. *son todo* also okay)  
       all.sg are men in that office  
       ‘It’s all men in that office’  
       b. \*Todo hay hombres en ese despacho (cf. \**hay todo*)  
       all.sg have men in that office  
       c. Al haber todo hombres en ese despacho, no estaba cómoda  
       to-the have.INF all.sg men in that office not was comfortable  
       ‘Since it’s all men in that office, I didn’t feel comfortable’

With the above considerations in mind, I propose that Western Romance differs from Italian in that the Agr head in Spanish infinitives may optionally contain a full set of  $\phi$ -features able to value nominative case on a DP, but not compatible with PRO. Historical evidence for this analysis comes from the fact that inflected infinitives were possible in Spanish in previous stages of the language (see Egido-Fernández 1992) and, consequently, overt subjects were more common in areas adjacent to Galician-Portuguese speaking territories (Maurer 1968). Novel synchronic evidence comes from infinitives whose subject DPs can be interpreted as first and second person plural. As

shown in (3), a subject DP can be interpreted as first person in a finite clause with first person plural agreement (3a) but not when the DP is a complement, unless a first person plural clitic is added to the verb (3b). Interestingly, the first person interpretation is possible in a non-finite adverbial clause (3c), which suggests that the infinitive displays  $\phi$ -features:

- (3) a. Los españoles estamos muy descontentos (Spanish)  
 the Spaniards are.1pl very unhappy  
 ‘We Spaniards are very unhappy’  
 b. Los otros europeos no \*(nos) entienden a los españoles  
 The other Europeans not we.pl understand.3pl to the Spaniards  
 Intended meaning: ‘The other Europeans don’t understand us Spaniards’  
 c. Al estar los españoles muy descontentos, ...  
 To-the be.INF the Spaniards very unhappy  
 ‘Since we Spaniards are very unhappy, ...’

In order to license a null subject in non-finite clauses, however, overt agreement is needed, as in Galician and Portuguese inflected infinitives. This fits in well with approaches that treat null subjects as DPs whose phonological features are deleted at PF (see e.g., Biberauer et al. 2010) and also correlates with the fact that null subjects are not possible in Spanish infinitives.

Galician inflected infinitives, however, pose the question of why preverbal overt subjects are not possible in a context in which null subjects are (both are allowed in Portuguese). An important difference, however, is that inflected infinitives are optional in Galician (but required in Portuguese), suggesting that the infinitive is morphologically complete without the agreement. A way to formalize this difference is to assume that in Portuguese infinitives the finite verb moves all the way to Agr, as in regular finite clauses in all these languages (and thus all the possibilities shown in (1) above are attested) but in Galician infinitives Agr actually lowers to T. This entails that a null subject can be licensed by overt Agr alone, but a preverbal overt subject requires T to move to Agr, possibly in order to value nominative case in Spec-Agr.

A final puzzle regarding null subject licensing concerns the fact that in some tense and aspect combinations finite clauses in these languages actually display null/zero agreement, yet a null subject is still allowed despite the ensuing ambiguity, as shown in (4):

- (4) Antes salía (Spanish)  
 Before leave.IMPERF.PAST.INDICATIVE  
 ‘I/he/she used to go out before’

Since the finite verb in these languages moves up to Agr, it seems then that the exact condition that licenses a null subject is that the Agr head is phonologically realized, which could be achieved either by overt  $\phi$ -features (cf. Galician inflected infinitives) or by verb movement (as in (4)).

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**On documenting language change as it happens:  
The periphrastic construction “motion verb + *a* + infinitive” in Italian  
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**Introduction.** Grammaticalization refers to the process a lexical item undergoes in the course of time to become a functional item. It involves four main mechanisms (Heine and Kuteva 2002): semantic bleaching, extension, decategorialization and phonetic reduction. It is well known that motion verbs often partake in grammaticalization process: Bybee *et al* (1994) find, for examples, that they are the most common base for the creation of new *grams* for future forms. In some Romance languages, for instance, forms based on motion verbs are the base for the creation of analytic futures, the *go*-futures, that are, in various degrees, replacing the synthetic form of future, as it is seen in the French *je vais chanter* ‘I’m going to sing’ and the Spanish *voy a cantar*, same meaning.

**The problem.** While the fact that motion verb may undergo grammaticalization is widely attested cross-linguistically, it is less understood how this process comes about. Motion verbs in Italian appear to be a promising case to address the question. In Italian motion verbs can be used in what appears to be an aspectual periphrasis (‘motion verb + *a* + infinitive’, see exx. (1) and (2)), which suggests that they have undergone grammaticalization.

- (1) *Oggi vado a spiegarvi Aristotele*  
Today go-1SG *a* explain-INF-you Aristotle  
‘Today I’m going to explain Aristotle to you’
- (2) *Questa situazione si è venuta a creare a causa della pandemia*  
This situation REFL is come *a* create-INF due to the pandemic”  
‘This situation has arisen due to the pandemic’

In this periphrasis a motion verb appears to have lost its original lexical meaning in favour of a grammatical one (more precisely aspectual: culminative, inchoative, and iterative are typically assigned to this periphrasis in literature, see Strik Lievers 2017); this seems to be compatible with the ‘bleaching’ process. Moreover, a reanalysis process can be assumed to have taken place, which suggests a ‘decategorialization’ process: thus, from a biclausal sentence with a motion verb followed by a purpose clause the structure has become a monoclausal sentence, as for instance clitic climbing shows (see exx. (3) and (4); cfr. Cinque 2001):

- (3) [VP motion verb [CP *a* [VP infinitive]] > [FP motion verb [FP *a* [VP infinitive]]]
- (4) {*Ve lo*} *vado a spiegar(e) {velo} subito.*  
{you it} go-1SG *a* explain-INF- {you-it} right away  
‘I’m going to explain it to you right away’.

This process appears to affect several verbs (Strik Lievers 2017), but the most common and undoubtedly the most studied are *andare* ‘to go’, *venire* ‘to come’, and *tornare* ‘to come back’. From a diachronic viewpoint the periphrasis ‘motion verb + *a* + infinitive’ dates back to the early stages of Italian. Strik Lievers (2017), by using the MIDIA corpus, shows that *andare* + *a* + infinitive is attested since the fourteenth century, while *venire* + *a* + infinitive and *tornare* + *a* + infinitive are found since the thirteenth century. Although the periphrasis was in use in Old Italian, it does not seem to have been particularly common in written texts through the history of Italian (Strik Lievers 2017). In the past forty years, however, it appears to have been increasingly used. Renzi (2012), Levie (2015) show that it is widely used in the language of journalists and television, as well as in academic and bureaucratic discourse, which suggests a process of ‘change from above’ in a variationist perspective (Renzi 2012, following Labov’s framework).

**Methodology.** The available corpora of Italian appear to be well suited to document in great detail the undergoing process. In particular two corpora will be used to investigate what changes the periphrasis has been running into, CORIS and KIParla, which document two different

registers, written (formal) and spoken (informal). CORIS (CORpus di Italiano Scritto, ‘Written Italian Corpus’) is a synchronic corpus of written Italian that contains 165 million words, and it is divided into sub-corpora (such as press, narrative and academic prose, etc.). KIParla is a corpus of spoken Italian that contains 100 hours of recordings of spontaneous conversations and semi-structured interviews as well as lectures and academic oral exams. In CORIS, I searched for motion verb followed by *a* and an infinitive form. In KIParla, which is not *pos*-tagged, I searched for the various verb forms followed by *a*, then manually selected the ones with an infinitive verb. We expect that if the use of motion verbs as functional verbs is a change from above, CORIS should include more occurrences of motion verbs in this capacity than KIParla.

**Results.** Preliminary data appear to confirm the hypothesis of a change from above. Building on the examination of 1800 occurrences of *andare*, *venire*, and *tornare* it became apparent that the periphrastic form occurs more frequently in the more formal subcorpora, such as academic or bureaucratic prose. In addition, the verb *tornare* is used the most often in the periphrastic structure (up to 100% in the bureaucratic subcorpus, 88% on average), followed by *venire* (64% on average) and then *andare* (43% on average). As for the KIParla corpus, the verb *andare* is used in periphrastic constructions at a rate that is similar to what is found in CORIS, while *tornare* and *venire* are less used in the periphrastic construction (56% and 14% respectively) and have overall fewer occurrences than in CORIS. These facts do not surprise us, given that the KIParla corpus contains a more informal diaphasic variety than the CORIS corpus. However, they show a striking divide between *andare* and *tornare* on one hand, which are attested as functional verbs both in written and in spoken usage, and *venire* on the other, which is mainly attested as a functional verb in formal registers.

Moreover, the query allows us to draw some generalizations about the aspectual nuances of the periphrases. First, the inchoative aspectual value is more highly attested in KIParla than what had been verified in earlier investigations (Strik Lievers 2017), in which the culminative value was judged as the most common value. Second, the inchoative reading appears to be overwhelmingly associated with the presence of first and second person subjects, while the culminative meaning appears to be connected to the presence of a non-agentive subject. This is shown quite clearly in the data obtained w.r.t. *andare*. Moreover, there appear to be some occurrences with *andare* in KIParla that could be described as future forms, even if the context does not allow us to draw undoubtful conclusions.

**Conclusions.** Data collected querying two corpora of contemporary Italian allow us to show the trajectory of a change involving some motion verbs which have undergone a process of grammaticalization. The data show a higher presence of the periphrastic construction in the more formal varieties, corroborating the hypothesis that this is a ‘change from above’, but with some nuances than were not earlier noticed: motion verbs have undergone a similar process of grammaticalization but have followed different patterns of behaviour across language varieties, both in terms of how frequent they are in the periphrastic construction and in the aspectual value they convey. *Andare* and *tornare* show a more consistent change, while *venire* seems to be restricted to the more formal variety with a propensity for culminative meaning.

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Tableaux (4) and (5) show that the playful word will violate any faithfulness constraint that enforces a match to the stress position of the original Spanish word. Even though final, penultimate, and antepenultimate stress are present in Spanish (e.g. Harris, J. (1983)), the resulting playful form is a paroxytone.

What happens when the words have a heavy syllable? In both bi- and trisyllabic words, the pattern is very consistent. If there is a H syllable in either final or penultimate syllable in the playful form, the H syllable will attract the stress, as shown in (6).

- (6) a. 'H . L        →    L . 'H     Example: ['om.bre]        →    [bre.'on]        'man'  
 b. L . 'H        →    'H . L     Example: [pa.'tron]        →    ['trom.pa]        'boss'  
 c. H . 'L . L     →    L . L . 'H    Example: [san.'ko.tʃo]        →    [ko.tʃo.'san]        'stew'  
 d. H . 'L . L     →    L . 'H . L    Example: [es.'ki.na]        →    [na.'es.ki]        'corner'

If the H syllable ends up in antepenultimate position, the stress will be located on a L penultimate syllable ([ka.pi.'tan] >> [tan.( 'pi.ka)] 'captain'); five words in my data follow such pattern.

The majority of the bi-syllabic words show this pattern (93.22% -110 words- of my data); however, there are 8 exceptions: for example, ['fies.ta] >> ['ta.fies]<sup>5</sup> 'party'. Interestingly, 5 of the 8 exceptions correspond to the Costa Rican variation. For the trisyllabic words in my database, the pattern is much more regular (98.6% -74 words- of my data), with only one exception: [ben.'gan.sa] becomes [sa.'ɣa.βen] 'revenge'. This exception is also peculiar as it deletes one coda from the original word, and it as well comes from the Costa Rican data.

These data suggest that the right-aligned trochee in Spanish is quantity sensitive. In order to account for these patterns, we need an additional constraint: the Weight-to-Stress Principle (WSP) says that heavy syllables are stressed, and it is violated by an unstressed heavy syllable (Kager, 1999). Tableau (7) shows the role of WSP in the reordered form of [san.'ko.tʃo] 'stew': stress is assigned to the consonant-final syllable, which happens to be in final position; stress is not assigned to the penult. Harris (1983) affirms that paroxytonic stress in consonant-final words is severely restricted, which supports the stress pattern of this playful word.

(7)

[san.'ko.tʃo]	WSP	Ft=Trochee	Align
[ko.( 'tʃo. san)]	*!		
[ko.tʃo.( 'san)] <sup>5</sup>			
[('ko.tʃo).san]	*!		*

These patterns provide a novel probe into the metrical structure of Spanish illustrating The Emergence of The Unmarked (TETU) in metrical structure, whereby the unmarked stress pattern is a quantity-sensitive trochee.

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<sup>5</sup> This exception comes from the Costa Rican data. One reviewer indicated that for them [ta.'fies] is preferred, which would actually support the pattern.

# On the definite article *el*/heading clauses in Spanish (*el-que*): some syntactic and semantic properties

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This paper deals with the construction formed by the non-mandatory definite article *el* heading finite embedded clauses (CPs) in Spanish (henceforth *el-que*, cf. (1) Leonetti 1999; Picallo 2001, 2002; Serrano 2015).

- (1) a. **El que** llegues tarde me molesta [subject]  
The that arrive.SUB-2SG late me.DAT bothers  
'The fact that you're late bothers me'  
b. Lamento **el que** llegues tarde [object]  
regret.1SG the that arrive.SUB-2SG late  
'I'm sorry that you arrive late'

Even though it has been usually considered 'optional', we will show that *el* involves semantic and syntactic properties, so that its presence is not 'free'. We argue that *el* is a referentiality mark that licenses a [d-linking] operator (Haegeman & Urogi 2010, H&U) in Spec, CP (along the lines of Roussou (1994), Melvold (1991) or Haegeman (2012) among others).

We propose that *el* is a referentiality mark parallel to that in DPs (cf. DP-hypothesis, Abney 1987). For concreteness, among the possible situations denoted by the clause, the article refers to one unique salient situation turning the clause into a definite entity belonging to the real world. Syntactically, the article is in a higher position taking the CP as its complement (not a null noun is involved, cf. Picallo 2001, 2002). Moreover, in Spec, CP (more specifically in Spec, ForceP), a null [d-linking] operator licensed by *el* raises from the TP making the clause opaque since it occupies the position where extracted elements land (cf. Campbell 1996, Aboh 2004 for a specific operator in DPs). Both syntactic and semantic facts confirm this.

**Semantic facts.** *El-que* clauses cannot appear in assertive contexts. Its information must be part of the Common Ground (CG, Stalnaker 1978), the foreground (Levinson 1983) and it cannot be at-issue (Roberts 1998), as the examples from corpora show -the CG is underlined; *el-que* information related to the CG in *cursive*:-

- (2) Con todo, el alcohol se ha ido haciendo cada vez más asequible al consumo femenino y, consecuentemente, hay más mujeres alcohólicas. Aunque, si bien ya se acepta *el que la mujer beba incluso fuera de las comidas*, sigue existiendo una marcada intolerancia (...)

Even so, alcohol has become more accessible to female consumers over time; therefore, there are more alcoholic women. Yet, although it is accepted *that a woman drinks, even outside of meals, an important rejection still exists* (...)

This claim is supported by the fact that *el-que* clauses cannot appear in *out-of-the-blue* contexts, like an answer (3):

- (3) A: ¿Qué ha pasado? (What happened?)  
B: \*Juan ha impedido **el que** bajaran los sueldos  
Int: 'Juan prevented them from lowering the salaries'

Plus, *el-que* can co-occur with epistemic adverbs that mean certainty, but not with those that mean doubt:

- (4) ...Es lo que está determinando **el que** {**realmente/ efectivamente/ \*posiblemente/ \*tal vez**} la gente joven reciba unas dosis tremendas de luz ultravioleta  
'It is what's causing (the) that {really/in effect/ \*perhaps/\*maybe} young people get such tremendous doses of ultraviolet lights'

Moreover, the information inserted in *el-que* is more difficult to cancel since it is interpreted as a fact or a result (Dubosc 2011):

- (5) La noticia muestra **el que** los precios han subido, #*aunque no se sabe si es cierto*  
The news shows the that the prices have increased #although no SE knows if is true  
(6) La noticia muestra que los precios han subido, *aunque no se sabe si es cierto*  
The news shows that the prices have increased although no SE knows if is true

## On the definite article *el*/heading clauses in Spanish (*el-que*): some syntactic and semantic properties

Syntactic facts. The article licenses the operator and c-commands it; in turn, the operator c-commands the clause. Regarding its final position, the OP moves from an internal position until Spec, Force where the evidential information of the clause is encoded (Rizzi 1997). However, it must be base-generated somewhere in TP since it bounds the whole clause (‘event relativization’, H&U; Melvold 1991) in order to be able to quantify over the clause (i.e., the set of possible worlds) in a similar fashion to that of other clausal operators (e.g., relatives). For concreteness, we argue that the operator generates in the functional projection EvidP (Cinque’s 1999 hierarchy; cf. H&U; Haegeman 2012 for a similar proposal). A preliminary representation is proposed below:

(7)  $[_{DP} D [_{ForceP} Op_1 [_{Fin} que [_{FinP} [_{Fin} [_{EvidP} t_1 \dots]]]]]]]$

Some syntactic facts further endorse this proposal. First, the subjunctive: *el-que* mostly appears with this mood in the CP, which is the mood for non-assertion (Hooper & Thompson 1974) and it is used for factivity in Spanish (Quer 2001 a.o.). Interestingly, with non-factive verbs that can select indicative as well (8), the subjunctive is preferred with the article (9):

(8) El acuerdo contempla **que** la empresa {pueda/puede} hacer laborables cuatro sábados este año  
 ‘The agreement considers that the company can.SUB/can.IND have four Saturdays as working day this year’

(9) El acuerdo contempla **el que** la empresa {pueda/?puede} hacer laborables cuatro sábados este año  
 ‘The agreement considers that the company can.SUB/?can.IND have four Saturdays as working day this year’

Moreover, the article blocks extraction (10b), as definite DPs do (Roussou 1994; Leonetti 1999) due to the definiteness and the operator. This further endorses that *el*’s properties are not due to factivity since it is not restricted to factive verbs, and extraction patterns are not the same with factive verbs (10a) and with *el-que* (10b). Sheehan & Hinzen (2011) link the *more-edger* position with referentiality and the reluctance to extract from, being *el-que* evidence for this claim:

(10) a. Me molesta que digan eso → ¿Qué te molesta que digan?  
 Me.DAT bothers that say.SUB.3PL that → what you.DAT bothers that say.SUB.3PL  
 b. Me molesta **el que** digan eso → \*¿Qué te molesta **el que** digan?  
 Me.DAT bothers the that say.SUB.3PL that → \*what you.DAT bothers the that say.SUB.3PL

‘It bothers me that they say that’ → ‘What does bother you that they say?’

Besides extraction, neither TopP (11) nor FocP (12) (and any Main Clause Phenomena, cf. Haegeman 2012; Hooper & Thompson 1973; H&U 2010) can be projected in *el-que* clauses:

(11) a. \*La noticia destaca **el que** esa medida no la han aprobado (\*CLLD in *el-que*)  
 The news highlights the that *that measure* no ACC have.3PL approved

b. La noticia destaca **que** esa medida no la han aprobado (CLLD *bare-que*)

(12) a. \*Lamentamos **el que** LOS LIBROS DE LORCA no te hayan gustado (y sí los de Alberti)

‘Int: We’re sorry that THE BOOKS OF LORCA you didn’t like (but Alberti’s you did)

b. Lamentamos **que** LOS LIBROS DE LORCA no te hayan gustado (y sí los de Alberti)

However, these data are expected. The OP raises from its initial position until Spec, ForceP. Therefore, a projection endowed with similar features cannot be projected in its path since it would trigger intervention effects (Rizzi 2004). If the proposed operator is [+d-linking] and has [+Quantif.] features (H&U), neither wh-questions nor topics nor MCP (included foci) are expected.

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# Opening the black box of social meaning:

A pragmatic sociological treatment of variable liaison in spoken French

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Variable liaison (VL) is a phenomenon in spoken French where a latent consonant at the end of a word may (1a,c) or may not (1b,d) be pronounced if the following word begins with a vowel. Formal accounts of VL have pointed to high degrees of lexical determinism, but a full account requires a better understanding of VL's socio-stylistic aspects. Social factors, in addition to linguistic ones, have long been considered fundamental to the understanding of VL (see, e.g., Delattre, 1955, et seq.; Encrevé, 1988), though have remained elusive throughout the literature. Previous work has highlighted the link between VL and writing, proposing that the realization of consonants which are always present orthographically might lead listeners to interpret meanings such as *authority* or *professional expertise* (Hornsby, 2020), but has left the social aspects of this link underdeveloped. How are such meanings related to a reference to writing? Here, we examine the social meanings of VL by mobilizing Eckert (2008)'s conception of *indexical fields* within the framework of pragmatic sociology (Boltanski & Thévenot, 1991, et seq.). Indexical fields characterize potential associations between sets of social features (identities, personae, social conditions, ideological or stylistic stances) and linguistic forms through the lens of indexicality. Pragmatic sociology is a critical sociological approach that provides a model to understand precisely *how* social interpretation happens: social interactional situations are governed by specific, locally-meaningful value systems (termed *worlds*) that actors refer to in order to justify their behaviors and produce critique. These worlds render certain meanings available for interpretation while rendering others 'contingent' to the situation.

Here, we aim to unpack the black box of social meaning: if indexical fields contain multiple potential meanings, how are these meanings structured relative to one another? In our approach, the meanings are organized according to the internal structure of the world governing a given situation. Certain meanings are thus made available for contextualized interpretation. Following Hornsby (2020), we propose that the meanings in the indexical field of realized VL correspond to various social representations of writing. We provide a sketch of these representations which have been discussed in the fields of philosophy, anthropology, and sociology, and which we organize into four clusters: *Preparedness*, reflecting the effort and forethought put into a written text; *The Republican Standard*, reflecting the orthographic norm taught within the French school system, *Variability*, reflecting the pragmatic competence to make deviations from this norm, a mark of belonging to the elite, and *Ideological Materiality*, reflecting the social and juridical authority of codified language in writing.. Any of these or further meanings might be at play when "writing" writ large is indexed in a social interaction; we propose that it is through the prism of a given world that a subset of meanings can be targeted for interpretation in a given situation.

In the present study, we test the proposed link between VL and these representations of writing experimentally. We prepared and normed 32 stimulus items that each included a short passage describing a character in an interaction typical of one of four of Boltanski & Thévenot's proposed *worlds* (8 items per world). Each item included a short quotation from the main character including two possible VL sites which was presented auditorily to participants in two guises (one with the liaisons realized, one without). We then asked participants ( $N=60$ , recruited online through Prolific) to select which of the two recordings they thought best corresponded to the character in the situation. We found that participants had a preference for the realized variant only on trials in the Industrial World, where professionalism and expertise are valued as a way of establishing one's place in a merit-based hierarchy (see Fig. 1). Following our pre-registered analysis plan, we used a logistic mixed-effects model to test that the preference for the realized variant was higher in the Industrial World than the average preference for VL in our task (represented as a solid line in Fig. 1;  $\beta=0.30$ ,  $SE=0.09$ ,  $\chi^2(1)=12.1$ ,  $p<0.001$ ).

We interpret our findings according to the theoretical framework described above, and propose that VL's relation to writing is only pertinent in situations where values like professionalism and expertise are at issue (i.e., social situations couched within the industrial world), reflected notably in the cluster we identified as *Preparedness* within the indexical field described above. We thus significantly expand upon the theoretical underpinnings of the social meanings associated with VL that have been proposed in the literature, while providing an experimental test of our hypotheses.

- (1) a. *trop important* [tʁopɛ̃pɔ̃ʁtɑ̃] 'too important'  
 b. *trop important* [tʁoɛ̃pɔ̃ʁtɑ̃] 'too important'  
 c. *les vins étrangers* [levɛ̃zɛtʁɑ̃ʒ] 'foreign wines'  
 d. *les vins étrangers* [levɛ̃ɛtʁɑ̃ʒ] 'foreign wines'

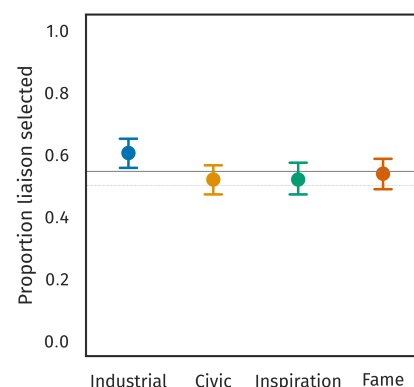


Figure 1: Proportion realized liaison selected by world.

Link to materials, analysis and pre-registration:

[https://osf.io/j8gev/?view\\_only=625e332cfcb44293b67b2b1de5349e60](https://osf.io/j8gev/?view_only=625e332cfcb44293b67b2b1de5349e60)

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**Optimization in allomorphy: the case of definite articles in Italian**

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The Italian definite articles in (1b) show phonologically conditioned phonemic variants, unlike the earlier forms in (1a), which could occur in all phonological contexts (Salvi/Renzi 2010).

(1a)		masc	fem	b.		masc	fem
	singular	lo	la		singular	lo, l, <u>il</u>	<u>la</u> , l
	plural	li	le		plural	li, <u>i</u>	<u>le</u>

The inventory in (1a) is characterized by a bimorphemic /l/+V-structure, where /l/ represents a kind of deixis while V marks number and gender. The novel forms in (1b) violate UNIFORM EXPONENCE ("Morphological features (or combinations thereof) must have a single phonological exponent") (Kenstowicz 1997)), as neither definiteness nor gender/number combinations are expressed uniformly. The latter violation also disrupts the syntagmatic cohesion expressed by identical agreement markers (boldfaced in (2a)), s. the bracketed article in (2b).

(2)a. Masc/sing: **Lo** stupido libro è costoso 'The stupid book is expensive'

b. Masc/sing: [Il] nuovo libro è costoso 'The new book is expensive'

Although the variants in (1b) are phonologically conditioned they are claimed to not serve phonological optimization (Nevins 2011:2371), challenging the central claim of Optimality Theory that constraints are violated only to satisfy higher-ranking constraints. In fact, OT analyses positing single underlying representations, from which the variants in (1b) are derived, appear stipulative. (Repetti (2019) crucially refers to the notion of "morphologically (non)-salient position" and assumes distinct epenthetic vowels, /i/ and /o/, both associated with def/masc/sing.)

I will argue that the allomorphy in (1b) is in fact optimizing, given reference to pertinent structure. That structure consists of (sets of) variants associated with specific morphosyntactic features (e.g. {[lo], [il], [l]}<sub>DEF/MASC/SING</sub>, {[li], [i]}<sub>DEF/MASC/PLUR</sub>) where the inclusion of individual items is determined by phonemic contrast, regardless of whether or not alternations recur or structure is predictable (cf. the notion of "morpheme unit" in Harris 1942). The relevant inventories in (1b) are easily verified synchronically, resulting from diachronic sound changes (see A). Allomorphy is considered optimizing when the distribution of all items can be explained by way of ranking independently motivated (universal) constraints, as is illustrated in B.

**A. Establishing allomorphs**

All segmental differences represented in (1b) are contrastive (e.g. the alveolar vs. palatal lateral /li/ <gli> 'the [masc/plur] : /li/ <li> 'there'). The specifics of table (1b) have been shown to result from historical conditions on sound change in various contexts (e.g. the disappearance of /l/ in the masc/plur cell, due to palatalization of /l/ before /i/, including a context where the lateral was absorbed to yield /i/ (Salvi/Renzi 2010:1428); /i/-epenthesis to yield /il/ only in connection with prior vowel loss in postvocalic contexts, which affected masc/sing only (Salvi/Renzi 2010:1426).

**B. Optimizing the distribution of allomorphs**

Synchronically, the allomorphs in each cell in (1b) exhibit a complementary distribution, defined by the left margin of the following word. The distribution indicates two cases, organization of the article as a separate syllable (adjunct) outside of the phonological word of the stem vs. prosodic integration, where the article and stem form a single syllabification domain. As for masc/sing, "il" illustrates the first case, while "l" and "lo" illustrate the second case (s. (3b) and (3c)).

(3)a.	( <u>il</u> ) <sub>σ</sub> (kane) <sub>ω</sub>	b.	(lur.to) <sub>ω</sub>	c.	( <u>los</u> .kafo) <sub>ω</sub>
	'the' <cane> 'dog'		'the' <urto> 'impact'		'the' <scafo> 'hull'

The prosodic organization in (3a) satisfies the constraint ALIGN (STEM, L, ω, L) ("Every left stem boundary coincides with a phonological word boundary"), lending the adjoined syllable a special status as "basic" allomorph (s. underlinings in (1b)). Violation of ALIGN (STEM, L, ω, L) in (3b,c)



indicates satisfaction of (higher-ranking) phonological markedness constraints pertaining to the stem-initial structure: the choice of /l/ before a vowel-initial stem satisfies ONSET ("A syllable needs an onset") while the choice of /lo/ before /sC/-clusters allows for /s/ to form a coda, rather than violating \*Appendix (no syllable appendices) or SON (The sonority in the onset must increase) (cf. Davis 1990). FAITH requires complete correspondence of the phonemic structure of input and candidate, where any member of a set of allomorphs may serve as reference.

(4) {lo, l, il} <sub>DEF/MASC/SG</sub> [urto] <sub>N/MASC/SG</sub>	FAITH	ONSET	ALIGN (STEM,L,ω,L)
(il) <sub>σ</sub> (fur.to) <sub>ω</sub>	*!	*	*
(i.lur.to) <sub>ω</sub>		*!	*
(lo.ur.to) <sub>ω</sub>		*!	*
(lo) <sub>σ</sub> (ur.to) <sub>ω</sub>		*!	
<del>☞</del> (lur.to) <sub>ω</sub>			*
{le} <sub>DEF/FEM/PL</sub> [ore] <sub>N/FEM/PL</sub>			
(lo.re) <sub>ω</sub>	*!		*
<del>☞</del> (le) <sub>σ</sub> (o.re) <sub>ω</sub>		*	

The preference of (il)<sub>σ</sub>(kane)<sub>ω</sub> over \*(lo)<sub>σ</sub>(kane)<sub>ω</sub> indicates constraints on adjoined syllables, such as \*(ONS/SON)<sub>ADJ</sub> (No sonorant in the onset of an adjunct). (Similar constraints on prosodic adjuncts affect the stability of (unstressed) head prefixes in Germanic languages, s. the remaining English items *be-*, *en-* *a-*). Listing all allomorphs in the input captures the relevant choices, s. (5):

(5) {lo,l,il} <sub>DEF/MASC/SG</sub> [kane] <sub>N/MASC/SG</sub>	FAITH	*(ONS/SON) <sub>ADJ</sub>	ONSET	ALIGN (STEM,L,ω,L)
(lo) <sub>σ</sub> (kane) <sub>ω</sub>		*!		
<del>☞</del> (il) <sub>σ</sub> (kane) <sub>ω</sub>			*	
{la, l} <sub>DEF/FEM/SG</sub> [perla] <sub>N/FEM/SG</sub>				
(il) <sub>σ</sub> (perla) <sub>ω</sub>	*!		*	
<del>☞</del> (la) <sub>σ</sub> (perla) <sub>ω</sub>		*		

The emergence of the specific complementary distributions among the allomorphs in (1b) is then optimizing in two ways, both phonological, concerning the improvement of the "worst" onsets and improved conformity of (non-integrated) material to particular adjunct-specific markedness constraints. The analysis accounts for variance (Marotta 1993), e.g. (il)<sub>σ</sub>(knutʃe)<sub>ω</sub> <C.N.U.C.E.> but (loksilofono)<sub>ω</sub> <xilofono> (/better sonority sequencing in the onset /kn/ than in /ks/), (luo.vo)<sub>ω</sub> <uovo> but (il)<sub>σ</sub>({u~v}ikend)<sub>ω</sub> <weekend> (the grapheme <w>, unlike <u>, associates also with a consonant <v> (<watt> /vat/, <wafer> /vafer/), which due to lower sonority is a better onset).

The notion of listed allomorphs can also be explored for alternative inputs, including the complete inventory in (1b) in the input. The candidate "(il)<sub>σ</sub>(perla)<sub>ω</sub>" would then be eliminated due not to violating FAITH, but GENDER AGREEMENT. One could further explore the optimization of inventories, including the hypothesis that UNIFORM EXPONENCE is the more important the more highly marked the morphology (the least allomorphy for fem/plur, the most for masc/sing in (1b)).

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## Person effects in null / pronominal subject alternation in Romanian: a corpus study

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So-called pro-drop languages vary considerably with respect to the frequency of null subjects. Moreover, the alternation between pronominal and null subjects seems to be sensitive to various factors in Romance languages (Mayol, 2012). This paper adds Romanian data from corpus studies to shed more light on these factors. In a corpus study on spoken Brazilian Portuguese, a language having shown a decrease in the use of null subjects over time (Duarte 2000), Correa Soares et al. (2020) found that pronominal subjects were more frequent with 1<sup>st</sup> and 2<sup>d</sup> person (72%) compared to 3<sup>rd</sup> person (39%). While null subjects are generally more frequent in European Portuguese, Duarte (2000) also shows a higher frequency of pronominal subjects for discourse persons (35% for 1<sup>st</sup>, 24% for 2<sup>nd</sup> pers.) compared to 3<sup>rd</sup> pers. (21%) in a spoken corpus. Similarly, in spoken Spanish, Manjón Cabeza-Cruz et al. (2016) and Ávila & Segura Lores (2022) found a higher frequency of 1<sup>st</sup> pers. sing. pronominal subjects (Granada: 24.7%, Malaga: 33.5%) compared to 3<sup>rd</sup> pers. sing. (Granada: 10.6%, Malaga: 7.69%).

We annotated extracts from a written Romanian corpus (Parseme-ro 1.2, from the Agenda newspaper: 447,464 sentences, 13M. words) and a spoken corpus (CoRoLa: 152 radio recordings) (Barbu Mititelu et al., 2018). The average sentence length is about 18 words in both corpora. We extracted 400 non-embedded sentences, 200 from text and 200 from speech, half with null, half with pronominal subjects (1, 2) and manually annotated them with: subject type, person, animacy, number, gender, verb lemma, voice, polarity and animacy.

The most interesting effects were those related to person, which differ considerably from previous corpus studies on other Romance languages: logistic regressions show a significant main effect of person ( $\beta = -2.85$ ,  $sd = .30$ ,  $z = -9.6$ ,  $p < .001$ ), with a much higher frequency of null subjects for discourse persons in particular in the written corpus (interaction:  $\beta = 3.80$ ,  $sd = .59$ ,  $z = 6.4$ ,  $p < .001$ ). This tendency can (among others) be accounted for by Ariel's (1990) Accessibility Theory: the more salient a referent is, the less explicit the subject will be. Since dialogue persons are inherently human, they are more prominent in discourse. It is also in line with Dobrovie-Sorin & Giurgea (2013)'s suggestion that pronominal subjects are used in Romanian to mark contrast and emphasis, and to avoid gender ambiguities (only 3<sup>rd</sup> pers. pronouns are marked for gender). However, saliency cannot account for the inverse pattern found in other Romance languages. It is thus possible that different factors play a role across Romance languages. Larger and more fine-grained parallel corpus studies as well as controlled crosslinguistic experiments will be necessary to shed more light on these differences.

Gender, animacy, number, and agentivity did not play a statistically reliable role. In the general model, voice did not have a significant effect either. However, we are facing a sparse data problem here because of the limited occurrences of non-active voice in both corpora (12% non-active). We therefore looked at active and non-active voice cases separately (see Figures 2a,b). Pronominal subjects are more frequent than null subjects for non-active voice ( $\beta = -1.37$ ,  $sd = .42$ ,  $z = -3.23$ ,  $p < .01$ ). This preference is marginally stronger in the written corpus ( $\beta = 1.43$ ,  $sd = .80$ ,  $z = 1.78$ ,  $p < .08$ ). No significant differences in frequency of null and pronominal subjects were found for active voice. Because of the sparse data problem, more controlled experimental studies will be useful here as well.

Even though more data will be necessary, we conclude that Romanian subject alternation is sensitive to person (and possibly to voice). These results are generally more pronounced in written than in spoken corpora. We assume that the norm for the use of null subjects is playing a

role here in particular for Discourse Persons. Editing processes aiming at more explicit gender disambiguation may have increased the use of pronominal subjects for 3rd person in the written corpus. Ongoing corpus research (embedded clauses) will provide further evidence about factors responsible for subject alternation, which are necessary to explain the difference between Romanian and other pro-drop languages.

- (1) Deci nu pentru bani am ales-o.  
 so not for money AUX.1SG chosen.PST.-CL.3SG.F.ACC  
 ‘So, I haven’t chosen her for the money.’ (CoRoLa, 2014)
- (2) Ea va rămâne deschisă la Timișoara până în 15 mai.  
 she will remain open.SG.F at Timisoara until in 15 May  
 ‘She will still be opened, in Timisoara, until the 15<sup>th</sup> of May.’ (Parseme-ro, 2020)

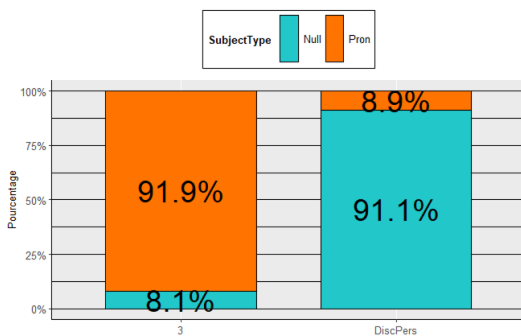


Fig 1a. Person effect in Romanian written corpus

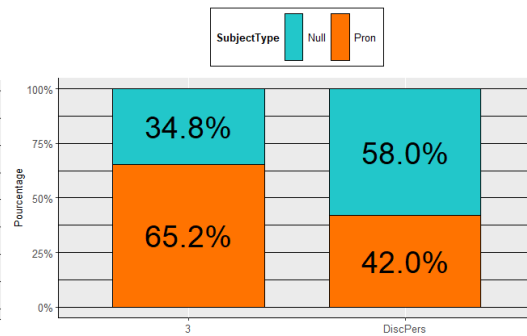


Fig 1b. Person effect in Romanian oral corpus

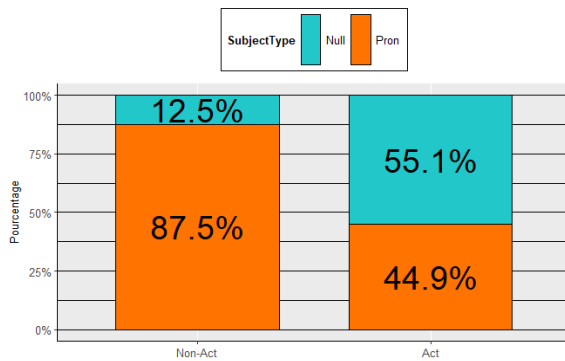


Fig 2a. Voice effect in Romanian written corpus

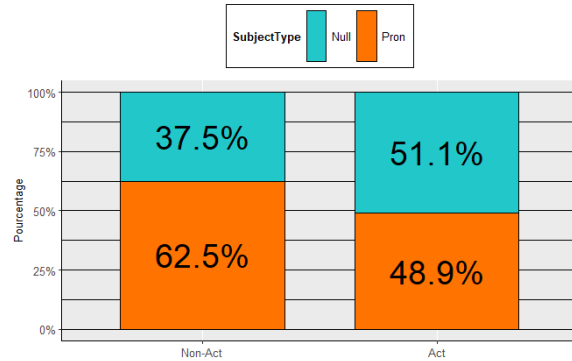


Fig 2b. Voice effect in Romanian oral corpus

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SPLB is an unnamed language spoken by very few people in the center of France, in the village of Saint-Pierre-le-Bost in the north of the *croissant linguistique*, traditionally a contact area between the occitan and oil language groups (Guérin 2022). This talk targets three unrelated issues raised by its pronominal system, presented in (1) (the source is the author’s fieldwork), providing an account in Strict CV (Lowenstamm 1996, Scheer 2004)

The first issue is the form of accented pronouns. Other Romance varieties, such as French or Italian, use the same pronoun in the dative and accented version (*lui* in French); but SPLB uses the [sø] form, which is general in the reflexive 3P. At the same time, unlike in the reflexive paradigm, [sø] is *not* generalized to all 3P forms. Instead, one finds two surprising forms. For the 3FSG, a form [jɛl], distinct from the NOM [al], is attested; and for the 3PL, [jyzot] and [jɛlzot] exhibit the diachronic generalization of [zot] from 1PL and 2PL to 3PL. These three forms share an initial glide followed by a vowel [ɛ] or [y] that is not attested elsewhere for this person.

The second issue concerns inconsistencies in the 1PL and 2PL forms. Neither the vowel /u/ nor the liaison consonant [z] are ever present in 1PL NOM, but regularly surface in the 2PL. In the non-NOM unaccented 1PL forms, /u/ and /z/ are in complementary distribution: either [u] or [z] surface, never both.

The third issue concerns possessive pronouns. Unlike French, SPLB distinguishes between M and F in plural pronominal suffixes (and articles – in yellow). However, that distinction is lost in possessives with plural possessor (magenta blue). If the possessed is singular, that gender distinction goes entirely unexpounded; and if the possessed is plural, a suffix [e] expounds both genders.

(1)

		unaccented				accented	possessed					
		nom	acc	dat	ref		msg	fmsg	mpl	fmpl	def	dem
sg	1	e <sup>j</sup>	mø	mø	mø	mø	m-õ	m-a	m-o	m-a		
	2	tə	tø	tø	tø	tø	t-õ	t-a	t-o	t-a		
	3	m	o <sup>l</sup>	lə	ji	sø	sø	s-õ	s-a	s-o	s-a	lə
	f	al	la	ji	sø	jɛl	s-õ	s-a	s-o	s-a	la	kœl
pl	1		n	nu/_C ; nz/_V		nzot	nut	nut	nut-e	nut-e		
	2		vu <sup>z</sup>	vu/_C ; vuz/_V		vuzot	vut	vut	vut-e	vut-e		
	3	m	e <sup>z</sup>	lo <sup>z</sup>	ji	sø	jyzot	luɕ	luɕ	luɕ-e	luɕ-e	lo
	f	al <sup>z</sup>	la <sup>z</sup>	ji	sø	jɛlzot	luɕ	luɕ	luɕ-e	luɕ-e	la	ke

The analysis of the first two problems illustrates the power of abstract, defective phonological representations. I begin with the form of accented pronouns. To explain the accented form in light blue, I assume that the exponent /ji/ in (2) expresses 3P in general. This exponent, however, cannot stand on its own. In the 3MSG, it is therefore replaced by /sø/. However, in the 3FSG (3) and 3MPL (4), it is combined with /al/ and /uzot/ respectively, thereby deriving the fused [jɛl] and [jyzot] (/i+a/ => [ɛ]; /i+u/=>[y]). The shaded VC parts of the skeleton are deleted through VC Reduction, Gussmann & Kaye (1993).

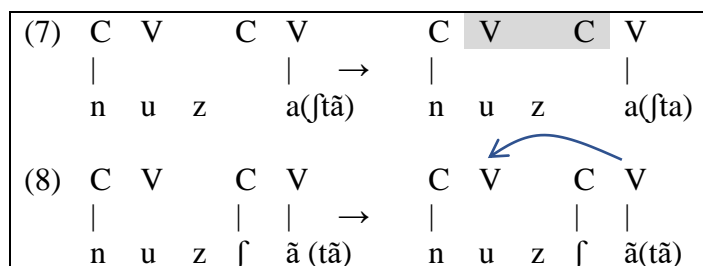
(2)	C	V	(3)	C	V	C	V	C	V	(4)	C	V	C	V	C	V
	j	i		j	i	a	l				j	i	u	z	o	t

As for the differences between 1PL and 2PL, first, I assume that the plurality in these forms is marked underlyingly as in (5,6): a floating /<sup>u</sup>/ with a position V, and a floating /<sup>z</sup>/ with no position (in other words, minimally different from French, where /u/ is associated).

(5)	C	V	(6)	C	V	
	n/v	u	z	v	u	z

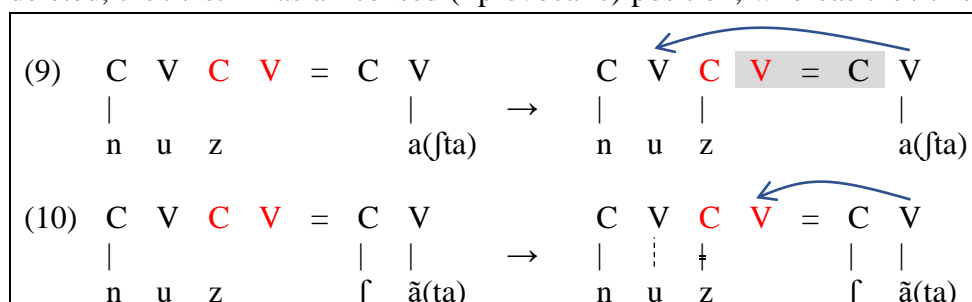
As associated in the 2PL because it coalesces with the preceding labial onset, as in (6) (e.g. Bucci 2013).

On to the NOM 1PL in context, the disappearance of the entire plural exponent /<sup>uz</sup>/ before V-



initial verbs then follows from VC Reduction, as in (7) ‘we buy’. In (8) ‘we sing’, before a C- initial verb, /<sup>uz</sup>/ also disappears, since the position of the floating /u/ is governed (as indicated by the blue arrow), and the /z/ has no position.

Assuming that VC-reduction applies only once, the 1PL non-nominative clitics ([nu]/\_C ; [nz]/\_V) can be derived in the following way from the same basic representation as in (5). Suppose that clitics are separated from their host by one CV unit (the unit in red in 9,10). In (9) ‘to buy for us’, after the shaded VC is deleted, the /<sup>z</sup>/ still has a licensed (=prevocalic) position, whereas the /<sup>u</sup>/ is governed and thus



syncopated. Before a C-initial verb in (10) ‘to sing for us’, there can be no VC-deletion. The /<sup>z</sup>/ does not associate because the

available position is not licensed, whereas that of the /<sup>u</sup>/ is ungoverned, and so /<sup>u</sup>/ is realized. To summarize, it seems that the difference between subject and object markers can be attributed to a greater level of cohesion of the subject markers to their host (the lack of the additional CV).

Finally, I discuss the realization of the gender and number of the possessed on possessive pronouns. The correct generalization seems to be the following. A gender distinction is compatible with singular possessor ([mõ, ma] vs [mo, ma]), but there is an incompatibility between a plural possessor and a gender distinction in the possessed.<sup>1</sup> For this reason, one does not find \*[nut-o, nut-a] (cf. Spanish *nuestros, nuestras*). However, the *number* of the possessed can still be expressed by recruiting the same exponent [-e] used in the demonstrative paradigm (bright green), which also neutralizes the gender distinction. Comparing this state-of-affairs to French *notre cheval, nos chevaux*, one may suggest that a plural *suffix* is required in SPLB because the base is identical for both singular and plural possessors (e.g. [nut, nut]).

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<sup>1</sup> This incompatibility can be formalized as impoverishment (Halle 1997): the gender feature is deleted in the context of plural possessors, however defined.

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## Pitch range and perception of politeness in Peninsular Spanish requests

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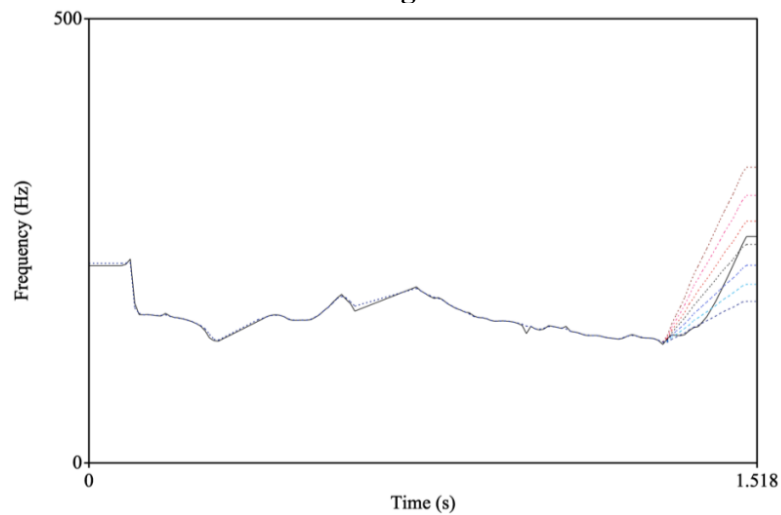
Research in the field of pragmatics (Brown & Levinson, 1987) and phonetics (Ohala, 1984; Ladd, 2008) has suggested that suprasegmental features may be indicators of politeness. More specifically, the frameworks of the Frequency Code Theory (Ohala, 1984) and Politeness Theory (Brown & Levinson, 1987) have claimed that higher pitch range is used to show politeness. Politeness Theory (Brown & Levinson, 1987) provides a framework that employs three contextual variables to determine the degree of politeness: power, distance, and imposition. Research on diverse languages such as Korean (Brown et al., 2014) or Catalan (Hübscher et al., 2017) found that pitch is one of the prosodic mitigators used to show politeness or formality. While much of this work has focused exclusively on the social variable of the power difference between interlocutors (Brown et al., 2014; Hübscher et al., 2017), little systematic analysis has addressed the differential effects of power, distance, and imposition on the perception of suprasegmental phonetic features

Given the general lack of systematic analysis of power, distance, and imposition in the analysis of suprasegmental features, the current study investigates whether higher pitch range is perceived with higher degrees of politeness. Polar questions (i.e., yes/no questions) in Spanish serve as a strong test-case, as they (canonically) rely on a rising final tone contour for interrogative meaning (Henriksen, 2012). Polar questions are the most conventionalized way of performing a request in Spanish. The hypothesis for this experiment accounts for an increase in the pitch range of the final contour of polar questions will be perceived as more polite as indicated by the Frequency Code Theory (Ohala, 1984).

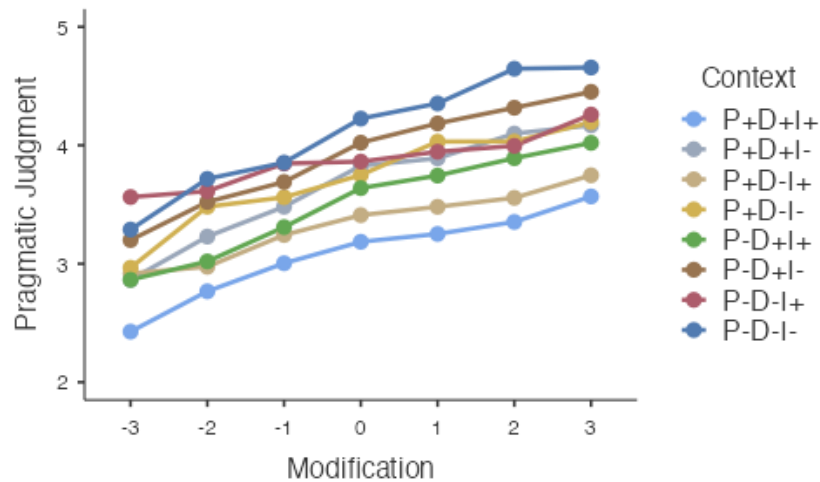
To test this hypothesis, 101 Spanish native speakers ( $M_{\text{age}} = 24.673$ ,  $SD = 3.88$ ) from Madrid, Spain completed a judgement task experiment. This experiment consisted of a rating task in which participants were presented with a context and a single modified stimulus that they had to rate in terms of how they perceived its degree of politeness (e.g., Nadeu & Prieto, 2011). The situations were balanced in terms of power, distance, and imposition (two levels each), as determined by a prior norming task. The goal of this experiment was to elicit participants' pragmatic interpretation towards difference pitch ranges in polar questions, which ended with a L\*H% contour and had the same syntactic and syllabic distribution. The normalized pitch range of the final contour of these each stimulus was manipulated in steps of 1.75 semitones each through a resynthesis method using Praat. The modifications consisted of steps 7-levels (see Figure 1). Participants had to rate the stimuli using a 7-point Likert scale. The labels for the endpoints of the scale ranged from "impolite" to "very polite," with the center point being labelled "appropriate". A total of 11312 responses were analyzed (101 participants x 16 situations x 7-levels of modification).

The results from the judgement task showed that participants rated higher pitch range as more polite in all the situations (see Figure 2). The different levels of power (P), distance (D), and imposition (I) showed to have an influence on the ratings by which less face-threatening situations are rated as more polite. The findings of this project shed light on the role of pitch range on the perception of politeness and support the Frequency Code Theory (Ohala, 1984) as higher pitch correlates with the perception of higher degree of politeness.

## Figures



**Figure 1.** Example of the 7-step modification of the final contour. The solid line represents the original sound, whereas dotted lines represent the modifications.



**Figure 2.** Average score for each context. Higher scores indicate that listeners rated the stimulus as more polite. The modifications range from 3 as the modification with higher pitch range to -3 with the lowest pitch range.

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## Polysemy of Italian *altro* ‘other’ between alternativity and incrementality

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1. Natural languages present a vast array of phenomena lying at the interface between grammar and logic. Linguists have shown that many interpretational phenomena rest on an implicit system of natural logic (Chierchia 2013). A large part of these phenomena belongs to pragmatics, in particular the domain of scalar reasoning (Fox 2007). Another area that deserves careful study is the rich domain of functional items. The modern enterprise of formal semantics has flourished in the fruitful attempt to analyze a core component of this functional domain, namely, that part of the vocabulary that consists of quantificational determiners and adverbs (Frege 1892, Russell 1905, Montague 1973). Less studied within this tradition are words that exhibit a clear logical meaning in some core uses, while showing a more diversified syntactic distribution and, correlatively, a variation in their semantic behavior, from the type of purely functional (logic-based) items to that of more contentful lexical items. The study of such words provides an interesting window on the interface between language and logic, as it shows, often in insightful ways, how logical meaning interacts with linguistic structure.

2. We consider one such word in Italian, *altro* (‘other’), and examine its syntactic distribution and semantic properties. *Altro* is encountered in at least four different syntactic contexts, typical of various grammatical classes, which can be ordered from the most functional to the most lexical ones (all examples are from the CORIS corpus, Rossini Favretti *et al.* 2002):

### *Quantificational (quantifier) and WH-word modifier*

- (1) a. Il cosiddetto problema ontologico, come ogni altro problema metafisico, è insolubile  
‘The so-called ontological problem, like any other metaphysical problem, is insoluble’  
b. oltre allo spirito di sacrificio, esiste un'altra condizione fondamentale  
‘beyond the spirit of sacrifice, there is another fundamental condition’  
(2) a. Dimmi chi altro si preoccuperà di te se non io?  
‘Tell me who else will care about you, if not me?’  
b. Chi altri sa di me e di quella foto?  
‘Who else knows about me and that photo?’

### *Pronominal (pronoun)*

- (3) a. Nietzsche è forse il filosofo che più di ogni altro è riuscito a mettere in luce l'alterità tra le virtù aristocratiche fondate sulla volontà di potenza  
‘Nietzsche is perhaps the philosopher who more than anyone else managed to highlight alterity among the aristocratic virtues based on the will to power’  
b. si deve avere riguardo alla dimensione dell'impresa, al tipo di organizzazione tecnico produttiva, alla natura e all'importanza del lavoro svolto dal lavoratore detenuto, alla durata prevedibile della carcerazione, alla possibilità di sostituzione, e altro.  
‘one has to consider the size of the enterprise, the type of technical and productive organization, the nature and the importance of the detainee's work, the expected duration of imprisonment, the possibility of replacement, and other.’

### *Qualificational (adjective)*

- (4) la sinistra di allora era altra da quella di oggi  
‘left-wing politics of that time was qualitatively different from today's’

### *Referential (noun)*

- (5) Amando e rispettando se stessi, si ama e si rispetta l'altro.  
‘By loving and respecting ourselves, we love and respect the others (*lit.* the other).’

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Semantically, *altro* varies from an adjective-like meaning, roughly corresponding to ‘qualitatively different’, as in (4), and the generic referential meaning of ‘person different from the self’, as in (5), to a two-sided logical meaning: (i) negation of identity (*different*-interpretation; e.g. *non questo libro, un altro* ‘not this book, another one’), as in (1a-3a), and (ii) increment along a scale (*more*-interpretation; e.g. *vorrei (ancora) un altro caffè* ‘I’d like to have one more coffee’), as in (1b-3b).

**3.** We focus on the two-sided logical meaning of *altro*, which has been the subject of recent studies. Syntax-based studies (Cinque 2015, Kayne 2021), mostly focused on cardinal noun phrases, have shown that there is a correlation between the two logical values of *altro* and different syntactic positions that this word occupies within the NP’s extended projection: a lower position, close to the noun head and associated with kind/type-level entities, would select the *different*-interpretation (*altra persona* = ‘other kind of person’), whereas a higher position, close to the cardinal phrase and associated with token-level entities, would select the *more*-interpretation (*altre due persone* = ‘two more tokens of the kind PERSON’). Other accounts, based on corpora and paying more attention to inter-sentential relations, claim that *altro* is lexically ambiguous between ‘different’ and ‘more’: the *different*-interpretation would be triggered by the discourse relation of contrast, while the *more*-interpretation by an additive discourse relation (Gianollo & Mauri 2020).

**4.** We analyze the issue whether the two logical meanings of *altro* are irreducible to one another, or whether one of them is to be taken as basic, with the other one being derived via pragmatic inference. Based on extensive corpus data, we argue that the *different*-interpretation is the semantic core of *altro*, since it is demonstrably (even though sometimes only trivially) present in the semantic representation of all sentences containing *altro*, while the *more*-interpretation is the result of the interaction between the core non-identity meaning and features of the larger discourse context. Among the latter, Gianollo and Mauri’s additive and contrastive relations play a major role. On the one hand, our proposal differs from Cinque’s (2015) account in that the core non-identity meaning posited by our theory is introduced in the sentence’s semantic representation no matter what the syntactic position of *altro* is, while discourse context contributes to determining the relevant ontological level at which non-identity is to be evaluated. On the other hand, we depart from Gianollo & Mauri’s (2020) account in that we provide a unified semantics for *altro* and neatly separate its core non-identity meaning from other components to be ascribed to discourse structure. Our analysis is cast in Asher & Lascarides’ (2003) *Segmented Discourse Representation Theory*, a flexible framework allowing a modular representation of the separate contributions of *altro* and discourse structure. It contributes to our understanding of the interactions between logic and linguistic structure from the perspective of a polysemous word.

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### **Porque-causal clauses in Brazilian Portuguese**

This work focuses on Brazilian Portuguese (BP) adverbial causal clauses introduced by *porque* ‘because’ exemplified in (1).

- (1) a. *A Maria vai embora [porque o Pedro chegou].*  
‘Maria will leave because Pedro has arrived.’  
b. *A Maria saiu, [porque a luz tá apagada].*  
‘Maria left, because the lights are off.’  
c. *Compre um sanduíche, [porque eu tô com fome]!*  
‘Buy a sandwich, because I’m hungry!’

I assume that causal clauses in BP are subordinate clauses and propose that, according to their level of integration, they can be adjoined to three distinct positions in the matrix. To describe these different levels of integration, I adopt the classification proposed by Frey (2016) and Badan and Haegeman (2022), in which adverbial clauses are classified as central (adjoined internally to TP), peripheral (adjoined externally to TP), and non-integrated (adjoined to a projection linked to the speech act). It is worth noting that for the grammatical tradition, in general, these clauses are classified according to their meaning as causal subordinate clauses (1a) or as explicative coordinated clauses (1b-c). The syntactic description proposed here however does not start from the meaning of the clauses: the adjunction positions are defined from syntactic diagnoses involving the scope domain of the matrix. It is from its adjunction position that the adverbial acquires a meaning: central adverbials modify the eventuality encoded in the matrix, peripheral adverbials provide a proposition that serves as evidence for the relevance of the main proposition, and non-integrated adverbials modify the speech act.

Nevertheless, when it comes to the meaning of causal clauses, it is necessary to mention the well-known proposal of Sweetser (1990), which distinguishes the relations established between adverbials and the matrix considering the domain to which they belong: content domain, epistemic domain, and speech act domain. The sentence expresses a causal relationship belonging to the content domain when the eventuality described in the causal clause is interpreted as the direct reason for the situation described in the main clause, as in (1a). Causal clauses in the epistemic domain express the reason why the speaker believes the main clause to be true, as in (1b). On the other hand, causal clauses in the speech act domain are said to justify the utterance of the main clause, as in (1c). With respect to the different levels of integration discussed above, I argue that content clauses are central, epistemic clauses are peripheral, and speech act clauses are non-integrated.

At first glance, there seems to be a one-to-one correspondence between the three adjunction positions mentioned and the three domains proposed by Sweetser, however her proposal targets the speaker’s intention and contemplates the meaning of the content of adverbials, not the meaning derived from their adjunct positions. In fact, as we will see, the relationship between the different adjunct positions mentioned and the different interpretations proposed by Sweetser is not a one-to-one relationship. Based on Frey (2016), this paper proposes that this relationship takes place as follows: content clauses can be adjoined to all three positions, epistemic clauses can only be peripheral or non-integrated, and speech act clauses can only be non-integrated. Conversely, central clauses can only get a content reading, peripheral clauses can get both an epistemic and a content reading, and non-integrated clauses can get all three readings.

To show that BP causal clauses can be classified as central, peripheral and non-integrated, I discuss three syntactic diagnoses: binding, scope of negation and the property of embedding in a completive clause. Tests involving the phenomena of binding and scope distinguish central clauses from peripheral and non-integrated clauses, while the test on the possibility of

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embedding distinguishes peripheral clauses from non-integrated ones.

Central clauses are within the scope of the matrix clause, as shown in (2); they are adjoined internally to TP, modifying the main eventuality, so the only possible interpretation for them is in the domain of content.

- (2) \**Ela<sub>i</sub> vai embora porque a Maria<sub>i</sub> tá cansada.* (violation of Principle C)  
she<sub>i</sub> goes away because the Maria<sub>i</sub> is tired

Peripheral clauses are not within the scope of the matrix clause (3) and may be embedded, together with the matrix they modify, under a verb that selects a completive clause (4).

- (3) *Ela<sub>i</sub> deve ter saído, porque a Maria<sub>i</sub> nunca deixa a luz apagada.* (Principle C is not violated)  
'She must have gone out, because Maria never leaves the light off.'

- (4) *Pedro disse que Maria deve ter saído, porque a luz tá apagada.*  
'Pedro said that Maria must have gone out, because the light is off.'

They are adjoined externally to TP and associated with the proposition expressed by the matrix, so they can then provide a justification for the conclusion enunciated in the main clause, having a reading in the epistemic domain. In addition, they also accept a reading in the content domain: they can convey the cause of the main eventuality in cases where the speaker considers a causal relationship as part of his assessment of the world. That is, the causal clause is not directly about a relationship between facts, but about a relationship between assumptions that certain facts are true (5) (Frey 2020). The adverb 'unfortunately' attests to the peripheral character of the causal clause.

- (5) *João acredita [que Pedro está nervoso porque infelizmente suas mãos estão tremendo].*  
'John believes [Peter is nervous because unfortunately his hands are shaking].'  
*Ele tem medo de ter Parkinson como seu pai.*  
'He is afraid of having Parkinson's like his father.'

On the other hand, non-integrated clauses are those that are not within the scope of the matrix and cannot be fitted into a completive clause (6).

- (6) \**Pedro confessou que [porque ele precisa ser sincero, a filha dele não gosta da Maria].*  
Pedro confessed that because he needs to be honest, his daughter doesn't like Maria

They are associated with a speech act projection, thus modifying the speech act itself. Because they are associated with the utterance, at the top of the structure, non-integrated causal clauses do not exclusively convey a speech act reading, but can equally convey a content reading and an epistemic reading. A non-integrated clause can be added as a speaker's comment: therefore, it is modifying the speech act, but it may be conveying the cause of the main eventuality or a justification for the conclusion enunciated in the matrix (7).

- (7) *A Ana deve estar doente, porque, honestamente, ela está muito pálida!*  
'Ana must be sick because, honestly, she looks very pale!'

An implementation of this proposal will be considered in terms of Krifka (in press), as proposed by Frey (2020).

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**Introduction.** Quer (1998) observes that clausal complement of so-called implicative verbs in Catalan, e.g. *fer* ‘make’, *contribuir* ‘contribute’, *impedir* ‘prevent’, carry an embedded verb in the subjunctive mood, (1). Quer further notes that these verbs are also causative since the subject’s referent of the matrix clause is the initial causer of the embedded clause, (1)  $\approx x$  *cause/make y (to/not to) like w*.

(1) El professor **fa/impedeix/contribueix** que ens agradin (\*agraden) les mates.

~‘The teacher makes/prevents/contributes that we like-SBJV (\*like-IND) math.’

Karttunen (1971) notes that among implicative verbs, we find verbs such as *remind*, which for Bolinger (1971) are also causative in the sense that *remind* can be loosely paraphrased as *make x remember y*. According to Quer, then, implicative verbs with a causative reading of the *remind* sort in Catalan are predicted to carry an embedded verb in the subjunctive. **Here**, we show that this prediction is not met and that causative verbs of the *fer*-type as discussed by Quer do not show uniform behavior regarding mood choice. We assume two distinct subclasses of verbs that can be identified depending on whether they actually entail that the matrix subject’s referent knows the truth of the proposition in the clausal complement. Crucially, this correlates with mood selection in the embedded clause: causative verbs that do not entail such knowledge of the subject’s referent strictly select the subjunctive, i.e., *fer*-type verbs (2a). Verbs that do entail it select the indicative (in their non-directive interpretation). We call these *recordar*-type verbs, e.g. *falsificar* ‘falsify’, *aclarir* ‘clarify’, *ometre* ‘omit’ (2b).

(2) a. El nou professor **fa/impedeix/contribueix** que ens agradin més les matemàtiques, ...però ell no n’és conscient, encara no li ho hem dit.

~‘The new teacher makes/prevents/contributes that we like-SBJV math more, but he doesn’t know it, we haven’t told him yet.’

b. El nou professor **recorda/aclareix/omet** que som molt bons en matemàtiques, ...#però ell no n’és conscient, encara no li ho hem dit.

~‘Our professor reminds/clarifies/omits that we are-IND very good at math, but he doesn’t know it, we haven’t told him yet.’

**Analysis.** To account for the contrast in (2), we offer an analysis based on Geurts’ (2019) take on commitments. Individuals undertake commitments to socially coordinate their actions through expectation management with themselves and with others by proposing them to the common ground. We further use Geurts’ three-place relation  $C_{a,b} p$  to express that an individual  $a$  is committed to  $b$  to act on  $p$ . Thus,  $C_{a,b} p$  can either express that  $a$  publicly commits to  $p$  ( $a \neq b$ ), i.e.  $a$  says  $p$  ( $C_{a,b} p$ ), or  $a$  privately commits to  $p$  ( $a = b$ ), i.e.  $a$  believes  $p$  ( $C_{a,a} p$ ). The stipulation for *recordar*- and *fer*-type verbs we suggest is that the former entail the matrix subject’s private commitment to the propositional content of the embedded clause in the actual context, as it cannot be canceled (2b). In contrast, *fer*-type predicates only imply the matrix subject’s uncertainty about the future in the actual context and allow cancellability (2a), leading to our assumption that these verbs implicate a lack commitment to  $\neg p$  ( $\rightarrow \neg C_{a,a} \neg p$ ). Quer (1998) similarly argues that *fer*-type verbs are future realizations of a world according to the referent of the matrix subject and only lexically imply but do not contribute to the context. Thus, we further assume that there is a possibility for the matrix subject to commit to  $p$  through strengthening of the weak implicature of  $\neg C_{a,a} \neg p$  whenever it is common ground that  $C_{a,a} p \vee C_{a,a} \neg p$  (cf. Geurts 2019). In (3), we only look at the entailment and (weak) implicatures of possible private commitments in our respective verb classifications of *fer* and *recordar*-type predicates:

(3) a. *recordar*-type verbs, at the time of utterance entail  $C_{a,a} p$

$a$  is committed to herself to act on  $p$

b. *fer*-type verbs, at the time of utterance, implicate  $\neg C_{a,a} \neg p$

$a$  is not committed to herself to act on  $\neg p$

From the notation in (3b), the matrix subject together with a *fer*-type verb expresses that she cannot undertake a commitment to  $\neg p$  at the time of utterance. Courtesy of the auxiliary premise

postulated that  $\neg C_{a,a} \neg p$  gets strengthened to  $C_{a,a} p$ , whenever it is common ground that  $C_{a,a} p \vee C_{a,a} \neg p$ , we merely eliminate the possibility that  $a$  “has not made up her mind as to whether she is privately committed to  $p$  or to  $\neg p$ ” (Geurts 2019: 26). Conversely, whenever it is not common ground that  $C_{a,a} p \vee C_{a,a} \neg p$ , the implicature can be canceled. In any case, since *fer*-type verbs imply  $\neg C_{a,a} \neg p$  by default at the time of utterance, we take this lack of a commitment to be a licenser of subjunctive mood (cf. Giannakidou & Mari 2021). Applying our analysis to the examples in (2), these observations receive further support: the distribution of commitments not only patterns with our entries for *fer* and *recordar*-verbs but it also makes correct predictions with respect to mood choice:

- (4) El meu avi va **aconseguir** ( $\rightarrow \neg C_{a,a} \neg p$ ) que el meu fill mengés(-SBJV) verdura,  
 a. ...però no ho va arribar a saber ( $\neg C_{a,a} p$ ), es va morir abans que li ho diguéssim. (it is not common ground that  $C_{a,a} p \vee C_{a,a} \neg p$ ,  $\neg C_{a,a} \neg p$  does not get strengthened to  $C_{a,a} p$ )  
 b. ...però només se'n va assabentar ( $C_{a,a} p$ ) poc abans de morir. (it is common ground that  $C_{a,a} p \vee C_{a,a} \neg p$ ,  $\neg C_{a,a} \neg p$  gets strengthened to  $C_{a,a} p$ )  
 ‘My grandfather succeeded in making my child eat vegetables, ...but he never came to know that, as he died before we could tell him./ ...but he only found out shortly before he died.’
- (5) El professor ens va **recordar** ( $\neq C_{a,a} p$ ) que érem(-IND) molt bons en matemàtiques,  
 a. ...#però no ho va arribar a saber ( $\neg C_{a,a} p$ ), es va morir abans que li ho diguéssim.  
 b. ...i en va estar convençut ( $C_{a,a} p$ ) fins a la seva mort.  
 ‘The professor reminded us that we were very good at math, ...but he never came to know that, as he died before we could tell him/and he was convinced of it until his death.’

Embedded clauses of *fer*-type verbs signal the matrix subject’s referent is not committed, from which it follows that it is not clear whether the matrix subject is committed to  $p$ , resulting in the subjunctive mood in the embedded clause. Since *fer*-type verbs express a lack of commitment to  $\neg p$  at the time of utterance, there is a possibility to strengthen  $\neg C_{a,a} p$  to  $C_{a,a} p$ . Hence, both follow-up sentences in (4) are valid. With *recordar*-type verbs it is the case that when the sentence is uttered, the matrix subject’s referent is definitely committed to the truth of the proposition in the complement clause qua entailment, and this commitment usually persists (Geurts 2019: 5). This explains why (5a) is infelicitous and (5b), on the other hand, felicitous.

**Implications.** Our approach to the distribution of commitments with causatives can help us deepen our understanding of the nature of causal chains. Indirect causal chains involve an intermediate entity other than the initial causer and the final causee. Previous work (Fodor 1970; Shibatani 1976; Bittner 1999; Wolf 2003) argued only periphrastic causatives, e.g. *cause to die*, can felicitously describe scenarios that imply indirect causation, whereas lexical causatives, e.g. *kill*, cannot, as they entail direct causation:

- (6) CONTEXT: A gunsmith faultily repairs the gun that a sheriff brings him for inspection. The next day, the sheriff’s gun jams and he is killed. (Katz 1970)  
 a. The gunsmith **caused** the sheriff to die. b. #The gunsmith **killed** the sheriff.

We propose direct causation is connected to commitments on part of the matrix subject’s referent, as they result in full accountability, whereas indirect causation involves the impossibility to hold someone fully accountable for their actions as they did not commit to  $p$  in the first place. The context in (6) shows the gunsmith is committed to repairing the sheriff’s gun, he’s not committed to killing him. The periphrastic causative is thus related to an accidental side effect of his faulty repair. Namely, the gunsmith’s commitment is not correctly reflected in *The gunsmith killed the sheriff* because his commitments do not match with direct causation, explaining (6b).

**Conclusion.** Cause-related verbs in Catalan do not show uniform behavior regarding mood choice in their complement clause since two distinct classes can be identified: *recordar*- and *fer*-type. We have argued that in the former, the referent of the causer is committed to the truth of the proposition and that in the latter, commitment of the causer’s referent is not clearly assignable, leading to a lack of commitment to  $\neg p$  at the time of utterance which can be strengthened. These

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distributions pattern with mood, corroborating a view of mood choice according to which indicative or subjunctive is dependent on commitments (cf. Giannakidou & Mari 2021).

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## Processing Spanish Copulas: Evidence from the Visual World Paradigm

The expression of location with copular verbs in Spanish has received some attention in syntax-semantics (Brucart, 2012; Leonetti, 1994; Zagona, 2012), acquisition (Arnaus Gil, 2013; Bel, 2013; Cuza & Guijarro-Fuentes, 2021; Sera, 1992; Sera et al., 1999), and psycholinguistics grounds (Dussias et al., 2014; Leone-Fernández et al., 2012); but none of these studies provide a unifying account that can explain the linguistic, developmental, and processing behavior of this structure. The present study attempts to fill this gap by asking whether recent theoretical proposals (Fábregas et al., in press; Perpiñán et al., 2020) can be corroborated with eye-tracking data from two different bilingual populations, Spanish-dominant and Catalan-dominant speakers.

Spanish locative constructions select a different copula depending on the ontological category to be located: individuals –including objects– and places are located with *estar* (1a), whereas eventive subjects are located with *ser*; both copulas are translated as *to be* in English. This exceptional contrast poses difficulties for the theoretical explanations of the copulas as well as its acquisition (Pérez-Leroux et al., 2010).

- (1) a. Pedro {está/ \*es}            en Roma.            b. El concierto {es/ \*está} en el teatro.  
    Pedro is<sup>estar</sup>/ is<sup>ser</sup>            in Rome            the concert is<sup>ser</sup>/ is<sup>estar</sup> in the theater  
    ‘Pedro is in Rome.’            ‘The concert is in the theater.’

Previous semantic explanations based on the dichotomous Individual-Level (IL-*ser*) vs. Stage-Level (SL-*estar*) aspectual distinction (Arche, 2006; Luján, 1981) have proven insufficient to explain why eventive subjects select *ser*, and not *estar*, the locative copula. Perpiñán et al., (2020) suggested that, in addition to the IL-SL alternance, another aspectual dimension is needed: that of dynamicity, i.e., the distinction between events [+dynamic] and states [-dynamic]. Under this view, *ser* is considered the default copula, and *estar* is only specified for SL predicates, which include the location of individuals. Considering these theoretical issues, we question whether we would find a psycholinguistic connection of the (un)markedness of *ser* and *estar* in locative constructions in an anticipatory visual paradigm. If Perpiñán et al. (2020) are on the right track, we would expect that Spanish *ser* would not block any possible reading except for that of the location of objects.

This linguistic contrast can also be the focus of crosslinguistic influence (CLI) in L2 learners and bilingual speakers if their two languages do not completely overlap (Perpiñán & Marín, 2021). A case in point is that of Catalan, which has the same two copulas *ser* and *estar*, with a slightly different distribution: *ser* is considered the prototypical verb for locative constructions whereas *estar* adds an aspectual contribution such as duration (GIEC, 2016, p. 872). Nonetheless, copula *estar* in Catalan is gaining ground in the locative context to *ser* (Sanz & González, 1995; Solà, 1994). Thus, Catalan *ser* can combine with both objects and events, whereas Catalan *estar*, when available as a locative, is restricted to non-eventive subjects. Given these differences, we further question whether Catalan-Spanish bilinguals will show signs of CLI from Catalan in their processing of Spanish locative constructions. The research on the processing of locative copulas in Spanish is very scarce (Dussias et al., 2014; Leone-Fernández et al., 2012, using ERP signatures) and no studies have addressed the topic with eye-tracking. In addition, this study is novel for investigating bilingualism effects, usually neglected in anticipation processes (Desideri & Bonifacci, 2018; Foucart et al., 2014).

In a Visual Word Paradigm (VWP), we explore whether Catalan-Spanish bilingual speakers are able to associate the locative reading after hearing the (event or object) subject and the copular verb (*ser* or *estar*). Two groups of Spanish-Catalan bilingual speakers (25 Catalan-dominant and 28 Spanish-dominant), grouped according to their result in the *Bilingual Language Profile* (Birdsong et al., 2012), performed a VWP eye-tracking task with printed words using a Tobii Pro T60XL. Participants heard aural copular sentence stimuli



while looking at 2 words on the screen expressing a location (target for locative readings) or a property (target for non-locative readings). After that, they were asked to respond an aural question that assessed attention. With a Latin Square design, the task had 2 conditions: type of copular verb (*ser* and *estar*) and type of subject (event and object) as in (2a-d;  $k = 8$ ;  $8 \times 2 \times 2$ , a total of 32 experimental items, distributed in two lists). Anticipatory eye gazes to words on screen were computed during the region of interest -in bold in (2a)-; an adverbial adjunct was embedded for a broader region of interest. Our prediction was that participants would anticipate the location in the expected combinations ((2a) and (2d)), i.e. more looks to the target word on screen expressing location; no anticipation was expected in the two remaining conditions. As for language dominance, we hypothesized that Catalan-dominants would also anticipate locations with *ser* and objects (condition 2c), showing traits of CLI in processing.

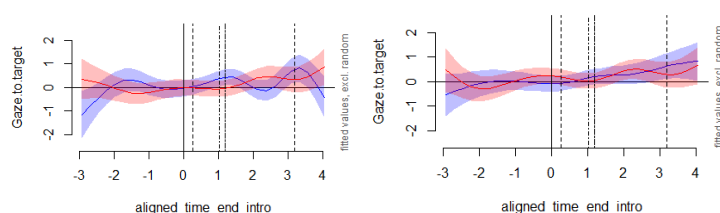
Overall, we found that locative *ser* with objects is blocked in Spanish-dominants bilinguals (anticipatory looks to the non-locative word in condition (2c) are significantly more frequent, which means that Spanish-dominant speakers clearly reject a locative reading in *object+ser* constructions, as Fig. 1 shows). With events, anticipatory processing emerges, as expected, in constructions with *ser* (2a), and no anticipation is attested with *estar* (2b). Contrary to our predictions, locative *estar* with objects (2d) does not show any anticipatory pattern, either (Fig. 1 red line). Catalan-dominant bilinguals, on the other hand, presented a significantly higher number of anticipatory looks to the locative word (*taberna*) in *object+ser* constructions (2c), and no anticipatory looks in *event + ser* (2a), indicating CLI from the broader Catalan copula *ser*. In turn, they clearly anticipated locatives with *estar*.

(2) Auditory Stimuli (example)

- a. EVENT + SER (LOCATIVE) On screen: *taberna* (target) | *empezar* (competitor)  
El chef sostiene que el banquete *es* **afortunadamente en** | la *taberna* como había previsto.
- b. EVENT + ESTAR On screen: *taberna* (competitor) | *empezar* (target)  
El chef sostiene que el banquete *está* afortunadamente por *empezar* tal como había previsto.
- c. OBJECT + SER On screen: *catalán* (target) | *taberna* (competitor)  
El chef sostiene que el menú *es* afortunadamente en *catalán* tal como había previsto.
- d. OBJECT + ESTAR (LOCATIVE) On screen: *taberna* (target) | *catalán* (competitor)  
El chef sostiene que el menú *está* afortunadamente en la *taberna* tal como había previsto.

To summarize, our psycholinguistics results are compatible with Perpiñán et al., (2020) with respect to their analysis for Spanish *ser*, but not for *estar*, since our Spanish-dominant participants did not show a preference for locative readings with *estar*, unlike our Catalan-dominant bilinguals. Finally, resorting to anticipatory processing data has allowed us to find out nuances and different degrees of sensitivity to (non-)eventive copular locative sentences in Spanish that can be more difficult to identify from offline data; on the other hand, studying (proficient) bilinguals has shown that CLI is at stake even between large overlapping linguistic systems.

Figure 1: El menú es en catalán (competitor: *taberna*) vs. El menú está en la *taberna* (competitor: *progreso*). Spanish-dominant vs. Catalan-dominant speakers' gazes to target (over 0).



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## Processing Spanish Copulas: Evidence from the Visual World Paradigm

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The expression of location with copular verbs in Spanish has received some attention in syntax-semantics (Brucart, 2012; Leonetti, 1994; Zagona, 2012), acquisition (Arnaus Gil, 2013; Bel, 2013; Cuza & Guijarro-Fuentes, 2021; Sera, 1992; Sera et al., 1999), and psycholinguistics grounds (Dussias et al., 2014; Leone-Fernández et al., 2012); but none of these studies provide a unifying account that can explain the linguistic, developmental, and processing behavior of this structure. The present study attempts to fill this gap by asking whether recent theoretical proposals (Fábregas et al., 2023; Perpiñán et al., 2020) can be corroborated with eye-tracking data from two different bilingual populations, Spanish-dominant and Catalan-dominant speakers.

Spanish locative constructions select a different copula depending on the ontological category to be located: individuals –including objects– and places are located with *estar* (1a), whereas eventive subjects are located with *ser*; both copulas are translated as *to be* in English. This exceptional contrast poses difficulties for the theoretical explanations of the copulas as well as its acquisition (Pérez-Leroux et al., 2010).

- (1) a. Pedro {está/ \*es} en Roma.  
Pedro is<sup>estar</sup>/ is<sup>ser</sup> in Rome  
'Pedro is in Rome.'  
b. El concierto {es/ \*está} en el teatro.  
the concert is<sup>ser</sup>/ is<sup>estar</sup> in the theater  
'The concert is in the theater.'

Previous semantic explanations based on the dichotomous Individual-Level (IL-*ser*) vs. Stage-Level (SL-*estar*) aspectual distinction (Arche, 2006; Luján, 1981) have proven insufficient to explain why eventive subjects select *ser*, and not *estar*, the locative copula. Perpiñán et al., (2020) suggested that, in addition to the IL-SL alternance, another aspectual dimension is needed: that of dynamicity, i.e., the distinction between events [+dynamic] and states [-dynamic]. Under this view, *ser* is considered the default copula, and *estar* is only specified for SL predicates, which include the location of individuals. Considering these theoretical issues, we question whether we would find a psycholinguistic connection of the (un)markedness of *ser* and *estar* in locative constructions in an anticipatory visual paradigm. If Perpiñán et al. (2020) are on the right track, we would expect that Spanish *ser* would not block any possible reading except for that of the location of objects.

This linguistic contrast can also be the focus of crosslinguistic influence (CLI) in L2 learners and bilingual speakers if their two languages do not completely overlap (Perpiñán & Marín, 2021). A case in point is that of Catalan, which has the same two copulas *ser* and *estar*, with a slightly different distribution: *ser* is considered the prototypical verb for locative constructions whereas *estar* adds an aspectual contribution such as duration (GIEC, 2016, p. 872). Nonetheless, copula *estar* in Catalan is gaining ground in the locative context to *ser* (Sanz & González, 1995; Solà, 1994). Thus, Catalan *ser* can combine with both objects and events, whereas Catalan *estar*, when available as a locative, is restricted to non-eventive subjects. Given these differences, we further question whether Catalan-Spanish bilinguals will show signs of CLI from Catalan in their processing of Spanish locative constructions. The research on the processing of locative copulas in Spanish is very scarce (Dussias et al., 2014; Leone-Fernández et al., 2012, using ERP signatures) and no studies have addressed the topic with eye-tracking. In addition, this study is novel for investigating bilingualism effects, usually neglected in anticipation processes (Desideri & Bonifacci, 2018; Foucart et al., 2014).

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and the copular verb (*ser* or *estar*). Two groups of Spanish-Catalan bilingual speakers (25 Catalan-dominant and 28 Spanish-dominant), grouped according to their result in the *Bilingual Language Profile* (Birdsong et al., 2012), performed a VWP eye-tracking task with printed words using a Tobii Pro T60XL. Participants heard aural copular sentence stimuli while looking at 2 words on the screen expressing a location (target for locative readings) or a property (target for non-locative readings). After that, they were asked to respond an aural question that assessed attention. With a Latin Square design, the task had 2 conditions: type of copular verb (*ser* and *estar*) and type of subject (event and object) as in (2a-d;  $k = 8$ ;  $8 \times 2 \times 2$ , a total of 32 experimental items, distributed in two lists). Anticipatory eye gazes to words on screen were computed during the region of interest -in bold in (2a)-; an adverbial adjunct was embedded for a broader region of interest. Our prediction was that participants would anticipate the location in the expected combinations ((2a) and (2d)), i.e. more looks to the target word on screen expressing location; no anticipation was expected in the two remaining conditions. As for language dominance, we hypothesized that Catalan-dominants would also anticipate locations with *ser* and objects (condition 2c), showing traits of CLI in processing.

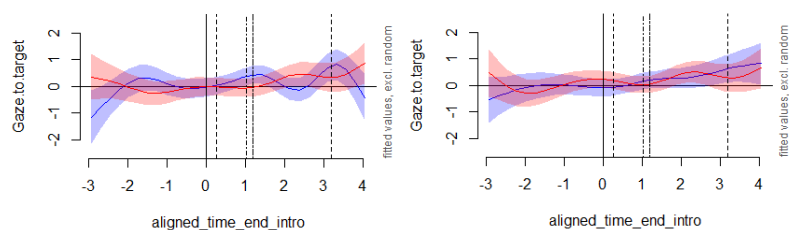
Overall, we found that locative *ser* with objects is blocked in Spanish-dominants bilinguals (anticipatory looks to the non-locative word in condition (2c) are significantly more frequent, which means that Spanish-dominant speakers clearly reject a locative reading in *object+ser* constructions, Fig.1). With events, anticipatory processing emerges, as expected, in constructions with *ser* (2a), and no anticipation is attested with *estar* (2b). Contrary to our predictions, locative *estar* with objects (2d) does not show any anticipatory pattern, either (Figure 1 red line). Catalan-dominant bilinguals, on the other hand, presented a significantly higher number of anticipatory looks to the locative word (*‘taberna’*) in *object+ser* constructions (2c), and no anticipatory looks in *event + ser* (2a), indicating CLI from the broader Catalan copula *ser*. In turn, they clearly anticipated locatives with *estar*.

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El chef sostiene que el menú *está* afortunadamente en la *taberna* tal como había previsto.

To summarize, our psycholinguistics results are compatible with Perpiñán et al. (2020) with respect to their analysis for Spanish *ser*, but not for *estar*, since our Spanish-dominant participants did not show a preference for locative readings with *estar*, unlike our Catalan-dominant bilinguals. Finally, resorting to anticipatory processing data has allowed us to find out nuances and different degrees of sensitivity to (non-)eventive copular locative sentences in Spanish that can be more difficult to identify from offline data; on the other hand, studying (proficient) bilinguals has shown CLI between large overlapping linguistic systems.

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## Projecting the external argument in Spanish passives

Alfredo García Pardo (Purchase College)

**Goals:** We argue for a uniform syntactic structure for nominal and verbal passives in Spanish. We do so by providing empirical evidence showing how both constructions are subject to the same grammatical constraints involving the external argument, namely: a) thematic restrictions in *por* ‘by’-phrases; ii) the disjoint reference effect.

**Thematic restrictions:** Alexiadou et al. (2014) argue that Spanish *por*-phrases in nominals show the direct participation effect (DPE), meaning that they can only introduce initiators (human or not) that directly bring about the event denoted by the nominal (e.g. (26)), from op.cit). Alexiadou et al (2013) link the DPE to the thematic restrictions of *by*-phrases, noting that there are similar effects in Romanian and German.

- (26) a. El huracán justificó la evacuación de los habitantes  
‘The hurricane justified the evacuation of the inhabitants’  
b. #La justificación de la evacuación de los habitantes por el huracán  
‘The justification of the evacuation of the inhabitants by the hurricane’  
c. El huracán destruyó nuestros cultivos  
‘The hurricane destroyed our crops’  
d. La destrucción de nuestros cultivos por el huracán  
‘The destruction of our crops by the hurricane’

**Problems with this view:** Native speakers of (European) Spanish dislike *por*-phrases with non-human direct causers quite generally (e.g. (1)). Human direct causers, on the other hand, are acceptable (speakers have a preference to use a *por parte de* ‘by’-phrase, which is only available with human entities in nominalizations). The same situation carries over to verbal passives (we do not include examples here for space reasons).

- (1) a. ??La inundación del sótano por el río.  
    (‘The flooding of the basement by the river.’)  
b. ??El agrietamiento de la pared por el extintor.  
    (‘The cracking of the wall by the fire extinguisher.’)  
c. ??El enterramiento de los coches por la arena.  
    (‘The burying of the cars by the sand.’)  
(2) a. La invasión de Ucrania por (parte de) el ejército ruso.  
    ‘The invasion of Ukraine by the Russian army.’  
b. La declaración de hostilidades por (parte de) Putin.  
    ‘The declaration of hostilities by Putin.’  
c. El ensamblaje de las piezas por (parte de) trabajadores cualificados.  
    ‘The assembly of pieces by qualified workers.’

Then how come (26c) above is judged grammatical? The issue here is that there are two kinds of *por*-phrases in Spanish; one that introduces the external argument in the passive and a second one that introduces the cause of a given eventuality but which, crucially, is not an external argument. We can observe this in the *se* passive construction, a kind of passive that disallows the introduction of external arguments in a *por*-phrase but which allows for causal *por*, as shown in (3). The reading in (3) would be one in which crops were destroyed because of the hurricane, but crucially, not that the hurricane was the initiator of the event. It is the same (and only) reading available in (26d), we claim. Our first reaction, due to our world knowledge, is to interpret the hurricane in (26d) as the initiator of the event, but in fact it is a causal complement.

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- (3) Se destruyeron cultivos (por el huracán).  
'Crops were destroyed (because of the hurricane).'

Note that these two types of *por*-phrases are not in complementary distribution. This is the case for verbal passives (e.g. (4a)) as well as for nominal passives (e.g. (4b)).

- (4) a. La puerta fue vigilada por los vigilantes por órdenes del jefe.  
'The door was surveilled by the guards due to orders from the boss.'  
b. La vigilancia de la puerta por (parte de) los vigilantes por órdenes del jefe.  
'The surveillance of the door by the guards due to orders from the boss.'

We claim that the restriction in Spanish passives (nominal and verbal) regarding the external argument is that it be human. Note that it would be inaccurate to say it needs to be an agent (in the classical sense of a human being that purposefully brings about an event), as we find examples with stative verbs where the external argument would be an experiencer, rather than an agent (e.g. (5a)), and the "human" effect is equally found in both nominal (e.g. (5b)) and verbal (e.g. (5c)) passives.

- (5) a. {Los soldados/ los perros} conocen bien el terreno.  
b. El buen conocimiento del terreno por (parte de) {los soldados/ ??los perros}.  
c. El terreno es bien conocido por {los soldados/ ??los perros}.

**The disjoint reference effect (DRE):** Baker et al. (1989) noticed that short verbal passives in English (i.e. without a *by*-phrase) show the DRE, i.e. the theme cannot be understood to be co-referent with the external argument. The same situation holds in both Spanish nominal and verbal passives (e.g. (6)), again pointing at an underlying common structure for the two constructions.

- (6) a. Los animals fueron ocultados. 'The animals were hidden.'  
b. El ocultamiento de los animales. 'The hiding of the animals.'  
OK: The animals were hidden by someone else.  
NOT: The animals hid themselves.

**The proposal:** Building on Bruening (2013), we assume that passives are built via a Pass head that selects a transitive vP which has not yet projected their external argument syntactically (see Ramchand 2018's *initP* or Harley's 2013 vP). Pass encodes the Disjoint Reference Effect via a presupposition, as in Spathas et al. (2015). In addition, the head Pass has a [+HUMAN] feature requiring that the external argument of the verbal predicate be human (but in itself Pass does not assign a theta role). The *por*-phrase adjoins to PassP as an adjunct and saturates the external argument slot. In the absence of a *por*-phrase, the external argument is existentially bound.

- (7) [<sub>PassP</sub> [*por*-phrase] [<sub>PassP</sub> Pass[+HUMAN] [vP (transitive) ]]]

If the passive is verbal, PassP will follow T and Asp projections; if it is nominal, PassP will be taken as a complement by a nominalizer N. But PassP is present in both constructions, which explains their identical behavior in terms of argument structure.

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## Right Dislocation as a Parenthetical Construction

Stefano Castiglione – University College London

In Right Dislocation (RD), a constituent whose referent must be discourse-given appears to the right edge of a gapless clause that contains a co-referring pronominal antecedent (Fernández-Sánchez & Ott, 2020):

- (1) L<sub>i</sub>' ho già LETTO, [questo libro].  
cl have.1SG already read this book  
'I've already read this book.'

Some of the most recent analyses of Right Dislocation (Ott & de Vries 2016 for Germanic, Fernández-Sánchez 2017 for Catalan, Alzayid 2020 for Arabic, Sun 2021 for Italian) support a biclausal structure, where the clause containing the pronominal antecedent (or antecedent clause) is separate from the right-dislocated element, which is the remnant of ellipsis in a clause (the elided clause) semantically equivalent to the antecedent clause. In these analyses, it is assumed that an abstract head (often the colon head “:°”, from Koster 2000) introduces a semantics of specification. This head takes the elided clause (CP2 in the structure below) containing the dislocated element  $\delta$  as its complement, and the antecedent clause (CP1) containing the pronominal  $\alpha$  as its specifier:

- (2) [:P [CP1 ...  $\alpha$  ... ] [:° [CP2 ...  $\delta$  ... ]]]

I argue that this analysis is too rigid. In particular, it predicts that the two clauses must be entirely separate, to the effect that no constituent belonging to the antecedent clause can appear to the right of the right-dislocated element (i.e., of the elided clause). However, despite RD generally appearing rightmost, other elements can appear to its right, at least in Italian. Giorgi (2015) provides a monoclausal analysis of RD that can account for these cases. My goal is to account for them under a biclausal analysis, on the assumption that biclausal analyses are more adequate than monoclausal ones (see Fernández-Sánchez & Ott 2020 for a discussion). When post-RD elements are stressed, it can be argued that they are in situ in the antecedent clause, as they bear that clause's main stress (indicated with small caps):

- (3) L' ho regalato, questo libro, a MARCO.  
cl have.1SG donated this book to Mark  
'I have given this book to Mark.'

When they are unstressed, however, the question arises of whether they undergo de-stressing in situ (or Marginalisation - see Antinucci & Cinque 1977, Cardinaletti 2002, and Samek-Lodovici 2015) or whether they are right-dislocated elements without a clitic (as in Samek-Lodovici 2015). A biclausal analysis of clitic-less right-dislocated elements is problematic, as no overt pronoun in the antecedent clause (see Cardinaletti 2002 for arguments against optional and null clitics), so it would be necessary so resort to a mixed analysis (biclausal if the dislocated element has an antecedent, monoclausal if it does not). Instead, I argue that unstressed post-RD elements can be analysed as being in situ in the antecedent clause. The (apparently syntactic) properties that they have in common with RD, such as the ban on NPIs (Samek-Lodovici 2015), may be explained

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with non-syntactic constraints. Moreover, it must be noticed that Romance languages which do not display Marginalisation, such as Catalan and Sicilian (see Cruschina 2010), also do not allow for destressed elements to appear after RD (see Fernández-Sánchez 2017 for Catalan). Finally, once the abstract colon head has been eliminated from the theory of RD, I will argue that the right-dislocated constituent can be seen as parenthetical element with respect to the antecedent clause. Furthermore, partly following Ott (2017) and Onea & Ott (2022), I will analyse it as a fragment answer (Merchant 2004) to an implicit question that arises, and that requires an answer, as soon as the pronominal antecedent is introduced. This explains why the element that specifies the antecedent needs not be rightmost. The overall picture is a minimalistic theory of RD that dispenses with unnecessary tools (such as the abstract head, which is never overtly realised in Italian RD constructions) and only relies on independently motivated mechanisms such as parenthesis and ellipsis.

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## Rising Datives: *tomar miedo*-Type Collocations and Constructional Change in the History of Spanish

In modern-day Spanish the verb *tomar* ‘take’ combines with nouns designating ‘feelings or emotions’, e.g. *amor* ‘love’, *cariño* ‘affection’, *miedo* ‘fear’, and *odio* ‘hatred’. These structures can be analyzed as collocations in which the noun of ‘emotion’ serves as the base and selects *tomar* as its collocate (Alonso-Ramos 2004, Alba-Salas 2012). Following Traugott and Trousdale (2013), they can also be analyzed as a constructional subschema, i.e. as a Construction with abstract meaning formed by generalizing over structures with a similar pattern. The syntactic subject of *tomar miedo*-type collocations is the experiencer of the emotion. Often, there is another participant besides the subject, and depending on how this second complement is realized syntactically, we have two types of subschemas. In the first one, the most common today, the second complement is a dative-marked indirect object that is interpreted as a goal (the entity towards which the emotion is metaphorically directed), as illustrated in (1). In the second subschema, which is much less frequent today, the second complement is still a goal, but is realized as a non-dative prepositional phrase, e.g. (2). Both subschemas involve metaphorical extensions of *tomar* as a ‘heavy’ verb of acquisition of possession whose use as a collocate here contributes the ingressive meaning of ‘beginning to experience the emotion’ designated by the noun (Sanromán Vilas 2017; cf. Alba-Salas 2012); for example, *tomarle miedo* in (1) can be informally paraphrased as ‘begin to feel fear’.

- (1) La modernidad es **otra cosa a la que** a veces **le tomo miedo**. *Modernity is something else that I sometimes grow afraid of.* (Pedro Ramón López, 2011, Dominican Republic, pedroramonlopezoliver.wordpress.com)
- (2) [...] la Divina Providencia hizo que, desde el noviciado, **tomase cariño por los enfermos**. [...] *since his novitiate, Divine Providence made him grow very fond of the sick.* (anonymous blogger, preguntasantoral.es, Spain, 2011)

In the Middle Ages the second complement of *tomar miedo*-type collocations was found with a wider range of prepositions, including *de* ‘of, from’ (3) and *con* ‘with’ (4), among others. Moreover, as (5) illustrates, in Medieval Spanish the prepositional structure appeared with a wider range of nouns of ‘emotion’ than today; for example, *tristeza* ‘sadness’ or *pesadumbre* ‘grief’, whose second complement is the cause or source of the emotion, rather than a goal.

- (3) [...] ca tamaño es **el mjedo que tomaron de mj los delas portogal** & [...]. [...] *since the Portuguese grew so afraid of me and [...].* (*Crónica de Alfonso X*, Fernán Sánchez de Valladolid, composed 1300s, copied 1489 [Madrid, Nacional, 829])
- (4) [...] començaron a mamar asi que **la loba tomo amor conellos** E metiolos en su cueua [...]. [...] *they started to breastfeed so the she-wolf grew in her love for them and she put them in her den [...].* (*Sumas de la historia troyana*, Leomarte, composed 1300s, copied 1341 ca -1420 ca [BNE, 9256])
- (5) Et fablo estonces alli el Rey ala reyna & dixol assi. [...] non deuedes uos **tomar tamanna tristeza por este fecho** como yo. *And then the king addressed the Queen and said this to her: [...] you should not grow as sad over this event as I do.* (*General estoria II*, Alfonso X, composed 1200s, copied 1300s [BNE 10237])

Using the *CORDE* and the *Corpus del español*, this study traces the historical realization of the second complement of *tomar miedo*-type collocations formed with 38 different nouns of ‘emotion’. Following recent synchronic analyses (e.g. Anscombe 1995, Sanromán Vilas 2003, 2012, De Miguel 2015), the 38 nouns were classified in three groups: as endogenous nouns that construe the emotion as originating in the experiencer and being projected towards an external goal (e.g. *cariño*); as exogenous nouns in which the emotion is seen as originating



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in an external source or cause (e.g. *tristeza*); and as hybrid nouns that allow both options (e.g. *miedo*).

The corpus data suggest that *tomar* ceased to be productive with exogenous nouns by the 1800s (cf. Sanromán Vilas 2017, Alba-Salas 2012). Although *tomar* continued to be used with endogenous and hybrid nouns in Modern Spanish, there was a shift from an overwhelming predominance of the non-dative prepositional structure in the Middle Ages (e.g. *tomar miedo de* in (3)) to a vast majority of dative constructions (e.g. *tomarle miedo* in (1)) by the 1700s, with endogenous nouns leading the change. Using the framework of Diachronic Construction Grammar (Traugott & Trousdale 2013), the emergence of the dative subschema as the default realization of *tomar miedo*-type collocations is analyzed as entailing the restructuring of a broad network of Constructions involving not only *tomar* as both a heavy verb and a collocate, but also other ingressive collocates as well as two grammatical Constructions –both of them featuring a dative complement, but mapped onto different semantic roles– that have played a key role in the history of Spanish: the Ditransitive Construction (e.g. Ortiz Ciscomani 2011), and the Intransitive Dative Construction (e.g. Vázquez Rozas & Rivas 2007, Melis & Flores 2012).

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## Romanian Definite DPs: a Diachronic View

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**Empirical focus.** This paper examines the overt expression definiteness within Romanian DPs from a diachronic perspective. The Romanian definite article is expressed as a suffix on a head within the DP, as a reflex of an Agree relation between the [def] feature on D and the [def] feature on the respective head (Cornilescu & Nicolae (CN) 2009, 2011, Nicolae 2013). In this paper I will focus on a particular type of definite DPs that occurred in Old Romanian (OR), in which the definite article was overt on N even if N was not the closest head to the definite D head. Such strings were grammatical in OR only if the noun was followed by a complement or a modifier, and are ungrammatical in Modern Romanian (MR), a language in which the definite article must be overtly expressed on the closest head to D.

- (1) (a) *neștiutor gândul omenesc (OR)*  
ignorant thought.DEF human  
'the ignorant human thinking'
- (b) *neștiutorul gând omenesc (MR)*  
ignorant.DEF thought human  
'the ignorant human thinking'

**Previous analyses.** CN 2009, 2011, Nicolae 2013 analyze the OR strings in (1.a) as instances of Long Distant Agree (LDA), i.e. an Agree relation between the [def] feature on D and a matching feature on a head that is in a non-local relative position to D. In CN's 2009, 2011 view, the switch from the OR stage in which definiteness could be the outcome of LDA, to MR, in which definiteness is overtly expressed only on heads in a local relation to D, was motivated by the ambiguities generated by an OR type of grammar, which allows non-local Agree. Such ambiguities led to a resetting of the 'definiteness parameter' in favour of the more constrained (i.e. local) version, in accordance to the subset principle.

**Problems with previous analyses.** A significant problem with the distant Agree view is that alongside with DPs as in (1a), OR also displayed strings in which the definite article was spelled out on the head closest to D ( $A_{def-N}$ ). Under the assumption that distant Agree was indeed an option in OR, what is needed is a theory that specifies the exact conditions/ contexts in which Agree was local in OR vs contexts in which it was non-local.

**Proposal.** I propose that the instances in which As are 'skipped' and are not affected by Agree illustrate a particular focus strategy that was available in OR, i.e. the 'cleft-like' strategy (Frascarelli 2010). Once this analysis is assumed, there is no need to posit the existence of non-local Agree in OR. In cleft-like structures, the focus constituent is merged as a predicate of a small clause (SC) and then raises to SpecFocP (similarly to predicate inversion), while the subject of the SC is the Presupposition, which is realized as a (free) relative clause (FRC). The FRC includes an empty NP antecedent and a CP that contains a predication relation between an NP and a predicate (XP) that is different from the one in the SC. Crucially, focussed As do not bear a [def] feature (which is typically associated with an anaphoric feature on lexical items, rather than a focus feature) and thus are not part of the Agree chain established when D searches for a valued matching [def] feature.



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## Rudin constructions in Romanian: identity of relations via multiple *wh*-clauses

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**OVERVIEW** In this paper, we describe and analyze the syntactic and semantic properties of an understudied non-interrogative *wh*-construction requiring multiple *wh*-expressions, to which we refer as ‘Rudin constructions’. We show that they differ from other multiple *wh*-constructions studied to date and argue that they denote identity between the extensions of two relations.

**DATA** The multiple *wh*-construction we investigate is illustrated in (1)-(2):

- (1) a. Trăncănește [**cine ce** vrea].                      b. Mănâncă [**cine ce** vrea].     (*Rudin 2008:260*)  
    blabs        who what wants                      eats        who what wants  
    ‘Everyone’s blabbing whatever they want.’    ‘Let everyone eat whatever they want.’
- (2) La picnicul de duminică a mâncat [**cine ce mâncare** a pregătit]. (*Caponigro & Fălăuș 2022:55*)  
    at picnic-the of Sunday has eaten    who what food    has prepared  
    ‘At the picnic on Sunday each person ate the food (s)he prepared.’

This is a typologically rare construction that, on the other hand, is extremely productive in Romanian, with the bracketed clause allowing for two or more (argument or adjunct) *wh*-expressions. Following Caponigro & Fălăuș (2022), we use the label ‘Rudin construction’ since to the best of our knowledge Catherine Rudin was the first scholar to describe it (Rudin 1986, 2007, 2008). It has been largely neglected since with the exception of recent semantic analyses (Caponigro & Fălăuș 2020, 2022, Nicolae 2020).

**COMPARISON WITH OTHER WH-CONSTRUCTIONS** Semantically, the sentences in (1)-(2) are similar to multiple *wh*-**correlative clauses** (Dayal 1996, Brașoveanu 2012), which are also very productive in Romanian (3):

- (3) a. [**Cine ce** vrea], *acela aia* mănâncă.                      b. [**Cine ce** mâncare a pregătit], *acela aia* mănâncă.  
    who what wants that-one that eats                      who what has prepared that-one that eats  
    ‘Everyone eats whatever they want.’                      ‘Everyone eats the food they prepared.’

Syntactically however, correlatives differ from Rudin constructions. First, in correlatives the *wh*-clause is obligatorily left-dislocated, whereas in Rudin constructions the *wh*-clause always follows the main clause. Second, the *wh*-expressions used in a correlative clause have corresponding anaphoric (typically demonstrative) markers in the matrix clause, as shown in (3) above.

We also show that Rudin constructions exhibit differences with the kind of multiple *wh*- **free relative clauses** (FRs) studied in Caponigro & Fălăuș (2020), illustrated in (4):

- (4) Bunica    a    împachetat [**ce cui**    dă    de Crăciun].  
    Grandma    has wrapped    what who.DAT gives for Christmas

    ‘Grandma wrapped the things she’ll give to the appropriate people on Christmas.’

The first difference lies in the relation between the *wh*-expressions and the two predicates. In (1)-(2), each *wh*-expression is related to an argument of *both* the matrix and the embedded predicate: the people blabbing/eating are the ones that want to blab/eat and the things they blab/eat are the things they want to blab/eat (1). In contrast, multiple *wh*- FRs satisfy only one argument of the matrix predicate and the lower *wh*- is in no way related to the matrix predicate. E.g., in (4) the receiver of the gifts is an argument of the predicate ‘give’ and not an argument of the predicate ‘wrap’. The second difference is semantic: multiple *wh*- FRs are referential, like definite DPs, whereas Rudin constructions seem to be akin to universal/free choice quantifiers.

We conclude that, at least in Romanian, Rudin constructions cannot be reduced to any other kind of multiple *wh*-constructions attested in the language and require a different analysis.

**SYNTACTIC ANALYSIS** Rudin constructions are always biclausal, with two fully tensed clauses:

(5) Diseară la petrecere \_mănâncă \_ [cine<sub>1</sub> ce<sub>2</sub> \_1 aduce. \_2].  
 tonight at party eat who what brings

‘Tonight at the party each person will eat what (s)he brings.’

In (5) for instance, each of the two clauses has a fully inflected transitive verb (‘eat’, ‘bring’). Both predicates are missing their subject and object arguments—highlighted with underscores. The bracketed clause (Clause<sub>2</sub>) is introduced by two (bolded) *wh*-expressions that are linked to its missing subject and object—highlighted with the subscripts “1” and “2”. The other clause (Clause<sub>1</sub>) doesn’t have any overt clause-internal marker correlating with its missing subject or object—highlighted with plain underscores without subscripts. Crucially, if either argument in Clause<sub>1</sub> is realized, the whole sentence becomes fully unacceptable, as shown in (6):

(6) a. \*Maria mănâncă \_ [cine<sub>1</sub> ce<sub>2</sub> \_1 aduce \_2]. b. \* \_ mănâncă desert [cine<sub>1</sub> ce<sub>2</sub> \_1 aduce \_2].  
 Maria eat who what brings eat dessert who what brings

This is due to the fact that in a Rudin construction Clause<sub>1</sub> and Clause<sub>2</sub> must have the same number and kind of missing constituents—at least two. If not, the whole construction is ungrammatical, as shown in (6) where Clause<sub>1</sub> has only one missing argument, whereas Clause<sub>2</sub> has two missing arguments (and corresponding *wh*-expressions). In (7), we illustrate the opposite situation: Clause<sub>1</sub> has only one missing argument (the subject), while Clause<sub>2</sub>, with a transitive predicate, has two missing arguments. Moreover, the two clauses in a Rudin construction also need to match in terms of the kind of missing arguments: in (8), both predicates require a subject and an object, but crucially the predicate in Clause<sub>1</sub> requires a direct object, while the predicate in Clause<sub>2</sub> an indirect object. The combination of the two results in unacceptability.

(7) \* \_ Vine [cine<sub>1</sub> ce<sub>2</sub> \_1 aduce \_2]. (8) \* \_ A atacat \_ [cine<sub>1</sub> cui<sub>2</sub> \_1 îi place \_2].  
 comes who what brings has attacked who who.DAT CL.3SG likes

The two clauses of a Rudin construction do not have the same syntactic status. Clause<sub>2</sub> always occurs to the right edge of Clause<sub>1</sub> and—we show—behaves like an adjoined *wh*-clause (a CP). Clause<sub>1</sub>, which always occurs first (left-most), allows for topicalized constituents or moved *wh*-constituents and acts as the main clause, determining the semantic and pragmatic features of the whole Rudin construction: if Clause<sub>1</sub> is declarative, then the whole Rudin construction is declarative, as in all the examples above. If Clause<sub>1</sub> is interrogative, as in (9), or imperative (10), then the whole Rudin construction will be interrogative or imperative, respectively.

(9) Când a mâncat [cine ce a adus]? (10) Mănâncă [ce când pregătesc]!  
 when has eaten who what has brought eat.IMP.2SG what when prepare.1SG  
 ‘When did everyone eat what they bring?’ ‘Eat whatever I prepare whenever I prepare it!’

**SEMANTIC ANALYSIS** We argue that Rudin constructions assert (or question or demand) identity between the extensions of two *n*-place relations (i.e., sets of ordered pairs)—one relation being denoted by the Clause<sub>1</sub>, the other being denoted by Clause<sub>2</sub>, as schematized in (11).

(11)  $[[\lambda x_1 \lambda x_2 \dots \lambda x_n \text{Clause}_1(x_1, x_2 \dots x_n)]]^{w_0} = [[\lambda x_1 \lambda x_2 \dots \lambda x_n \text{Clause}_2(x_1, x_2 \dots x_n)]]^{w_0} \quad n \geq 0$   
 The sentence in (5) for example is interpreted as asserting that each eater at the party tonight eats only the food that (s)he brings. I.e., the sentence asserts the identity between the set of ordered pairs of <eater, eaten-food> associated with the first clause and the set of ordered pairs <food-bringer, brought-food> associated with the second clause. Given the variable number and nature of missing *wh*-constituents within a Rudin construction (i.e., two or more arguments or adjuncts), the notion of identity and the type of relation involved need to be flexible. In the proposed implementation, we show that identity can be established between relations of variable *n*-ary and variable semantic type, as long as they are the same across the two relations associated with the two clauses involved in a Rudin construction.

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Rudin constructions seem to be attested in other Balkan languages, but their properties remain understudied. The data described and analyzed in this paper pave the way for further crosslinguistic investigation on Rudin constructions and a comprehensive typology of multiple *wh*-constructions.

### Satellite-framed patterns in Belgo-Romance dialects: a typological and geolinguistic study

This talk focuses on Walloon typological patterns expressing the SORTIR (TO GO OUT) displacement from an onomasiological perspective. Specifically, I determine the geolinguistic extension of [verb+satellite] constructions in Romance Belgium and the way they encode Path, one of the components of a motion event (Sarda 2019, Talmy 2000). In addition, I focus on the fine semantic determination of these morpholexical types and their contextual use from a contrastive areological analysis.

The widely commented Talmian typology (Talmy 2000) contrasts *verb-framed* (VF) and *satellite-framed* (SF) languages, the former encoding Path in a verbal root (e.g. fr. *je sors de la voiture*), the latter in a satellite (en. *I get out of the car*). Romance languages are commonly associated with the first type, but many studies have recently shown that the expression of motion in a particular language cannot be reduced to one type (VF or SF) (regarding Modern French in synchrony, see Kopecka 2006: 83-91). Diachronic studies have revealed a decline of SF patterns in the transition from Old French to Modern French (Fagard 2019, Kopecka 2013, Marchello-Nizia *et al.* 2020), but such constructions are still observed in Gallo- and Belgo-Romance dialects (Buridant 2019: 813, Remacle 1956: 184 ff.), as highlighted through the proposed case study.

To conduct this analysis, I first edit and map the data related to the notion of SORTIR according to the methodological principles at work in the *Atlas linguistique de la Wallonie* (Baiwir 2014). The data consist in the linguistic forms collected for five questions<sup>1</sup> (Q) of the French-Walloon translational questionnaire which is at the root of the dialectal survey undertaken by J. Haust in more than 300 localities of Wallonia (ALW1: 10-15). Second, I identify three types of dialectal patterns collected in Romance Belgium. The answers presented in Table 1 were obtained in three localities for Q785 “*Il faut qu’il soit bien malade pour ne pas sortir [He must be very sick not to go out]*” and illustrate these three patterns. Regarding the SF [v+satellite] type, the most common constructions combine a motion verb (‘mucier’, ‘aller’, ‘venir’, ‘brochier’) and the particle ‘fors’ (FEW3, 700b *fōras*). These can be compared to Old French constructions *issir fors*, *aller fors*, *jeter fors*, etc. (Buridant 2019, Fagard 2019). I also identify two other groups functioning as satellites: ‘à l’huis’ and ‘à l’air’ which combine with ‘aller’, ‘mucier’ and ‘venir’. Third, an areological and contrastive analysis reveals that SF [v+satellite] constructions are observed only in the extended Liège area and present variable extension depending on the survey question (for instance, see Figure 1 for the contrastive observation of Q785 et Q1962). These constructions compete with the SF [satellite+v] type ‘(s’)en aller’.

Pattern	Data collected for Q785 (survey locality)	Morpholexical type
VF	<i>I fôt ki fuche bin malade po n’ nin sôrti</i> (Namur)	‘sortir’
SF [satellite+verb]	<i>É fât k’ seûye bin malâde po n’ nin ’nn’alé</i> (Huy)	‘en aller’
SF [verb+satellite]	<i>I fât ki seûye bé malâde po n’ né moussî foû</i> (Verviers)	‘mucier fors’

Table 1 : examples of the three patterns

The superposition of the data shows that the saliency of the *source location* implied by the displacement SORTIR (Sarda 2019) in the linguistic context partly explains the variable extension of the [v+satellite] pattern. It reaches its maximum extension when the source is syntactically present (e.g. Q1162 “*Il sort d’ici [He gets out of here]*”) or suggested in the survey question (e.g. Q785), i.e. when the motion event referred to is specifically ‘to get out of...’.

<sup>1</sup> Q595 “J’ai voulu sortir [I wanted to go out]” (346 tokens); Q611 “Je sortirai vers cinq heures [I’ll be out around five o’clock]” (332 tokens); Q785 “Il faut qu’il soit bien malade pour ne pas sortir [He must be very sick not to go out]” (340 tokens); Q1162 “Il sort d’ici. Il part justement [He gets out of here. He’s just leaving]” (316 tokens); Q1962 “Sans cela, je ne sortirai pas [Without it, I won’t go out]” (343 tokens).

From the previous point, we can deduce specific semantic properties of these constructions which particularly highlight the extraction of the moving entity (*Figure* in Talmy 2000) out of the source location. In the Liège area, the satellite specifies the meaning of a relatively neutral motion verb such as 'aller' 'to go' or even completely reverses the semantics of a verb like 'mucier' 'to go into' (FEW6/3, 193b \**mukyare*). The study thus shows the contribution of a fine-grained analysis of the linguistic contexts formed by the survey questions. Lastly, from a typological point of view, I claim that Belgo-Romance dialects employ several strategies to encode Path. In particular, the speakers of the Liège area can select among different constructions depending on the specific displacement they want to express and the part of the movement they want to highlight.

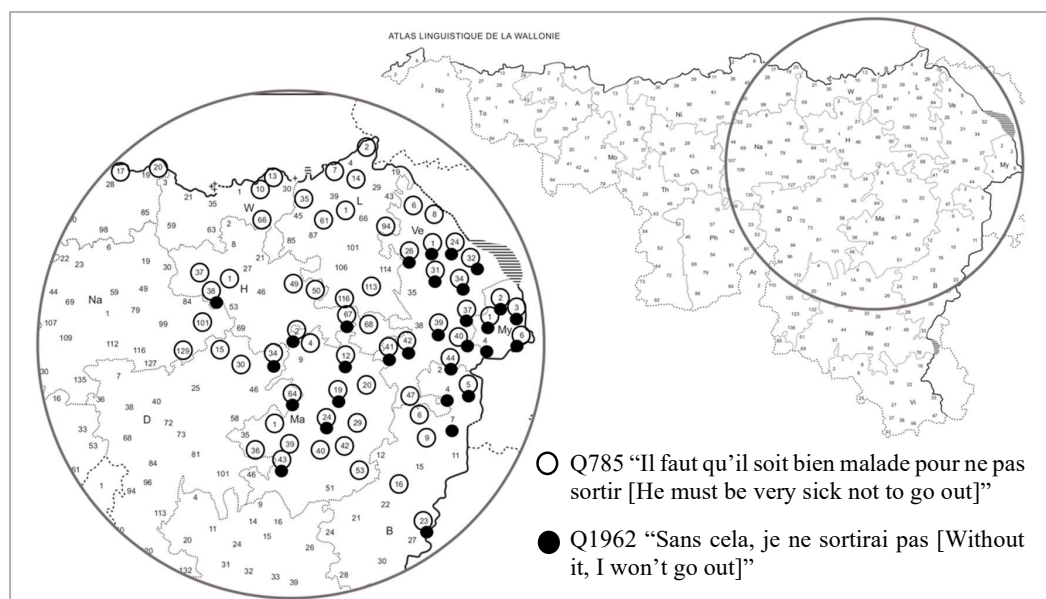


Figure 1 : SF [v+satellite] constructions in the Liège area (Q785 & 1962)

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L1 transfer is a hallmark of bilingualism. Studies describing how L1 transfer affects late pubertal L2 grammatical systems abound in SLA research. This research has found L1 transfer to be linked to 3 key phenomena, divergence between L1 and L2 representations, interlanguages, and L2 fossilization (Vainikka & Young-Scholten 2011; Schwartz & Sprouse in Press). In contrast, far less is known of the role of L1 transfer when the two grammars come into contact earlier in life, otherwise dominant language transfer in heritage language grammars (Polinsky, 2018). Unlike adult L2 speakers, the dominant language of the heritage speaker potentially affects the weaker language already from childhood. The best evidence to date of dominant language transfer comes from studies focusing on L2 syntax exploiting language production tasks (Fenyvesi 2005; Cuza & Frank 2015; Cuza & Strik 2012). These studies, however, employed elicited imitation which has been criticized for failing to evaluate capacity to produce (rather than imitate) language (Vinther 2002) and bias monolingual populations when compared to heritage speakers (Polinsky 2018). Another method which has been shown to tap into abstract representations fairly validly is structural priming (Jackson, 2018 for a state-of-the-art). Intrinsically linked to the use of priming and L1 transfer is the Basic Continuity Hypothesis (BCH) (Romano 2018) which maintains the sentence production mechanisms of monolingual (L1) and highly proficient L2Ss are similar enough for the latter to be able to integrate semantic and syntactic information in native-like manner despite any associated structures being absent in the L2Ss' L1 grammar. Thus, in the study we present, we extend the BCH to heritage speakers. The questions we address are as follows:

RQ1: To what degree does transfer affect L2 and heritage grammars?

RQ2: How similar are the language production mechanisms in L2 and HL to monolingual speakers, particularly when a structure requiring integration of semantic/syntactic information is absent from the L1/dominant language of the bilingual?

To address these questions, an oral structural priming task was employed to compare advanced Swedish speakers of Italian ( $n = 13$ ), proficiency-matched adult heritage Italian speakers ( $n = 14$ ) dominant in Swedish, and Italian monolinguals ( $n = 18$ ). The production of 4 clitic structures requiring coordination of syntactic/semantic information, namely proclisis with lexical, modal, and causative verbs and *si*-passives which are only possible in Italian (1-4), in comparison to a structure shared by both Italian and Swedish, namely transitives (5) was measured. If L1 transfer (RQ1) occurs, it was predicted that the transitive structures would lead to higher priming rates than clitic structures in the L2 and HL groups as the bilinguals are eased by an overlap in L1/L2 transitive structures. Moreover, if the BCH applies to both L2S and heritage speakers (RQ2), priming rates will be significantly high (above 60%) and comparable to native speakers. Results showed that bilinguals are not primed any more on transitives than some clitic structures, rejecting transfer. Moreover, they are primed higher than 60% on all but clitics + modals structures with most contrasts by structure not being statistically significantly different from monolinguals, supporting the BCH. Finally, an analysis of divergent structures produced shows L2/HL passive structures to be remarkably compatible with those produced by monolinguals at earlier developmental stages reported in previous research.

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(1) Lexical

- a. I pesci, Pietro li cucina all'aperto  
the fish Pietro cl.ACC.3PL cooks.v in-outdoors  
'the fish, Pietro cooks them outdoors'
- b. \*I pesci, Pietro cucina li all'aperto  
The fish Pietro cooks.v cl.ACC.3PL in-outdoors

(2) Modal

- a. I pesci, Pietro li vuole cucinare all'aperto  
the fish Pietro cl.ACC.3PL want.MOD cook.v-INF in-outdoors  
'the fish, Pietro cooks them outdoors'
- b. I pesci, Pietro vuole cucin-ar-li all'aperto  
the fish Pietro cl.ACC.3PL cook.v-INF-cl.ACC.3PL in-outdoors

(3) Causative

- a. I pesci Pietro li fa cucinare all'aperto dalla zia  
the Pietro cl.ACC.3PL make.CAUS cook.v-INF in- by auntie  
fish outdoors  
'The fish, Pietro has them cooked outdoors by auntie'
- b. \*I Pietro fa cucin-ar-li all'aperto dalla zia  
pesci  
the Pietro cl.ACC.3PL make.CAUS cook.v-INF in- by auntie  
fish outdoors

(4) *Si*-passives

- I pesci si cucinano all'aperto  
the cl.PASS cook in-outdoors  
fish  
'the fish need be cooked outdoors' or 'the fish cooks outdoors'

(5) Transitives

- Pietro cucina i pesci all'aperto  
Pietro cooks.v the fish in-outdoors  
'Pietro cooks the fish outdoors'

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L1 transfer is a hallmark of bilingualism. Studies describing how L1 transfer affects late pubertal L2 grammatical systems abound in SLA research. This research has found L1 transfer to be linked to 3 key phenomena, divergence between L1 and L2 representations, interlanguages, and L2 fossilization (Vainikka & Young-Scholten 2011; Schwartz & Sprouse in Press). In contrast, far less is known of the role of L1 transfer when the two grammars come into contact earlier in life, otherwise dominant language transfer in heritage language grammars (Polinsky, 2018). Unlike adult L2 speakers, the dominant language of the heritage speaker potentially affects the weaker language already from childhood. The best evidence to date of dominant language transfer comes from studies focusing on L2 syntax exploiting language production tasks (Fenyvesi 2005; Cuza & Frank 2015; Cuza & Strik 2012). These studies, however, employed elicited imitation which has been criticized for failing to evaluate capacity to produce (rather than imitate) language (Vinther 2002) and bias monolingual populations when compared to heritage speakers (Polinsky 2018). Another method which has been shown to tap into abstract representations fairly validly is structural priming (Jackson, 2018 for a state-of-the-art). Intrinsically linked to the use of priming and L1 transfer is the Basic Continuity Hypothesis (BCH) (Romano 2018) which maintains the sentence production mechanisms of monolingual (L1) and highly proficient L2Ss are similar enough for the latter to be able to integrate semantic and syntactic information in native-like manner despite any associated structures being absent in the L2Ss' L1 grammar. Thus, in the study we present, we extend the BCH to heritage speakers. The questions we address are as follows:

RQ1: To what degree does transfer affect L2 and heritage grammars?

RQ2: How similar are the language production mechanisms in L2 and HL to monolingual speakers, particularly when a structure requiring integration of semantic/syntactic information is absent from the L1/dominant language of the bilingual?

To address these questions, an oral structural priming task was employed to compare advanced Swedish speakers of Italian ( $n = 13$ ), proficiency-matched adult heritage Italian speakers ( $n = 14$ ) dominant in Swedish, and Italian monolinguals ( $n = 18$ ). The production of 4 clitic structures requiring coordination of syntactic/semantic information, namely proclisis with lexical, modal, and causative verbs and *si*-passives which are only possible in Italian (1-4), in comparison to a structure shared by both Italian and Swedish, namely transitives (5) was measured. If L1 transfer (RQ1) occurs, it was predicted that the transitive structures would lead to higher priming rates than clitic structures in the L2 and HL groups as the bilinguals are eased by an overlap in L1/L2 transitive structures. Moreover, if the BCH applies to both L2S and heritage speakers (RQ2), priming rates will be significantly high (above 60%) and comparable to native speakers. Results showed that bilinguals are not primed any more on transitives than some clitic structures, rejecting transfer. Moreover, they are primed higher than 60% on all but clitics + modals structures with most contrasts by structure not being statistically significantly different from monolinguals, supporting the BCH. Finally, an analysis of divergent structures produced shows L2/HL passive structures to be remarkably compatible with those produced by monolinguals at earlier developmental stages reported in previous research.

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(1) Lexical

- a. I pesci, Pietro li cucina all'aperto  
the fish Pietro cl.ACC.3PL cooks.v in-outdoors  
'the fish, Pietro cooks them outdoors'
- b. \*I pesci, Pietro cucina li all'aperto  
The fish Pietro cooks.v cl.ACC.3PL in-outdoors

(2) Modal

- a. I pesci, Pietro li vuole cucinare all'aperto  
the fish Pietro cl.ACC.3PL want.MOD cook.v-INF in-outdoors  
'the fish, Pietro cooks them outdoors'
- b. I pesci, Pietro vuole cucin-ar-li all'aperto  
the fish Pietro cl.ACC.3PL cook.v-INF-cl.ACC.3PL in-outdoors

(3) Causative

- a. I pesci Pietro li fa cucinare all'aperto dalla zia  
the Pietro cl.ACC.3PL make.CAUS cook.v-INF in- by auntie  
fish outdoors  
'The fish, Pietro has them cooked outdoors by auntie'
- b. \*I Pietro fa cucin-ar-li all'aperto dalla zia  
pesci  
the Pietro cl.ACC.3PL make.CAUS cook.v-INF in- by auntie  
fish outdoors

(4) *Si*-passives

- I pesci si cucinano all'aperto  
the cl.PASS cook in-outdoors  
fish  
'the fish need be cooked outdoors' or 'the fish cooks outdoors'

(5) Transitives

- Pietro cucina i pesci all'aperto  
Pietro cooks.v the fish in-outdoors  
'Pietro cooks the fish outdoors'

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**1. GOALS AND BACKGROUND:** Pseudopartitives have been frequently addressed in the literature since Selkirk's (1977) seminal study because of their peculiar semantic and syntactic behaviour. The most widely accepted account posits that the N1 is semi-lexical, possessing properties of both lexical and functional categories (Van Riemsdijk 1998, Stavrou 2003, Alexiadou et al. 2007, Tănase-Dogaru 2007 a. o.). However, these studies have not taken into consideration that the semantic classes typically identified display significant semantic and syntactic differences and, most importantly, they have not precisely defined the concept of semi-lexicality.

Focusing on Spanish data, we argue that pseudopartitives undergo a grammaticalization path, and that the N1s on these structures differ on their level of grammaticalization. Some N1s have grammaticalized and are thus functional, while other N1s have not completed the process and are semi-lexical. We assume, following Klockmann (2017) and Cavirani-Pots (2020), that semi-lexicality arises from a transition from the lexical to the functional. On the other hand, we provide a detailed examination of the peculiarities of pseudopartitives regarding verbal agreement, adjectival modification, and combinatory capabilities, amongst other syntactic properties.

**2. DISTINGUISHING FUNCTIONAL AND SEMI-LEXICAL N1s.** Some of the key observations that we aim to explain for pseudopartitives are the following:

**2.1. Verbal agreement:** In the semi-lexical configuration, the N1 triggers verbal agreement (1), while plural agreement with the N2 is possible or even preferred when the N1 is functional (2), showing a loss of phi-features as they grammaticalize. Demonte & Pérez-Jiménez (2015, 2017) argue that verbal agreement is semantically motivated. While singular agreement yields a group/atomic reading, plural agreement yields a plural/distributive denotation. However, the data do not support their view, since single-occurrence events are attested with plural agreement (3) and singular agreement is compatible with distributive interpretations (4).

- (1) Un saco de tomates {está/\*están} podridos  
a sack of tomatoes are/is rotten
- (2) a. Un grupo de niños {esperaba/esperaban} su turno  
a group of children was/ were waiting their turn  
b. Infinidad de niños {??espera/esperaban} su turno  
infinity of children waits/ wait their turn
- (3) Un montón de niños rompieron esa mesa  
a lot of kids broke-PL that table
- (4) a. Un grupo de estudiantes construyeron una casa  
a group of students build a house  
b. Un grupo de niños<sub>i</sub> visitó a su<sub>i</sub> abuela  
a group of kids visited DOM their grandmother

**2.2. Restrictions on the morphosyntax:** Functional N1s can only be preceded by the indefinite determiner *un,-a* (5), while the distribution of semi-lexical N1s parallels that of typical nouns (6). Crucially, a functional N1 can quantify over a semi-lexical N1 (7), showing that they occupy different positions in the syntactic structure.

- (5) a. \* dos barbaridades de personas  
two barbarities of people  
b. \* mucha exageración de piedras  
a-lot-of exaggeration of stones

- 
- (6) dos kilos de arroz / muchas cajas de manzanas  
two kilos of rice / many boxes of apples
- (7) bebe un montón de vasos de vino  
drinks a lot of glasses of wine

**2.3. Adjectival modification:** The pattern illustrated in (8), in which an adjective formally modifying an N1 modifies semantically the N2, is taken as strong evidence of the semi-lexical nature of the N1. The main analysis (Vos, 1999; Stavrou, 2003; Alexiadou et al., 2007) states that the N1, being light in descriptive content, is ‘transparent’ and thus the adjective can access the N2 through it. Notice that we have found corpus examples of adjectives that are semantically incompatible with the N1 (8b,c): while, syntactically, the availability of an adjective indicates that N1 is an ordinary noun, semantics suggests otherwise.

- (8) a. a. un vaso frío de leche  
a glass cold of milk  
‘a cold glass of milk’
- b. un vaso espumoso de cerveza  
a-MASC glass-MASC foamy-MASC of beer
- c. una taza espesa de chocolate  
a-FEM cup-FEM thick-FEM of chocolate

Modification of functional N1s, by contrast, is very restricted. They are only compatible with some prenominal adverbial adjectives (9):

- (9) a. Una verdadera/auténtica/absoluta infinidad de mujeres corrieron la maratón  
a true/real/absolute-FEM infinity-SG of women-FEM run the marathon
- b. \*una preciosa barbaridad de joyas  
a-FEM precious-FEM barbarity-FEM of jewellery-FEM

**3. PROPOSAL:** All pseudopartitives are headed by the N1, and the N2 is merged as its complement. We argue that there are at least two structures corresponding to the level of grammaticalization. Fully grammaticalized N1s (such as *montón* ‘a lot’) are degree quantifiers that head a functional projection, located in a high position on the tree, and *de/of* preceding the N2 is not a preposition. There is evidence showing that it is not a case marker either (cf. Doetjes 1997, Martí-Girbau 2010, a.o.). For instance, *de* also appears in non-nominal contexts, and there is a correlation in Romance between the presence of *de* and the absence of agreement on the Q (see Doetjes 2007 based on French data), hence we defend that it is a linker that marks dependency (Philip 2012).

As for semi-lexical nouns, they display properties of mensural classifiers of classifier languages, such as the requirement of semantic compatibility with the N2 or the possibility to be modified by adjectives (Zhang 2013). When these elements are inserted as the head of a Unit Phrase (Svenonius 2007), they are not referential and may have a different meaning than when they are inserted in a NP/DP (for example the N1s *pellizco* or *pinch*). Roots are not specified for semi-lexicality, but they can be inserted in semi-lexical contexts (Cavirani-Pots 2020).

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**Shared Romance features a product of contact-induced language change?  
Roman republican colonization and language contact in the ancient Italian peninsula**

**Keywords:** Language contact, simplified language, Roman colonization, Latin, Romance

Why are all of the Romance languages more structurally similar to each other than any of them are to Classical Latin? This paper proposes that radical demographic expansion and rapid Roman colonization of the Italian peninsula in the 3<sup>rd</sup> c. BC created a situation of language contact between speakers of Latin (imbued with new social, economic, and military prestige) and native inhabitants, which spurred the creation of a contact variety of “simplified” Latin. It is hypothesized that this reduced variety was maintained in the dialect continuum of spoken Latin and was later exported to the provinces, thus explaining some of the structural features shared by all of Romance that are lacking in Classical Latin. The three objectives of the paper are:

1. Describe the socio-political facts of Roman expansion in 3<sup>rd</sup> c. BC Italy and show three social criteria (Thomason 2001) favoring contact effects are present.
2. Offer explicit, metalinguistic, and implicit evidence of these contact effects on Latin.
3. Propose a hypothetical model that contact-induced imperfect group SLA gave rise to a “simplified” Latin, the ancestor of early Romance.

First, despite the recent advances in contact linguistics, the colonial situation of the Romans in the Italian peninsula and its possible importance on the history of Latin and Romance have not been given adequate attention. New and detailed information from the fields of history and archaeology shows that the colonization scenario is comparable to those of the early modern and modern periods. Between 338 and 187 BC Rome expanded from a small area in Latium to found about fifty colonies around the peninsula (Salmon 1970) (Figure 1), resulting in an estimated population movement of 400,000 people (Pelgrom 2012) at a time when the total population of Italy is thought to be roughly 4 million (~10% percent of the total) (Scheidel 2008). Native populations used Latin to interact with their conquerors (Adams 2003). Not only was their population movement from the capital to colonies, but as the city of Rome increased in wealth and power there was widespread migration from the colonies back to Rome until 187 BC (Salmon 1955: 71). It is therefore not only possible, but extremely likely that contact effects occurred given the ideal social and demographic environment.

To prove these contact effects, we synthesize evidence of contact-induced features and changes in Latin, drawing primarily on the work of J. Adams (2003, 2007, 2013) who provides documentary evidence of contact and metalinguistic observations by Cicero and others, disparaging this “regional Latin”. Then we present indirect evidence from Romance in support of this hypothesis, building on the work of Goyette (2000), Ledgeway (2012) and others. Specifically, there is a long list of structural features absent in classical Latin that are shared by all of Romance (absence of the synthetic passive system, loss of neuter, reduction of cases, etc.). The Principle of Occam’s Razor would suggest that these features were already present in the spoken Latin that was spread around the Mediterranean, rather than each of them piecemeal completing a universal expansion across the entire Romance world.

We therefore have a situation of contact, evidence of contact, and a list of features that are likely to have existed in the contact variety. These facts and comparisons with better documented situations of language contact suggest that imperfect group SLA gave rise to a “simplified” Latin. This hypothetical contact variety is most similar to Winford’s (2003) definition of a “simplified language” arising from imperfect group SLA, a process documented

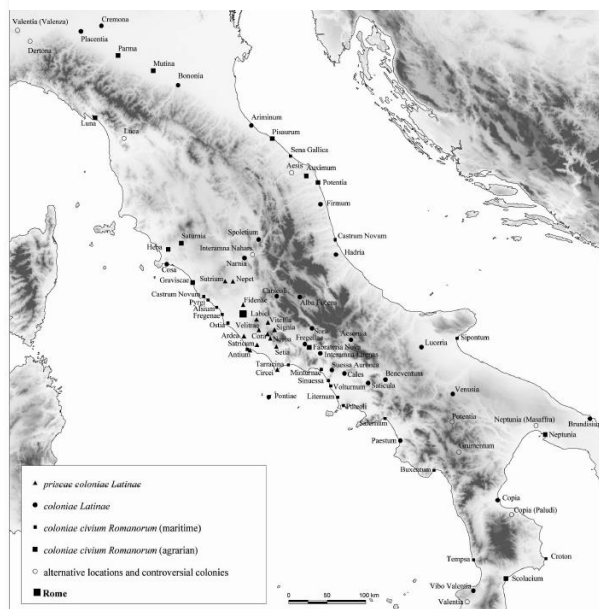
in Latin (Adams 2003: 525). This differs from other proposals of language-contact effects on Latin and proto-Romance (Leonard 1978, DeDardel & Wüest 1993, Goyette 2000) in that there is not a complete elimination of synthetic structures, nor is there any pidgin stage when the contact variety would be unrecognizable as a form of Latin. Rather, there is a reduction and simplification of the target language which facilitates its use by an indigenous population who share one substrate language. This simplified Latin existed, possibly “submerged” (Adams 2013: 860), on the dialect continuum of spoken Latin that was exported to the provinces outside Italy in later periods of colonization.

By comparing historical, demographic, and linguistic data on early Roman Italy with better-understood cases of contact variety genesis, this paper proposes that the answer to the question of why the Romance languages are all more similar to each other than any are to Latin is because the main Proto-Romance structures emerged in a “simplified” Latin resulting from imperfect group second language acquisition process in 3<sup>rd</sup> century BC Italy.

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Figure 1 - Roman and Latin colonies founded in Italy from the early Republic to the Gracchi (Pelgrom 2012: 6)





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## Social and linguistic correlates of assibilation and affrication of coronal plosives in a corpus of urban youth vernacular

In French, the release of coronal plosives followed by high front vowels presents the acoustic phonetic characteristics of a “noisy fricative release” [1]. While the phonetic motivations of this phenomenon – turbulent airflow released through the relatively narrow channel of the following high vowel – are quite clear, the phonological status and acoustic phonetic properties of the consonants depends on the variety of the language.

In Canadian French, coronal plosives have been shown to participate in clear allophonic distinctions: /t/ and /d/ are assibilated into /ts/ and /dz/, respectively, when followed by high front vowels /i/ and /y/ [1] [2], such as in *petit* ‘small’ /pətsi/, *tu* ‘you’ /tɥ/, *dix* ‘ten’ /dzis/, and *durer* ‘to last’ /dzyʁe/. Reports of Metropolitan varieties, on the other hand, seem to point to more retracted realizations, typically perceived as affrication. Several corpus studies concluded, for instance, that “plosives may indeed take an affricated release” [1]. Affricated voiceless plosives have also been attested in journalistic speech styles [3]. Previous work in sociophonetics found affricated releases of /t/, /d/ followed by high front vowels to be emblematic of multiethnic urban youth speech styles. Since the early 2000s, palatalization and affrication, in particular, have also been linked to youth speech styles [4] in large urban areas of France, among them Paris [5] and Marseille [6]. And yet, neither the perceptual salience [7], nor the spread of affrication of plosives in Metropolitan French has been confirmed in large corpora collected in fieldwork settings. At most, plosive releases accompanied by strong friction noise have been considered characteristic of “an individual speaker with a tight and tense speech style” [1] and “depend on the speakers and situations” [7]. This study seeks to examine the discrepancy behind some of these findings by identifying both the social and linguistic correlates of coronal plosive releases in a corpus of urban youth vernacular.

Over eight hundred voiceless (/t/) and voiced alveolar plosives (/d/) before two high vowels (/i/ and /y/) have been extracted from three male and three female speakers in the open-access Multicultural Paris French (MPF) corpus [8], a repository of unconstrained conversations between 34 male and female teens between 13 and 17 years of age. The speakers were recorded in conversational settings in a suburb (*banlieue*) of Paris.

Speakers were split into groups according to their biological gender and reported cultural and linguistic background. Following previous comparative investigations of the MPF corpus [9], cultural background has been operationalized as ‘multicultural’ (MC) of immigrant descent and ‘Franco-dominant’ (FD) of non-immigrant descent [10]. In addition to linguistic factors, such as type of consonant, following vowel, and prosodic position (word-initial or word-medial), each word containing coronal plosives was also tagged for its degree of novelty (new vs. old information) in the immediate discourse context. Each token was segmented and transcribed using spectrograms in Praat [10] by one of the authors. Ten percent of the tokens, chosen randomly, have also been analyzed by an external expert with over 90% inter-coder reliability. To distinguish between acoustic realizations, VOT was used to measure the length of the release phase, while CoG (Center of Gravity, or Spectral Mean) was used to estimate the degree of frontedness (more or less assibilated vs. affricated) of the consonant [11] [12]. Spectrograms and audio in Praat were used for joint acoustic and perceptual analyses. It was hypothesized that longer VOTs and lower CoGs would strongly correlate with – and be perceived as – more retracted (affricated) realizations.

The first results of descriptive statistical analyses suggest that the realizations of the coronal plosives analyzed in this study should be placed on a continuum from more or less fronted (perceived as assibilated) to more or less retracted (perceived as affricated) releases. Although the clarity of VOT and CoG measures depended, to a large extent, on the identity of the speakers, all speakers’ speech showed a wide variety of realizations. To the best of our

knowledge, this type of variability has not yet been reported for Parisian French. Retracted (affricated) realizations of plosives occurred in larger numbers in the speech of MC male and MC female speakers than in FD speakers in general, but a more precise acoustic analysis of these releases remains necessary. There was a gender split in realizations of the voiced affricated palato-alveolar /d/: regardless of their cultural backgrounds, female speakers in both groups (MC and FD) tended to use fewer affricated realizations of plosives than their male peers. In each gender group, however, assimilated releases could also be found (Figure 1, see supplemental file). While voiceless plosives in word-initial position were more frequent across all phonetic contexts, when more retracted (affricated) realizations of plosives occurred word-medially, they tended to be particularly strong and salient (Figure 2, see supplemental file). New information in direct addresses to the hearer, especially in the context of a direct address in *tu* (informal ‘you’), tended to correlate with longer, and perceptually more salient, releases. Inferential statistical tests are expected to support the validity of these first findings and should also further ascertain the role of pragmatic factors. In this initial phase of the study, it appears that there is indeed some degree of grammaticalization of plosive realizations in this contemporary variety of Metropolitan French.

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## Social predictors of Venezuelan vowel variation: Sociolinguistics and speech processing methods in a diachronic Caracas corpus

Spanish sociolinguistic research often focuses on consonants, paying little attention to vocalic variation (Díaz Campos, 2014; Lipski, 2011; Samper-Padilla, 2011). This project examines vowel production through an analysis of linguistic and social factors, focusing on the production of /a/ using an acoustic analysis of a diachronic corpus drawn from Caracas, Venezuela, in 1987 and 2004-2013. Over the course of data collection in the corpus, Venezuela experienced massive sociopolitical changes that restructured social classes and the way they interact. The rise of the Chávez dictatorship in 1998 led to economic decline and the creation of a system of clientelism, which destroyed the productive manufacturing apparatus of the country. Within this changing sociopolitical landscape, sociolinguistic phenomena associated with local identity flourished, especially with increased suspicion directed toward education and the middle class.

Meanwhile, in linguistics, speech processing methods using speech-to-text engines continue to develop and improve, creating the potential for a massive shift in the way sociophonetic research is conducted. When combined with forced alignment, it is possible for linguists to generate transcripts and perform segmental analyses on tens of thousands of tokens, processing data at speeds many times faster than manual measurement would permit (Coto-Solano, Stanford, & Reddy, 2021). Especially in the realm of sociolinguistics, where numerous social and linguistic factors are expected to overlap and intersect in the description of the complex process of language production, these methods allow for a larger and more balanced look at tokens from across a wide array of speakers. This, in turn, contributes to greater certainty when making claims about ongoing change in socially-influenced phenomena.

The current analysis focuses on data across two generations from the *Diachronic Corpus of Caracas Spanish* (Bentivoglio & Sedano 1993, Bentivoglio & Malaver 2006), with 31 participants stratified by age, gender, and socio-economic status. This corpus offers unique insights into a variety of Caribbean Spanish that has received relatively little attention with respect to vocalic variation. Additionally, given the more than twenty year spread between the two periods of data collection for the corpus, claims can be made about apparent time changes across within-corpus generations and real time changes around the time of the Venezuelan dictatorship and associated social change. We hypothesize that while apparent time differences may exist in the corpus in 1987, data collected from 2004-2013 will reflect a move toward more vernacular styles associated with local identity. By examining this phenomenon, this study intends to identify the symbolic value of vowel variation that may exist in Caracas as a part of the larger picture of the changing linguistic and social identity in the city.

Data analysis consisted of a novel methodological protocol we developed to process this corpus using speech processing tools and was composed of three steps. First, audio was transcribed using the commercial Sonix software (Sonix, 2022), which provided timestamps every 400 milliseconds, and compared to the original transcript created by the makers of the corpus for reliability, and to remove audio produced by interviewers. Following that, the data were processed using the Montreal Forced Aligner (MFA: McAuliffe et al., 2017), and vowel formants were normalized using the Lobanov method, then rescaled to present a readable format (Lobanov, 1971). Finally, after cleaning the data, Praat was used to collect acoustic measurements, including F1 and F2 values, duration, and center of gravity for the vowels (Boersma & Weenink, 2022). This methodology yielded over 75,000 tokens of /a/ collected from the 24.5 hours of interviews.

These results suggest that variable production is predicted by both linguistic and social factors. Mixed-effect logistic regression models were used to consider both F1 and F2 as continuous dependent variables. For the model using F1 values, previous and following place of articulation, lexical stress, speech rate, duration, style and corpus year are significant factors

predicting vowel height. With respect to linguistic factors, raising was associated with preceding vowels, following vowels, coronals, and labials, and in unstressed position with shorter vowel lengths. For the social factors, raising tended to occur in the 2004-2013 corpus, in faster speech, and earlier in the interview, when vernacular speech is often less likely to occur. In the analysis of F2 values, previous and following place of articulation, lexical stress, speech rate, duration, style, corpus year and gender of the speaker were predictors of vowel fronting. In terms of linguistic factors, fronting was favored with both preceding and following labials and back vowels, in syllables with lexical stress, and in longer segments, while for the extralinguistic factors, men, speakers from the 2004 corpus, faster speech, and speech earlier in interviews tended to favor fronting. These similarities across F1 and F2 suggest that changes are underway from 1984 to 2013, and that the vernacular production is gaining ground among speakers recorded after the social shift in Venezuela.

Overall, this project contributes to a description of an underrepresented dialect and examines linguistic change over real time at a massive scale using novel speech processing methods. While some researchers have begun to employ forced alignment methods in Spanish (e.g., Coto-Stanford et al., 2021), much research has relied on dialectological and impressionistic approaches that are often slow and difficult to replicate. Through speech processing and forced alignment, we model this phonetic analysis protocol to process large amounts of spoken data in a consistent fashion. We hope that, through demonstrating the effectiveness of this approach, more researchers will consider looking into the applications of speech processing tools in Romance linguistics in order to reliably process and analyze acoustic norms and social variation in speech using this cutting-edge technology.

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## **Socio-economic Status and Prestige as Determinants of English use in the Linguistic Landscape of the U.S. – Mexican Border.**

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Linguistic Landscape (LL) studies show the linguistic configuration of an area through the study of the language of public signage (Landry and Bourhis, 1997). They can also “provide important insights and a different perspective on our knowledge about language” (Gorter and Cenoz, 2008: 343). The focus of this study is to investigate the LL of Ciudad Juárez, Mexico (a city bordering with El Paso, Tx. in the United States) and to understand the relationship between language use, prestige, and identity in the bilingual context of the U.S.-Mexico border.

With a population of around 1,512,450 (INEGI, 2020), Ciudad Juárez (CJ) is a profusely Spanish monolingual community (Teschner, 1995). The vitality of Spanish in CJ is quite outstanding despite its proximity to the U.S. border. To analyze the LL of CJ, we collected pictures of signs from different sectors of the city based on a map using data from the 2020 census (IMIP, 2020). The map divides CJ according to ‘wellness levels’ or the socio-economic status (SES): Very High, High, Middle, Low and Very Low. Signs were coded according to language choice, sign location, sign type, business type, main text and informative text (Franco-Rodríguez, 2008). We hypothesized that English, the prestigious language (Baumgardner, 2006), would be used more frequently in locations with higher SES and by international companies.

Preliminary results, based on an analysis of 260 pictures, confirmed our hypotheses. There was a strong effect of location ( $p=0.002$ ) where sectors with greater SES have the highest rates of English-only signs (17%), while those with ‘middle’ SES have the highest rates of bilingual signs (45%) and those with ‘low’ SES have higher rates of Spanish-only signs (86%). Type of sign was also an important predictor of language choice ( $p=0.003$ ) with the highest rate of English in corporate signs (franchises) (32.3%).

As for business type, English was used more frequently in signs from hobbies and entertainment, restaurant and catering, beauty, and communication businesses, potentially targeting both Juarenses with high socioeconomic status and Americans seeking lower prices south of the border. English-only signs may also be used as an attempt to signal higher quality and pricing. The reason for high English usage in communication and restaurant and catering signs could be due to some businesses being international companies or being global franchises.

Interestingly, our analysis of translation of texts revealed that only one (1/69) bilingual sign included a direct, word-for-word translation. The rest of the bilingual signs used code-switching, presenting different information in each language. Lack of translation in bilingual signs suggests that English is used to convey prestige and to symbolize modernization (Baumgardner, 2006). Thus, using English in signs in a border city like CJ has a dual benefit – it targets English speaking customers from the U.S. and it attracts locals with higher SES, as well as those who are not high SES but want to be perceived as such.

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The goal of this paper is to discuss certain elliptical structures in Spanish that have not been analyzed in prior literature. These structures offer novel evidence countering the widespread assumption that VP Ellipsis is not possible in Spanish (Brucart 1987, Martins 1994, Saab 2008, 2022). This assumption is based on the well-known (though poorly understood) observation that, contrary to what happens in English (1a-b), Spanish auxiliaries cannot be stranded as a result of VPE (1a'-b'). However, previous literature has failed to notice that, in Spanish, the omission of the VP is accompanied by the appearance of the so-called neuter clitic *lo* (henceforth VPA *lo*). As (2a) and (2b) illustrate, this clitic attaches to the inflected auxiliary and functions as a VP anaphor: that refers back to an antecedent VP in the previous clause. Furthermore, in those cases where no auxiliary is present, as in (3a), the light verb *hacer* 'do' serves to lend morphological support to the VPA clitic *lo* and to the inflectional morpheme /mos/ (1PL.PRS), which would otherwise remain stranded. Interestingly, the perfect auxiliary *haber* behaves in a similar manner, as shown in (3b). While the progressive and passive auxiliaries in (2a) and (2b) can stand alone, the perfective auxiliary *haber* in (3b) must be followed by *hecho* 'done' (the past participle form of the LV *hacer* 'do').

- (1) a. Juan was investigated before Mary was [investigated]. (English)  
 a'. \* Juan fue investigado antes de que María fuera [investigada]. (Spanish)  
 b. Juan is studying now, but 5 minutes ago he was not [studying] (English)  
 b'. \* Juan está estudiando ahora, pero hace 5 minutos no estaba [estudiando] (Spanish)

(2) Aux Lo (Spanish)

- a. Juan fue [investigado]<sup>1</sup> antes de que \*(lo<sup>1</sup>) fuera María.  
 Juan was investigated before of that CL.PRED was María  
 b. Juan está [estudiando]<sup>1</sup> ahora, pero hace 5 minutos no \*(lo<sup>1</sup>) estaba.  
 Juan was studying now but before 5 ago not CL.PRED was

(3) Hacer-support (Spanish)

- a. ¿Compras tú la birra o lo \*(hace)-mos nosotros?  
 buy.2SG.PRS you the beer or CL.PRED do-1PL.PRS we  
 b. Primero ha entrado Juan y luego lo ha \*(hecho) Pedro.  
 First has entered Juan and then CL.PRED has done Pedro.

This paper presents new evidence in support of the VPE analysis of the clitic structures in (3) and (4) in Spanish. Specifically, I will argue that in these structures, the VPA clitic *lo* doubles a fully articulated VP that has been deleted at PF, as schematically represented in Fig. 1. Under this analysis, the observed variation between English and Spanish reduces to the choice of head licensing ellipsis: (i) T/Aux in English (Fig. 2) and the VPA clitic *lo* that attaches to T/Aux in Spanish (Fig. 1) (cf. Bentzen et al 2014, Vinka & Waldman 2013 for a similar analysis of the Scandinavian pronoun *det* 'it').

Fig 1. Clitic-stranding VPE (Spanish)

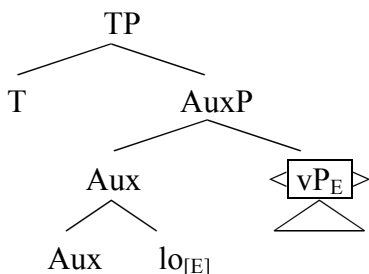
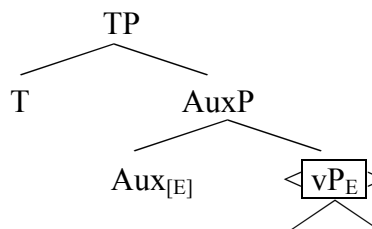


Fig 2. Aux-stranding VPE (English)

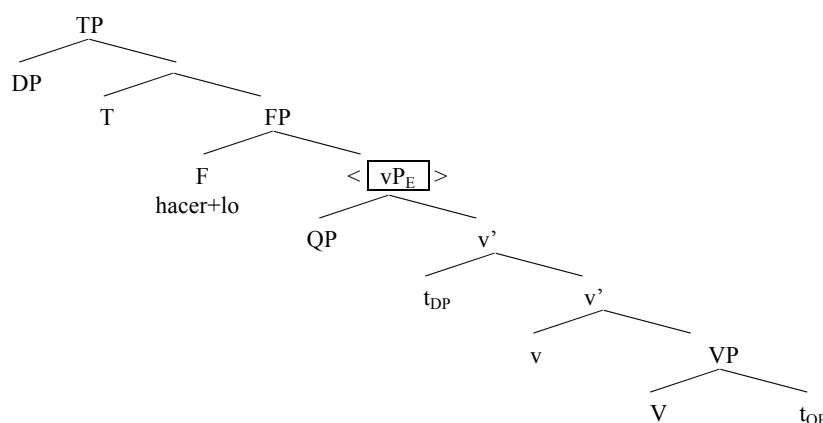


Evidence in support of the VPE analysis that I defend here comes from independent sources: (i) from inverse scope, (ii) idioms, (iii) voice mismatches and, most importantly, (iv) from the ability of the elided VP to host the trace/copy of different types of movement chains.

1. **Inverse Scope:** Quantifier Raising applies to Spanish clitic-stranding VPE constructions. As shown in (4), wide scope of the universal quantifier in the antecedent clause leads to a parallel scope in the elliptical clause. In the context of a comparable phenomenon in Norwegian, Bentzen et al (2015) suggest that the inverse scope observed in these VPE structures results from reconstructing the subject DP to its original position within the elided VP. Under this view, Quantifier Raising (QR) takes place within VPE, enabling the quantifier to c-command the reconstructed subject DP without exiting the elided VP. This is illustrated in Figure 3.

- (4) a. Este hospital es famoso porque un medico visita a cada paciente antes de que lo haga una enfermera.  
 ‘This hospital is famous because a doctor visits every patient before a nurse does [visit every patient]’ ✓(∃>∀)/✓(∀<∃)
- b. Según la política de este hospital, un medico atenderá a cada paciente tantas veces como lo haya hecho una enfermera  
 ‘According to the current policy of this hospital, a doctor would take care of every patient as many times as a nurse does [take cares of every patient].’ ✓(∃>∀)/✓(∀<∃)

Fig 3.



2. **Idioms.** VP-idioms involving a subject DP are rare but exist in Spanish. This is the case of *llegar la sangre al río* (lit: ‘the blood arrives to the river’/idiom: ‘to come to blows’). As shown in (5), the VP-proform *hacerlo* preserves the idiomatic reading of its antecedent VP in the previous clause.

- (5) Todos pensaban que la sangre [VPA llegaría al río]. Así que se sorprendieron cuando no lo hizo.  
 (lit.) ‘Every one thought that the blood will arrive to the river. So they get confused when it didn’t.’  
 (idiom.) ‘Every one thought that problems will rapidly escalate. So they get confused when they don’t.’

3. **Voice Mismatches.** It is well-known that English VPE constructions tolerate voice mismatches between the antecedent and the elided VP (Merchant 2013 et seq). The same is true for clitic-stranding constructions in Spanish.

- (6) a. *active antecedent, passive ellipsis*  
 Sancionaremos a quienes deben serlo  
 ‘We will penalize those persons that must be [VPE penalized].’
- b. *passive antecedent, active ellipsis*  
 ?Este información pudo haber sido filtrada por Gorvachov, pero decidió no hacerlo.  
 ‘This information could have been released by Gorvachov, but he chose not to [VPE release this information].’

4. **Extraction.** As demonstrated in example (7a), *Hacer Lo* can have an unaccusative verb as its antecedent. In the passive sentence provided in example (7b), the subject DP that originates as the internal argument of the verb is able to move to [Spec,TP] in order to check/value its Case feature.

- (7) a. Ahora ya no muere tanta gente de sida como lo hacía antes.  
 ‘Nowadays less people die because of AIDS than they<sub>1</sub> used to [VPE die t<sub>1</sub>].’
- b. Tú estuviste siendo investigado por tantos policías como lo estuve (siendo) yo.  
 ‘You were being investigated by as many police officers as I<sub>1</sub> was (being) [VPE investigated t<sub>1</sub>].’



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## Stress in Spanish: an analysis using layered feet

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Stress in Spanish has attracted interest from phonologists due to the occurrence of both regular and exceptional patterns. A key question is how much of the vocabulary can be accounted for by the grammar and how much information must be stored in the lexicon, and by what mechanisms. After more than half a century of research, there are still fundamental issues unresolved: 1. Is the domain of stress assignment the prosodic word or the morphological stem? 2. Is the stress system quantity sensitive or quantity insensitive? 3. To what extent does morphological structure affect phonological structure, and how? Building on previous work, I propose here a comprehensive analysis of Spanish stress that answers all those questions. The analysis combines formalisms that have not been previously explored together: constraint indexation, underlying stress, and layered feet.

I assume that stress in Spanish is stem-final and quantity insensitive (Baković 2016). Regular stress falls on the last vowel of the stem (the penult in words ending in an inflectional affix (1a) and final in words ending in a consonant (1b) or a non-inflectional vowel (1c)). Irregular stress, however, falls on the second-to-last vowel of the stem (the antepenult in words ending in an inflectional affix (2a) and penultimate in words ending in a consonant (2b)), or on the third-to-last vowel of the stem (always the antepenult (2c)).

### 1. Regular stress in Spanish

- a. ...'VC]<sub>St</sub>V (*sabán*]<sub>St</sub>a ‘savannah’)
- b. ...'VC]<sub>St</sub> (*animál*]<sub>St</sub> ‘animal’)
- c. ...'V]<sub>St</sub> (*Panamá*]<sub>St</sub> ‘Panama’)

### 2. Irregular stress in Spanish

- a. ...'VCVC]<sub>St</sub>V (*sában*]<sub>St</sub>a ‘sheet’)
- b. ...'VCVC]<sub>St</sub> (*canibal*]<sub>St</sub> ‘cannibal’)
- c. ...'VCVCVC]<sub>St</sub> (*régimen*]<sub>St</sub> ‘diet’),  
(*ímpetu*]<sub>St</sub> ‘impetus’)

For regular stress (1), I assume that FINALSTRESS (‘Stress is final in the stem’) dominates NONFINALITY (‘Stress is not final in the stem’), based on Baković (2016). Irregular stress in (2a,b) derives from ranking a lexically indexed version of NONFINALITY<sub>(1)</sub> above FINALSTRESS. As opposed to Baković (2016), however, I assume metrical feet. In the present analysis, FINALSTRESS dictates whether feet are unmarked syllabic trochees, as in sa(bán)a]<sub>Ft</sub> or ca(níbal)]<sub>Ft</sub>, or monomoraic, as in ani(mál)]<sub>Ft</sub> or Pana(má)]<sub>Ft</sub>. The latter two violate FOOT-BINARITY (‘Feet must contain at least two moras or syllables’). I further assume that satisfaction of NONFINALITY<sub>(1)</sub> can trigger layered feet, as in ((sába)<sub>Ftmin</sub>n]a)<sub>Ftmax</sub> and the plural form ca((níba)<sub>Ftmin</sub>]es)<sub>Ftmax</sub> (cf. singular ca(níbal)]<sub>Ft</sub>) (cf. Martínez-Paricio 2021). These forms violate \*LAYEREDFOOT (‘Feet are maximally disyllabic’). Finally, the three-syllable window in Spanish can be derived from a constraint like ALIGN-Right(Ft<sub>max</sub>, ω) (‘Maximal feet right-align with a prosodic word’), which is undominated in Spanish.

Any comprehensive analysis of Spanish stress must further account for the irregular pattern in (2c), *régimen*], as well as the set of stress patterns found in the plural of C-final forms with irregular stress, not addressed in Baković (2016). Two strategies are observed: (i) stress shifts one syllable to the right (e.g., *régimen*], with antepenultimate stress, and *carácter*], with penultimate stress, give *regímen*]es and *caractér*]es, respectively); and (ii) stress shifts two syllables to the right (e.g., *ómicron*] gives *omicrón*]es) (Ohannesian 2004). These facts are accounted for if we assume a combination of underlying stress, that is, underlying metrical structure, and constraint indexation. (i) *régimen*] has underlying stress on the third-to-last syllable and is also indexed with NONFINALITY<sub>(1)</sub>. *régimen*] surfaces with antepenultimate stress because IDENTSTRESS dominates \*LAYEREDFOOT: ((régi)<sub>Ftmin</sub>men)]<sub>Ftmax</sub>. In

the plural, NONFINALITY<sub>(1)</sub> rules out \*regi(mén]es)<sub>Ft</sub> and ALIGN-Right(Ft<sub>max</sub>, ω) discards \*((rég]i<sub>Ftmin</sub>me)<sub>Ftmax</sub>n]es in favor of re((gí]me)<sub>Ftmin</sub>n]es)<sub>Ftmax</sub>. (ii) *ómicron*] also has underlying stress but is not indexed to NONFINALITY<sub>(1)</sub>. The plural then surfaces with penultimate stress: omi(crónes])<sub>Ft</sub>. (iii) *carácter*] has no underlying stress, but is indexed to both NONFINALITY<sub>(1)</sub> and \*LAYEREDFOOT<sub>(2)</sub>. The latter dominates the former, so layered feet are avoided in the plural: carac(tér]es)<sub>Ft</sub>, cf. \*ca((rá]cte)<sub>Ftmin</sub>r]es)<sub>Ftmax</sub>.

To conclude, the combined use of formalisms of several types (i.e., constraint indexation, underlying stress, and layered feet) links to a scale of markedness. 1. The most marked forms are those which have underlying stress and are indexed (régimen, regímenes; with proparoxytonic stress in both the singular and the plural and stress shift). 2. Then there are forms with underlying stress and no indexation (ómicron, omicrones; with proparoxytonic stress in the singular and paroxytonic stress in the plural and stress shift). 3. The next less marked form is doubly indexed (carácter, caracteres; with paroxytonic stress in both the singular and the plural and stress shift). Finally, there are forms which are indexed to one constraint (cañibal, cañibales; with penultimate stress in the singular and antepenultimate stress in the plural and no stress shift).

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### **Switching tenses and switching times: towards a grammar of the Historical Present**

The HP is a narrative device in which eventualities in the Present Tense are actually past relative to the time of the "real" context of utterance (1a). HP should be distinguished from the play-by-play present, but also from the present in stage directions, screenplays, and plot summaries, in which pastness relative to UTT-T is not guaranteed. In spite of its intrinsic interest as a particular instance of context-shift (in which at least one of the coordinates of a Kaplanian context is shifted, giving rise to a "double K-context"), HP is underdescribed as a linguistic phenomenon (Schlenker 2004, Eckard 2015). In a series of recent papers, Anand & Toosarvandani (2017, 2018, 2021) have established certain hallmarks of the HP and proposed an explanation for them. These are: (1) the HP time interval does not overlap UTT-T (1a); (2) the HP is linked to narratives (it is infelicitous in simple information exchanges) (1b); (3) a sequence of sentences in the HP may not exhibit temporal inversion (1c); (4) the HP may anchor not only Present Perfects and Simple Pasts, but also Past Perfects (1d); and (5) the HP is not subject to the stative-constraint (1e). A&T's important contribution to the analysis of the HP has been made mostly on the basis of constructed English examples.

In this presentation, we report the first results of an ongoing qualitative corpus investigation of the HP in Spanish, French, Italian and Portuguese (parallel corpus of translations of J. Cercas' *Anatomía de un instante*), whose tense-aspect systems differ from English (no stative constraint for the Present; Imperfect vs Pfv-Simple Past contrast) and among themselves (differences in the semantics of the Present Perfect and of the Pfv-Simple Past). We focus on two phenomena, switching tenses and switching times.

**SWITCHING TENSES:** The HP cooccurs with other tenses not only when a narrative switches from HP-mode into non-HP-mode (2), but also inside HP-mode text stretches. Since the temporal relations between subsequent HP occurrences are restricted to narrative progression (*and-then*) and overlap (A&T 2018), backward-shifting requires a form indicating anteriority, so that there is also a H-PresPerf (cooccurring with definite temporal adverbials that are incompatible with the canonical PresPerf), a H-Pfv-SP and a H-PastPerf (3a-d). Our data show important crosslinguistic differences as to the availability of a H-Pfv-SP and as to the preference for either H-PresPerf and H-PastPerf. But the most interesting question in this regard concerns the existence in Romance of an Imperfect that is not backward-shifted, but simultaneous to a HP. Intrasentential tense switches involving H-Imperfects (4) have important consequences for the theory of Sequence of Tense. They appear to be restricted to relative clauses, thus substantiating the hypothesis that their SoT-behavior differs from that of other types of embedding (Kusumoto 2005).

**SWITCHING TIMES:** The HP-mode relies on the shift of the temporal coordinate of the context from UTT-T to a (past) time of assessment (ASSESS-T). Although the HP-mode may be sustained in an entire narrative, switches back and forth between the HP- and the non-HP mode are frequent. **Temporal adverbials** (Altshuler 2011) play a central role in those switches. The HP-mode does not support indexical adverbials (*yesterday/tomorrow*) – but for the possible exceptions of *now* (whose status as an indexical is at best doubtful) and of text stretches combining HP with Free Indirect Discourse. The HP-mode resorts instead to anaphoric adverbials (*the day before/after*). Thus, in the HP-mode tenses are interpreted relative to ASSESS-T, whereas indexical adverbials are interpreted relative to UTT-T. This suggests that a bicontextual analysis for the HP-mode, analogous to that of FID (Schlenker 2004, A&T 2017), is more adequate than an analysis in terms of indexical shift (Deal 2020).

- (1) a. *Entonces, en 1947 Gombrowicz sale.PRES a la superficie* (Piglia).  
Then, in 19747, Gombrowicz emerges to the surface. [UTT-T C **april 2008**]  
b. Who built this church? \*(In the 1630's) Borromini builds this church (A&T 2020)  
c. The administration fires (e1) Mike. He meets (e2) with the ambassador. \*e1 > e2 (A&T 2018)  
d. Rumors of Berlusconi's crimes swirl. His advisors confront him. He scoffs.  
He had paid off the prostitute for her silence already (A&T 2017)  
e. Bill wins the race. <sup>ok</sup>HP ; \*CANONICAL-PRES (A&T 2017)
- (2) Sp. *en las semanas que siguen.PRES diversos miembros de ese organismo tantean.PRES a dirigentes de partidos minoritarios [...] y durante el otoño y el invierno se extienden.PRES en Madrid rumores diversos [...] Eso fue.SP todo.* (Cercas)  
in the weeks that **follow** various members of that organization **sound out** leaders of minority parties [...] and over the course of the autumn and winter several different rumours **spread** around Madrid [...] That **was** all. (Cercas)
- (3) a. Sp. *antes del verano ha inquietado*PRESPERF *al país con la advertencia [...]* (Cercas)  
Fr. *Avant l'été, il avait inquiété.PQP le pays par un avertissement*  
before the summer **he'd worried** the country with the warning [...]
- b. Sp. *lo halagan.PRES los mismos empresarios y financieros que antes lo arrinconaron.SP*  
Fr. *il est flatté.PRES par les patrons et les financiers, ceux-là mêmes qui auparavant l'avaient délaissé.PQP*  
It. *lo incensano.PRES quegli stessi imprenditori e finanziari che lo avevano messo.PQP da parte*  
businessmen and bankers who **used to exclude** him **flatter** him (Cercas)
- d. Sp. *y dado que este había promovido.PQP una candidatura derrotada, la elección supone.PRES un severo varapalo para el presidente* (Cercas)  
and given that he **had sponsored** a candidate who was defeated, this election **represents** a severe setback for the Prime Minister
- (4) *Lo que ocurre.PRES a continuación en la Zarzuela [...] ocurre.PRES en unos pocos metros cuadrados, en el despacho del Rey y en el de Fernández Campo, que era.IMPf el antedespacho del antedespacho del Rey* (Cercas)  
What **happens** next in the Zarzuela [...] **happens** in a few square metres, in the King's office and in Fernández Campo's, which **was** the outer office of the King's outer office

**REFERENCES:** Altshuler 2011, Toward a more fine-grained theory of temporal adverbials. **SALT 21**. 652-673; Anand & Toosarvandani, 2017 Unifying the canonical, historical, and play-by-play present **SuB 21**; 2018, No explanation for the historical present: Temporal sequencing and discourse. **SuB 22**; 2021, Embedded presents and the structure of narratives. **SALT 30**. 801-820; Deal 2020, A theory of indexical shift, MIT Press; Eckardt 2015, *The semantics of Free Indirect Discourse*. Leiden, Brill; Kusumoto 2005, On the quantification over times in natural language, *Natural Language Semantics* 13(4), 317-357; Schlenker 2004, Context of Thought and Context of Utterance (A Note on Free Indirect Discourse and the Historical Present). *Mind & Language*  
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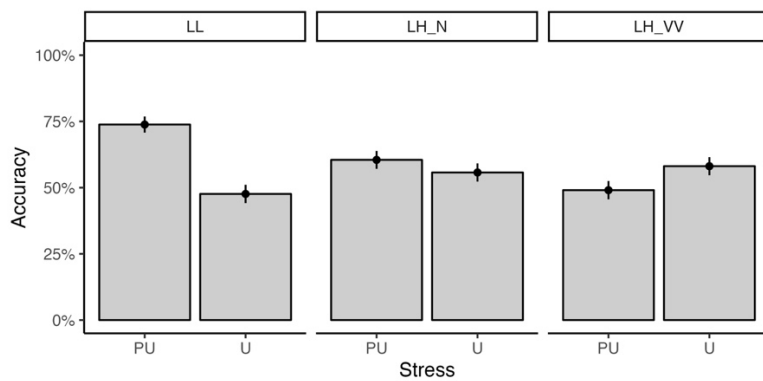
## Syllable weight effects on L2 Portuguese stress identification may be sonority-driven

Chao Zhou (University of Lisbon) & Guilherme D. Garcia (Université Laval)

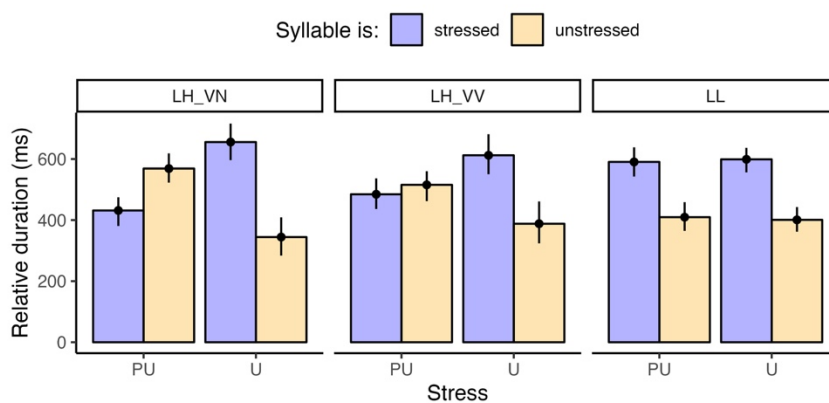
**Background:** Word-level prominence in Mandarin Chinese is predicted by the durational difference between syllables, which correlates with the tone carried by the syllable ( $T0 < T3 < T1/T2/T4$ ), rather than the syllable types (CV and CVN) (Qu 2013, Wu & Kenstowicz 2015). When acquiring the lexical stress of a novel weight-sensitive language, one would expect L1-Mandarin learners to transfer this durational cue and to be blind to syllable types in the early stages of their interlanguage. Surprisingly, in an experimental study, we found that both durational cues and syllable type (weight) seem to play a role in the perception of Portuguese stress by naïve L1-Mandarin listeners.

**Experimental Study:** Twenty one L1-Mandarin native speakers with moderate English proficiency (mean LexTALE score 30, SD = 7.23; 0–100 scale) and no knowledge of Portuguese participated in an auditory stress identification task with disyllabic pseudo-words in Portuguese displaying final or penultimate stress ( $n=60$ ). 10 stimuli had two light syllables (LL), 10 ended with a nasal coda (LHn), and 10 had a final diphthong (LHvv). Since Portuguese is weight-sensitive (Garcia 2017), this study aims to test L1-Mandarin learners' accuracy locating stress in Portuguese on the basis of syllable weight in the target language. We predicted that L1-Mandarin participants would perform better with Portuguese final stress if the final syllable were heavy (i.e., duration as an acoustic correlate of prominence; Qu 2013, Garcia 2020). Meanwhile, their identification accuracy on penultimate stress would be diminished with the presence of a final heavy syllable.

**Results & Discussion:** A maximal Bayesian mixed-effects regression found two interaction effects, confirming L1-Mandarin listeners' gradual sensitivity to Portuguese syllable weight. As seen in Figure 1, the heavier the final syllable, the more accurate at locating final stress participants were ( $b_{LL:stressU} = -1.21$ , 95% HDI [-2.05, -0.41];  $b_{LHvv:stressU} = 0.63$ , 95% HDI [-0.01, 1.22]). These results indicate that syllable duration indeed helps L1-Mandarin listeners identify Portuguese stress (LL vs. LH), but it alone does not account for the gradual weight effect (LL < LHn < LHvv) observed in the data. This is because syllable duration does not seem to reliably cue the difference between LHn and LHvv in the stimuli, as shown in Figure 2. Further, this effect cannot be attributed directly to their previous linguistic knowledge: syllable type does not correlate with word-level prominence in Mandarin, as previously mentioned. Finally, in their English L2, the final syllable is extrametrical (Hayes 1982). Thus, the question is what leads L1-Mandarin listeners to perceive stress in final LHvv syllables with higher accuracy than LHn. Our speculation is that sonority can be playing a role. It has been shown in many languages that sonority affects stress assignment (Kenstowicz 1994; McCollum 2020; cf. Shih and de Lacy 2019). It seems that sonority, which may be grounded in the perceived resonance (Clements 2009), might function as one of the universal perceptual biases that shape (L2) speech perception (e.g., Bohn 1995; Bohn & Best 2012). When acquiring a non-native language, learners show sensitivity to sonority early on and will further explore its exact role in the target language (e.g. stress assignment and phonotactics) with increased experience.



**Figure 1:** Main results: accuracy (y-axis) by stress and weight profile (error bars represent bootstrapped 95% confidence intervals). Gradient weight effect in final (U) syllables positively affects accuracy.



**Figure 2:** Durational difference of auditory stimuli.

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Diachronic changes in the aspectual viewpoint meaning (Smith 1991) of Romance tenses have been extensively studied for (analytic) perfects evolving perfective viewpoint readings, cf. e.g. (Squartini & Bertinetto 2000; Schaden 2012; Howe 2013; Caudal 2015). I will here take ‘perfectivization’ processes to involve two distinct steps, as over time, some tense became increasingly capable of **(a)** combining with aspectuo-temporal modifiers requiring (past) perfective-viewpoint readings, before **(b)** marking utterances within sequence-of-event (SOE) discourse structures – as is commonly assumed in the literature (Nedjalkov 1988; Dahl 2000; Squartini & Bertinetto 2000). I will try and show how perfectivization processes **(a)** and **(b)** can be somewhat independent and semantically distinct, by studying the perfectivization of two French tenses: the *passé composé* (PC) (trying to renew our take on a well-known issue, from (Foulet 1920) to (Caudal 2015)) and the *imparfait* (IMPF). For the latter tense, we will of course examine its so-called ‘narrative’ uses – a much less well covered issue, except synchronically, cf. (de Saussure & Sthioul 1999; Gosselin 1999; Berthonneau & Kleiber 1999; Bres 2005), i.a.

Concerning process **(b)**, on the basis of a corpus study, I will demonstrate that (i) SOE uses of the IMPF in Modern/ Contemporary French (18<sup>th</sup>-20<sup>th</sup> c.), and of the PC in Old French (11<sup>th</sup>-12<sup>th</sup> c.) cannot appear on purely discourse contextual grounds, and share a common need for licensing/support expressions. I will then argue that all said support material seems to set a *narrative discourse topic* (i.e. to signal and set a topic referent meant to encompass a new (or additional) series of SOE discourse segments) to which the discourse referent denoted by the PC/IMPF-marked SOE utterance can attach (Asher, Prévot & Vieu 2007). Indeed, those support expressions seem to consist in framing and SOE-inducing expressions (e.g. framing adverbials (cf. (1)), causo-temporal connectives (cf. *puis* in (2)), bi-clausal causo-temporal constructions (*quant... si...* in (3)), etc.), with a narrative topic-introducing function; cf. (Tasmowski-De Rijck 1985) for the IMPF (*pace* (Bres 1999)), and (Caudal 2015) for the PC. Discourse topic referents and topic coherence are known to be key to modelling narrative discourses in the SDRT literature (Asher & Lascarides 2003: 163); to put it intuitively, narrative discourses (i.e., about past SOEs) must meet special requirements in terms of coherence and topic (dis)continuity. Moreover, discourse connectives as well as framing adverbials have been independently shown to have a topic setting function in discourse (Bras, Le Draoulec & Vieu 2001; Asher, Prévot & Vieu 2007). I will here capitalize on these prior results in my analysis of perfectivization process **(b)**, and will propose that discourse topic semantic conditions are involved in the denotation of SOE uses of the IMPF and PC, but cannot be set by the semantics of those tense uses alone, so that support expressions must intervene to satisfy their topic conditions.

- (1) *A 17 h, nouvelle canonade [sic]. A 22 heures, elle reprenait plus violente encore. Un obus atteignait l'aumônier, le cher P. Talabardon, qui était<sub>IMPF</sub> tué sur le coup.* (CF)  
‘At 17 :00, another cannonade. At 22:00, the cannonade resumed<sub>IMPF</sub> again, even more violently. A shell hit<sub>IMPF</sub> the chaplain, dear Fr. Talabardon, who was killed instantly.’  
(<http://spiritains.forums.free.fr/defunts/talabardons.htm>; 14/012/2018 at 22 :07)
- (2) *Il y eut un choc sourd, (...) puis le corps de Barzum s'écroulait en arrière.*  
‘There was a dull shock, (...) and then Barzum's body collapsed<sub>IMPF</sub> backwards.’  
(Souvestre & Alain, *Le train perdu*, éd. R. Laffont, Paris, p. 264)
- (3) *Quant la reine voit le roi, (...) si s'est contre le roi dreciee.* (OF) (*Chevalier*, 3955–7)  
‘When the queen saw the king (...), she stood<sub>PC</sub> up in defiance.’

I will specifically claim that SOE, near-perfective uses of both the Old French PC and the Modern/Contemporary French IMPF (which I take to be then in the process of becoming conventionalized, separate uses of these tenses) semantically require, but are unable to

introduce, narrative discourse topics. I take this inability to associate with imperfective tense meanings – which, according to me, explains their so-called ‘anaphoricity’ (Berthonneau & Kleiber 1999): they require a narrative topic referent, but do not introduce (= existentially bind) one – unlike (*bona fide*) perfective tense meanings. Hence the need for support expressions identified for SOE uses of the (Old French) PC and IMPF – these are ‘crutches’ making up for the anaphoric discourse-level semantics of these tense uses, introducing the narrative discourse topics required (but not denoted) by said tense uses. Reinterpreting diachronic claims in (Caudal 2015), I will suggest that perfectivisation process (**b**) was completed for SOE uses of the PC by the pre-Modern French period, when they became capable of introducing (= existentially binding) a narrative discourse topic, thereby becoming fully-fledged perfective tense uses.

Finally, coming back to perfectivization process (**a**), and exploiting earlier empirical observations (Bres 2005: 126; Treikelder 2006: 75; Caudal 2015; Caudal 2020) that SOE uses of the IMPF / (Old French) PC could associate with past perfective adverbials (e.g. *pendant* (‘for’) + fixed duration), I will suggest that the non-discursive aspectual semantics of these SOE uses was already perfectivized, i.e. that the logical forms associated with these uses involve a perfective aspectual viewpoint function (vs. an imperfective viewpoint function for non-SOE uses of the PC/IMPF). In a nutshell, I will claim that SOE uses of the Old French PC and Modern French IMPF were already perfectivized w.r.t. their sentence-level aspectual semantics, but not their discourse-level semantics, where they retained imperfective features (anaphoricity). It seems to me that this might explain the abundance of conflicting opinions in the literature as to their aspectual sense: although no longer really imperfective, they were not fully perfective yet – an aspectually hybrid, highly discourse-sensitive type of tense meaning.

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## Testing the Aerodynamic Voicing Constraint using large scale ASR with pronunciation variants: The case of five Romance languages

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The Aerodynamic Voicing Constraint [1, 2] refers to the physical limitations speakers encounter when maintaining voicing in stops. When producing stops, air accumulates in the oral cavity, reducing the oral and subglottal pressure gradient which may lead to insufficient transglottal airflow and result in voicing loss. Stops are not equal before the AVC. Voicing maintenance varies with place of articulation: Consonants with more posterior occlusions (velars) are less compatible with voicing than consonants with more fronted constrictions (labials and coronals). This has been attributed to differences in compliant surface availability for passive enlargement of the vocal tract [3]: for velars only the pharyngeal walls and part of the soft palate are compliant surfaces. Despite this, voiced velar consonants are present in phonological inventories across languages, an indication that certain articulatory strategies to circumvent the AVC are present [4]. The present study investigates whether non-canonical voicing patterns (voicing of phonemically voiceless and devoicing of phonemically voiced stops) vary as a function of place of articulation in intervocalic position, a position known to favoring voicing, in five Romance languages using large corpora and automatic alignment with pronunciation variants.

**Corpora** consisted of more than 1000 hours of French, Italian, Portuguese, Romanian and Spanish broadcast speech from TV and radio shows. Except for Romanian, which had automatically transcribed data, manual transcription was available for all data. An automatic speech recognition (ASR) system [5] was used to carry out the forced alignment, matching speech segments to their orthographic transcription using language specific acoustic models and pronunciation dictionaries. The latter were enriched with pronunciation variants for stop voicing (e.g., the Romanian *acut* /akut/ ‘acute’ has four possible pronunciations: [akut], [agut], [agud], [akud]) allowing the system to choose the variant which best matches the language-specific acoustic models [6]. Only intervocalic stop consonants were retained for the present analysis. Table 1 shows the total counts of phonemic intervocalic stops and the percentages of non-canonical productions identified by the system for each language.

**Hypothesis:** Based solely on aerodynamic constraints (AVC), we would expect phonemically voiceless velar stops to voice at lower rates than more fronted occlusion consonants (bilabials and coronals), and phonemically voiced velar stops to devoice at higher rates than their bilabial and coronal counterparts.

**Statistical analysis:** To test this hypothesis we ran two models (one for intervocalic voicing /p,t,k/ → [b,d,g], and one for intervocalic devoicing /b,d,g/ → [p,t,k]) using a binomial family, logit link function logistic regression with *place of articulation* (bilabial, coronal, velar), *duration*, *position in the word* (initial, medial, final), *language* (French, Italian, Portuguese, Romanian, Spanish) and *vowel height* (high, mid, low) as predictors. The duration variable was log-transformed to reach a normal-like distribution. Categorical variables were contrast coded using theoretically motivated Helmert contrasts for the three level variables and deviation-coding was used for the five-level *language* variable.

**Results** show that for intervocalic *voicing* the AVC was upheld in Romanian, Portuguese and French, but not Italian and Spanish, where voicing patterns went against the predictions of the AVC (velars tend to voice at higher rates in intervocalic position than bilabials and coronals).

For intervocalic *devoicing* the AVC was disconfirmed for all five languages (velars do not devoice at higher rates than more fronted occlusion consonants).

**Discussion:** Results show that intervocalic stop voicing, a common phonological process, is sensitive to aerodynamic constraints *only* in Romanian, Portuguese and French. The aerodynamic hypothesis is not supported for Italian and Spanish, suggesting other elements than articulation naturalness are at play in these two languages. All studied languages behave similarly, and against the AVC in regards to intervocalic stop devoicing, a much rarer phenomenon.

Phoneme	bilabial		coronal		velar	
	b	p	d	t	g	k
French	17868 (4.6%)	63147 (9.1%)	105748 (4.5%)	83646 (7.7%)	8996 (3.6%)	63063 (9.5%)
Italian	17304 (6.6%)	54975 (10%)	116202 (4.7%)	82231 (11%)	8239 (5.6%)	69169 (15.3%)
Portuguese	12497 (6.59%)	28125 (8.2%)	67330 (13.2%)	55405 (12.9%)	11812 (9.6%)	43109 (9.69%)
Romanian	40938 (3.9%)	113007 (5.65%)	195629 (4.8%)	204176 (5.6%)	20829 (5.9%)	149215 (5.35%)
Spanish	153644 (3.7%)	123545 (7.54%)	347658 (4.5%)	142157 (8.18%)	52331 (4.3%)	203569 (13.2%)

Table 1: Total counts of identified phonemic intervocalic stops per place of articulation and language. Percentages in brackets indicate counts of non-canonical productions (voiced /p,t,k/ and devoiced /b,d,g/).

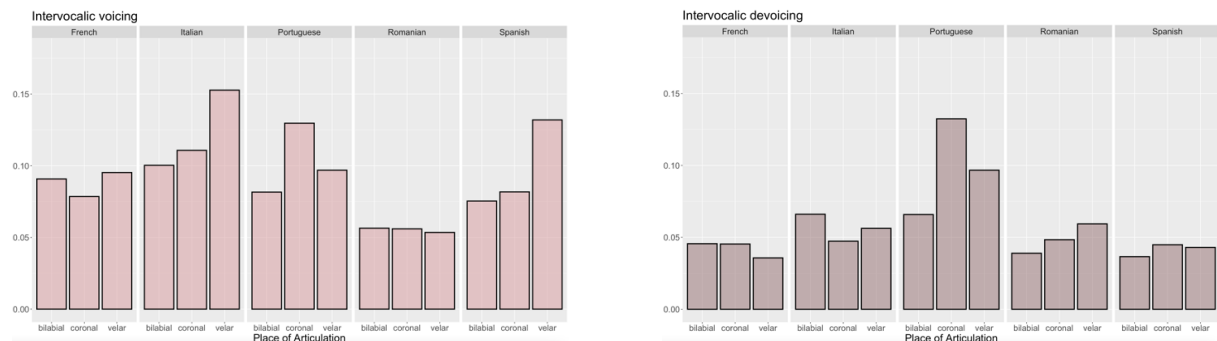


Figure 1: Intervocalic **voicing** (left) and **devoicing** (right) percentages per *Language* (French, Italian, Portuguese, Romanian, Spanish) and *Place of Articulation* (bilabial, coronal, velar) detected by the ASR systems

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## The A-N vs. N-A asymmetry: French adjectives at the Syntax-Phonology interface

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Although a number of approaches have been proposed that the interaction of syntax and phonology is bidirectional (Breiss & Hayes, 2020; Zec & Inkelas, 1990), whether phonological requirements can affect syntactic choices is still a well-debated issue (Schlüter, 2003; Shih, 2017). Our study investigates the impact of prosodic factors on the ordering of a particular set of French attributive adjectives, unlike previous studies (Forsgren, 1978; Thuilier et al., 2012). The choice of adjectives was driven by the observation that variation with regard to the position is possible. This variation is created by the absence of syntactic and semantic constraints, thus the adjectives can occur in pre- and postnominal position with no apparent change of interpretation, as shown in (1).

- (1) a. un charmant garçon                      b. un garçon charmant  
      *a charming boy*                              *a boy charming*  
      ‘a charming boy’

This, in our opinion, leaves room for phonological and prosodic factors to be decisive for the placement of these adjectives. Our first hypothesis is that the relative length of adjective and noun affects the positioning of the adjectives. The role of Length has previously been shown to influence the placement of constituents (Bresnan et al., 2007; Faghiri, 2016; Thuilier, 2012) and words in general (Benor & Levy, 2006; Forsgren, 1978; Yao, 2018). Since it has been claimed that constituents are inclined to appear in order of increasing length in SVO languages like French (Thuilier, 2012), the question arises whether this “short-before-long principle” (Hawkins, 2000; Thuilier, 2014) is reflected in the NP, too. Our second hypothesis is that the inadmissibility of some monosyllabic element in the second position of the A-N pair is due to a violation of a principle of rhythmic alternation (Schlüter, 2005). Interestingly, it has been previously stated that monosyllabic adjectives tend to occur preminally (Thuilier et al., 2012; Wilmet, 1981). Similarly, when the noun is monosyllabic, the avoidance of juxtaposed strong syllables due to phrase-final prominence results in a preference for postnominal adjectives (2b.).

- [                      \* ] [ \* ]                      [ \* ]                      [ \* ]  
(2) a. ?/\*un parfait lieu                      b. un lieu parfait  
      *a perfect place*                              *a place perfect*  
      ‘a perfect place’

To test these two hypotheses, we conducted an online acceptability judgment task (7-point Likert Scale), examining the role of relative length and rhythmic alternation. The material testing length is designed according to six conditions, consisting of three length configurations (i. A is longer than N, ii. A is shorter than N, iii. A and N are equally long), each presented in two orders (A-N or N-A). The impact of rhythmic alternation was tested with a subset of the items, which include adjectives modifying a monosyllabic noun, thereby allowing for adjacent strong syllables. The task was completed by filler sentences. In both cases the sentences were presented in written format.

An initial analysis of the results from 104 participants showed no significant difference in the acceptability between the conditions testing both factors. Thus, we excluded all participants who did not judge the filler items accordingly, which left us with 23 participants (15f, 5m, 3d). *Figure 1* displays the ratings of the items testing the impact of length. As predicted, adjectives that are longer than the noun are rated significantly higher in postnominal position (post\_longerA). For adjectives that are shorter than the noun, no significant difference could be observed (pre\_shorterA vs. post\_shorterA). When adjectives and nouns are equally long, postnominal adjectives are rated significantly higher (post\_equalA). In addition, a mixed-

effects model was constructed in R (R Core Team, 2015) using the lme4 package (Bates et al., 2014) and lmerTest (Kuznetsova et al., 2017). The model predicted participant's RATINGS as a function of POSITION and RELATIVE LENGTH including PARTICIPANTS and ITEMS as random effects. The model revealed a significant effect of POSITION and the interaction of POSITION and RELATIVE LENGTH on the RATING. *Figure 2* displays the ratings of the items testing the influence of rhythmic alternation. As predicted, items are rated significantly lower when the adjective-noun pair involves a juxtaposition of two strong syllables (pre\_longerAStrongStrong). Our results show that native speakers prefer adjective-noun pairs that appear in order of increasing length and disprefer adjective-noun pairs that include two adjacent strong syllables. Thus, prosodic factors such as length and rhythm affect the positioning of French attributive adjectives. This supports the claim that phonological requirements can affect syntactic choices.

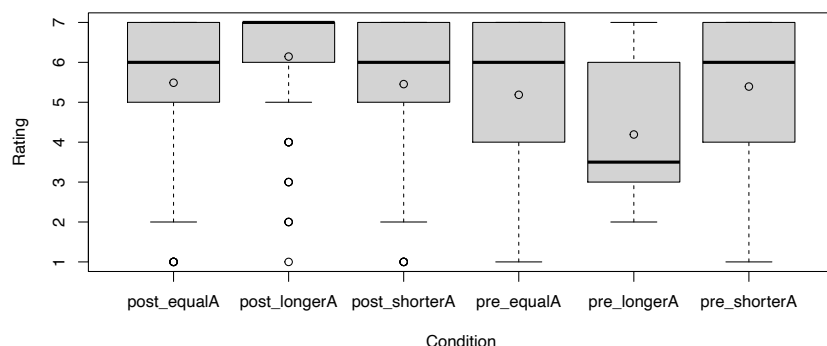


Figure 1 Ratings of the experimental items testing length according to the six conditions

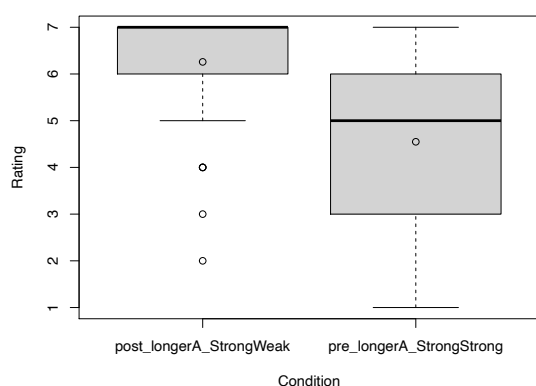


Figure 2 Ratings of the experimental items testing rhythmic alternation

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The French pronoun *iel* on Twitter: a gendered use of a non-gendered form?

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Germanic human sing. non-binary pronouns (*they*, *hen*) expand their generic use, raising sociolinguistic (evolution against the norm, cf. Bodine, 1975) and theoretical questions (gender place and values in the feature hierarchy, cf. Bjorkman, 2017), while little is known about Romance (*elle* in Spanish, *elu* in Portuguese). For Canadian French, Diaz (2021) found very few neopronouns (2% of all inclusive forms) on Twitter (May 2020). We focus here on French *iel*; coined by non-binary persons to refer to themselves around 2008 (Greco, 2015), it entered the Robert dictionary in 2021 as a ‘subject 3<sup>rd</sup> pers. pronoun to evoke a person whatever their gender’. We searched Twitter, which has metadata about speaker’s gender, and which has ‘iel’ in its guidelines, with the *rtweet* R package (Kearney, 2019). Using *search\_fullarchive*, we compiled all tweets over one day (June 1st) in 2020, 2021 and 2022, extracting all French tweets containing *iel(s)* ‘they’, *il(s) et/ou elle(s)* ‘he or/and she’, excluding retweets. We see an increase of *iel(s)* (496 in 2020, 688 in 2021, 795 in 2022), always outnumbering *il(s) et/ou elle(s)* (resp. 88, 83 and 131). We randomly sampled 300 *iel(s)* tweets for each year, excluding 36 irrelevant ones, yielding a sample of 864 tweets, plus 281 *il(s) et/ou elle(s)* tweets. In addition to Twitter metadata, we annotated grammatical number and function, agreement pattern (where applicable), type of use (sarcastic, metalinguistic, generic, group-referent, non-binary). Despite *iel(s)*’s dominant subject use (88%), we found some instances of predicative (*C’est iel* ‘it is them’) (4%) and prepositional complements (*avec iel* ‘with them’) (2%), where it competes with strong forms (*ellui*, *elleux*).

User gender	2020		2021		2022	
Female	20/48	23.7%	36/24	20.7%	27/39	23%
Non binary	13/44	19.9%	13/14	9.3%	10/12	7.7%
Non binary female	11/18	10.1%	11/13	8.3%	6/5	3.8%
Male	6/10	5.6%	11/10	6.9%	21/17	13.2%
Non binary male	6/9	5.2%	14/11	8.6%	10/2	4.2%
Any	5/8	4.5%	8/10	6.2%	5/4	3.1%
Unknown	33/56	31%	63/52	40%	77/52	44.9%
<b>Total</b>	94/193	100.0%	156/134	100.0%	154/133	100.0%

Table 1. Number of *iel/iels* in tweet samples by user gender and year.

Despite the number of ‘unknown’, we found that *iel(s)* users identifying as female (23% in 2022) are stable and outnumber those that identify as male while (self-declared) non-binary users form a decreasing minority (15.7% in 2022) (Table 1). We also found an increase in singular *iel* (32% in 2020, 53% in 2021 and 2022).

Type of use	2020		2021		2022	
Generic ( <i>iel</i> )	64/0	22.3%	89/0	30,9%	52/0	18,1%
Metalinguistic	5/3	2.8%	31/3	11,8%	32/5	12,9%
Sarcastic	4/1	1.7%	5/2	2,4%	9/2	3,8%

Non-binary	18/14	11.1%	25/7	10,4%	56/1	19,9%
Ungendered	3/1	1.4%	6/1	2,4%	5/0	1,7%
Group (iels)	0/174	60.6%	0/121	42,0%	0/125	43,6%
<b>Total</b>	<b>94/193</b>	<b>100.0%</b>	<b>156/134</b>	<b>100.0%</b>	<b>154/133</b>	<b>100.0%</b>

Table 2. Number of *iel/iels* in tweet samples by type of use and year.

Table 2 shows that most users employ *iel* not to refer to non-binary persons (1) (only 14.4%) but rather to mixed groups (2) (54.4%), possibly as a strategy to overcome the male bias associated with the ‘generic’ masculine (Gygax et al., 2008). We also see a slight decrease of generic uses (3) (22.5%), and a slight increase in metalinguistic (4) (5.9%) and sarcastic uses, likely due to the French media controversy in 2021.

(1) *mais iel est non binaire, désolé* ‘but they<sub>.SG</sub> are non binary<sub>.SG</sub>, sorry’

(2) *J’ai failli parler des philosophes [...] généralement iels disent juste des trucs perchés* ‘I almost mentioned philosophers, usually they<sub>.PL</sub> just say crazy things’

(3) *ne pas sortir avec quelqu’un parce qu’iel est bi c’est de la biphobie* ‘Not dating someone because they<sub>.SG</sub> are bisexual it’s biphobia’

(4) *dans moins de dix ans iel passera comme tout le reste* ‘In less than 10 years, *iel* will be accepted like everything else’

By comparison, for *il(s) et/ou elle(s)*, we found no non-binary use and 58% generic use. Regarding agreement, the most common form is inclusive for sing. *iel* (44%, *iel est trop nul.le*<sub>INCLUSIVE</sub> ‘they<sub>.SG</sub> are too dumb’), while it is balanced between inclusive and masculine for plur. *iels* (both 34%, *iels sont lourds*<sub>M.PL</sub> ‘they<sub>.PL</sub> are heavy’).

Type of use	Female		Male		Non binary		Other	
Generic	55/0	28.5%	18/0	24.0%	16/0	15.1%	38/1	25.0%
Metalinguistic	13/1	7.3%	9/0	12.0%	6/1	6.6%	11/1	7.7%
Non-binary	13/0	6.7%	11/2	17.3%	13/2	14.2%	27/7	21.8%
Group (iels)	0/111	57.5%	0/35	46.7%	0/68	64.2%	0/71	45.5%
<b>Total</b>	<b>81/112</b>	<b>100.0%</b>	<b>38/37</b>	<b>100.0%</b>	<b>35/71</b>	<b>100.0%</b>	<b>76/80</b>	<b>100.0%</b>

Table 3. Number of *iel/iels* in tweet samples by type of use and user gender.

Looking at a subset without unknown-gender users (Table 3), we found most (36%) *iel(s)* users declare themselves as women, while non-binary speakers represent 20% and men 12%. We observe a link between gender and type of use: mixed group *iels* is used more by women (57%) than men (46%), while non-binary *iel* is more popular among non-binary speakers (21%) compared to men or women (17/7%). This result is in line with Gygax et al. (2008) who found women to be more sensitive to the male bias of plural masculine generic (*les promeneurs* ‘the walkers’) and with Stetie & Zunino (2022) who found a stronger male only interpretation for women than for men, reading Spanish masculine -os compared to inclusive (-es, -xs) forms. We conclude *iel(s)*’s reference outnumbers *il(s) et/ou elle(s)* by far and is evolving from non-binary to generic/mixed groups. **Selected references** Diaz Y., 2021, Un regard sur le français inclusif canadien dans une journée de Twitter, *ACL*. Gygax P. et al 2008. Generically intended, but specifically interpreted, *LCP* 23(3). 464–485. Stetie, N. & Zunino, G., 2022. Non-binary language in Spanish? Comprehension of non-binary morphological forms, *Glossa*: 7(1).

***The Italian negative system: expletiveness as a consequence of a diachronic change in the syntactic status of negation***

*Keywords: Syntax, Diachrony, Latin, Italian, Negation, Expletive Negation*

In this article I will focus on the Modern Italian negative system showing that it depends on a crucial change occurred in Archaic Latin: Latin negative morpheme *nōn* (“not”), which initially displayed a maximal projection status (Gianollo, 2016), became a syntactic (negative) head (*‘Spec-to-head principle / Head Preference Principle’*, cfr. van Gelderen, 2004). Simplifying the discussion in Haegeman & Zanuttini (1991), it can be assumed that if there is a syntactic negative the negative concord construction depends on the head status of the negator, otherwise a double negation construction is expected. I will argue that the change from the maximal projection status, to a head one, already happened in the early stage of colloquial Latin and it caused the shift from a double negation system (1a) to a negative concord one (1b), contrary to what it is usually assumed for standard Latin:

- (1) a. *nemo non videt* (Cic., Laelius de Amicitia 99.6)  
 nobody not sees  
 ‘Everyone sees’
- b. *Iura te non nociturum esse homini (...) nemini...*  
 swear.Imp.2<sup>nd</sup> you.Cl not to.hurt.Fut. to.be human-being.Dat. nobody.Dat  
 ‘Swear that you won’t harm anyone...’ (Plauto, Miles Gloriosus, 1411)

Moreover, I will also propose that this change, which has been inherited by Italian and many other Romance languages (Ledgeway, 2012), also determines the availability of the expletive reading of negation, as witnessed by (2a). More specifically, I will support the generalization that only languages (and structures) displaying a negative head allow the expletive interpretation of negation by discussing some new empirical data. Consider, for example, sentences in Italian (2a), English (2b) and French (2c):

- (2) a. *Rimarrò alla festa finché non arriva Gianni*  
 stay.1<sup>st</sup>SG.FUT to-the party until neg arrives John  
 ‘I will stay at the party until John arrives’
- b. *I will stay at the party until John (\*not) arrives*
- c. Je *ne* nie *pas* [que je *n’* aie ètè bien reçu]  
 I NEG deny NEG that I neg have been well receive  
 ‘I do not deny that I was received well.’ (in Muller 1978)

As is well known (Merchant 2001, Zeijlstra 2004), Italian *non* (“not”) has been considered as the head of a NegP and, according to the generalization, it must allow an expletive interpretation. On the other hand, English *not* has been proposed to be a maximal projection and, therefore, it should not allow expletive negation. French displays both a negative head (*ne*) and a maximal projection (*pas*), both constituting a single instance of negation by being generated in the same NegP (Kayne 1989). Crucially, expletive negation in the subordinate clause *‘je n’ai ètè bien reçu’* only displays the negative head *ne*, excluding the element with the maximal projection status *pas*. All these sentences support the generalization above. Crucially, this observation goes with the one in Zeijlstra (2011) that ‘there is no language without Negative Concord that exhibits a negative marker that is a syntactic head’ (p.136). From this point of view, two apparently distinct phenomena, i.e. negative concord and expletive negation, seem to be the reflex of a single **parameter**: the syntactic nature of a negative element (German *nicht* seems to represent an exception to this generalization; see Jäger 2008 for the debate).

Crucially, in languages like Italian the same negative morpheme can instantiate both standard and expletive negation, as witnessed by exclamatives (Zanuttini & Portner 2003). Exclamatives show a twofold interpretation: one in which negation is expletive (3a) and one in which it is standard (3b). In Greco’s (2020) work the former was labeled “Expletive Negation Exclamative” (ENE), and the latter “Negative Exclamative” (NE).

- (3) Che cosa **non** ha mangiato Gianni!  
 what neg/EN has eaten John

- a. ‘What has John eaten!’ (Expletive Negation Exclamative)  
 b. ‘What has not John eaten!’ (Negative Exclamative)

The two structures differ grammatically. For example, according to Grimshaw (1979) and Zanuttini and Portner (2003), exclamatives are factive and, therefore, can only be embedded under factive predicates (4a). However, focusing on a specific sub-class of factive predicates, i.e., *to know*-verbs (4b), only the NE interpretation is possible, and the ENEs one is ruled out:

- (4) a. È incredibile [che cosa **non** abbia mangiato Gianni]!  
 is incredible what neg/EN had.Subj.3<sup>rd</sup>.Sg eaten John  
 . ‘It is incredible what John did not eat!’ (NE)  
 . ‘It is incredible what John ate!’ (ENE)
- b. Luca **sa** [che cosa **non** ha mangiato Gianni]!  
 Luke knows what neg/EN has eaten John  
 . ‘Luke knows what John did not eat!’ (NE)  
 . #‘Luke knows what John ate!’ (#ENE)

The expletive reading of negation in (4b) is completely ruled out, whereas the standard one is preserved. A possible way to take into consideration the differences between NEs and ENEs is to assume a twofold derivation of negation: when the negative marker *not* is merged in the TP-domain, as it is generally assumed (Belletti 1990; Zanuttini 1997; Poletto 2008), it gives the standard negation reading; when it is merged in a higher position, i.e. the CP-domain (*à la* Laka 1990), it gives the expletive negation reading since the v\*P-phase has already been closed – (phases are underlined)

- (5) a. [CP ... [v\*P [X° non] ... ] (NE)  
 b. [CP ... [X° non] ... [v\*P ... ] (ENE)

Crucially, the high position of negation in ENEs can also explain why they cannot occur under factive predicates, as with *to-know* verbs in (4b). More specifically, it has been proposed (cf. Grewendorf 2002; Haegeman 2012) that some factive verbs select a reduced CP, leaving no space for several functional phrases, including, arguably, negation. If this is true, that means that the only available option for negation in exclamatives under *to-know* verbs is to be in the TP-domain, realizing the standard value of negation as (4b) shows.

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## The Nuances of /R/:

### An Analysis of Progressive and Regressive Voicing Assimilation in Quebec French

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**Introduction.** Voice assimilation in French is a well-established phenomenon. It has been shown to occur across all types of consonantal sequences ( $C_1C_2$ ), even across word boundaries, and to be regressive rather than progressive, meaning that the voiceless or voiced nature of  $C_2$  impacts the realization of voicing in  $C_1$  rather than the other way around (Hallé & Adda-Decker 2007, 2011). One type of CC sequences remains problematic, however, i.e., sequences with /R/ as either  $C_1$  or  $C_2$ , since /R/ is considered to be unspecified for voicing (Webb 2004): In French, it can be realized either as a voiced or a voiceless uvular fricative, sometimes approximantized (Gendrot et al. 2015), often considered as free variants (Chafcouloff 1983, Fougeron 2007). /R/ therefore supposedly assimilates to the adjacent consonant's voicing, be it preceding or following it. In the present study, we investigate read words from a lesser studied variety of French: Quebec French (QF), that displays no less than 9 allophones of /R/ (Clermont & Cedergren 1979; Santerre 1979, 1982; Sankoff & Blondeau 2007). We observe the distribution of these realizations with regards to manner of articulation and laryngeal feature of both the preceding and following consonants to establish whether the realization of /R/ in QF is more subjected to regressive assimilation (as are other CC sequences in Standard French), progressive assimilation, or both.

**Methodology.** Our data comes from the PFC-Québec corpus (Côté 2014), covering 32 locations. We selected 29 of them (no incomplete files or illiterate speakers), for a total of 396 speakers (206 women, 190 men) born between 1921 and 1999, reading 2 word lists. The segmentation and choice of allophone is made by a trained phonetician using Praat (Boersma 2015) according to both her perception and features in the spectrograms and oscillograms:

- apical tap [ɾ] or trill [r]: Perceived as apical + 1 to 3 flappings in the spectrogram,
- uvular trill [R]: Perceived as uvular + 2 to 3 flappings in the spectrogram,
- voiceless fricative [χ]: Friction noise and no F0 or voicing bar in the spectrogram,
- voiced fricative [ʁ]: Friction noise in the spectrogram and F0 detected + voicing bar,
- retroflex [ɽ]: Perceived as a retroflex + formants in the spectrogram,
- approximant [ɹ]: Formants in the spectrogram, glide-like,
- vocalized [ḁ]: Very stable formants in the spectrogram, schwa-like,
- deleted: No visible trace of a phone in the spectrogram - very often in clusters.

These variants are distributed unequally among speakers as a function of age, gender and location. The present study focuses on the subset of 159 speakers with /R/ realizations closer to Metropolitan French, i.e., using the uvular fricatives. Retroflex variants (only 21 tokens in a reduced number of word-forms) were also excluded. Our data thus comprises 19,821 Rs surfacing between a consonant or pause and a vowel, or vice-versa. The data is analyzed via a multilevel multinomial logistic regression model (multinom function from *nnet* package on R; formula =  $Rtype \sim LeftContext + RightContext + (1|word)$ ), the reported p-values are obtained thanks to post hoc tests (Tuckey HSD; *emmeans* package) run on the model.

**Results.** Fig.1a shows that the preceding context influences the realization of /R/ ( $p < 0.001$ ) with 63.4% and 76.4% voiceless variants after voiceless fricatives and voiceless stops respectively, against 0% ( $\Delta = 63.4\%$ ) and 6.4% ( $\Delta = 70\%$ ) after voiced fricatives and voiced stops ( $p < 0.005$  for all two ways comparisons). Fig.1b shows that the right context also influences the realization of /R/ ( $p < 0.01$ ) with 65.7% voiceless realizations before a voiceless stop, against 15.9% ( $\Delta = 49.8\%$ ) before a voiced stop ( $p < 0.05$ ). The comparison of the two environments indicates that the preceding phone impacts /R/ realizations more than the following one, e.g., 76.4% vs 65.7% voiceless /R/ after and before voiceless stop respectively

( $\Delta=10.7\%$ ). This does not hold for pause, however, since a preceding pause correlates with only 14.2% voiceless realizations against 40.6% ( $\Delta=-26.4\%$ ) before a following pause.

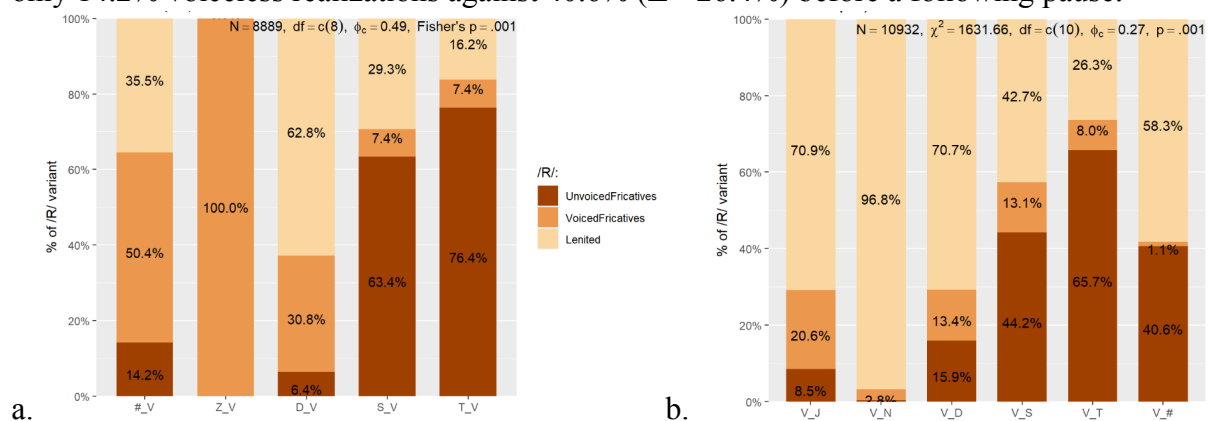


Fig. 1. Rates of voiceless, voiced or lenited (approximant-like, vowel-like and deleted) variants of /R/ among speakers using the uvular fricative as a function of the preceding (a) and following phone (b): pause (#), vowel (V), glide (J), nasal (N), voiced fricative (Z), voiceless fricative (S), voiced stop (D) or voiceless stop (T).

**Conclusion and discussion.** Our analysis of 19,821 tokens indicate that QF speakers favor progressive over regressive assimilation in CC sequences including a rhotic, thus patterning against the other consonantal clusters. When /R/ is not in a CC sequence, however, it is more variable before than after pause. These results seem to indicate that syllabic structure plays a role in voice assimilation, thus questioning further the phonetics-phonology interface. Future studies will investigate the other allophones of /R/ in QF and compare the present results with the realization of /R/ in Metropolitan French, as well as include acoustical measurements of /R/ voicing.

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## The clausal architecture of Old French infinitival clauses

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Over the past decades, the diachrony of finite clauses in French has accumulated a vast literature (Adams 1987, Vance 1989, Hirschbühler and Labelle 2005, Labelle 2007, Zaring 2011, Mathieu 2013, Balon and Larrivée 2016, Donaldson 2018, Klævik-Pettersen 2019, Wolfe 2022). Our understanding of the evolution of infinitival clauses, however, remains elusive. Under the assumption that language variation at the pan-Romance level stems from historical developments, there is evidence that at least some changes took place in French infinitival clauses.

- |     |                             |     |     |  |     |
|-----|-----------------------------|-----|-----|--|-----|
| (1) | a. <b>Le voir.</b>          | FR. | (2) | a. <b>Bien dormir</b> est reposant.        | FR. |
|     | b. <b>Vederlo.</b>          | IT. |     | b. <b>Dormire bene</b> è riposante.        | IT. |
|     | c. <b>Verlo.</b>            | SP. |     | c. <b>Dormir bien</b> es reparador.        | SP. |
|     | ‘To <u>see</u> <b>it.</b> ’ |     |     | ‘ <u>Sleeping</u> <b>well</b> is restful.’ |     |

Unlike most Romance languages, French infinitives come after the clitic (1a) and after certain adverbs (2a), specifically adverbs from the Higher Adverb Space (HAS) (Cinque 2004, Ledgeway and Lombardi 2005). In this regard, most varieties have enclisis (1b-c) and the order infinitive-adverb<sub>HAS</sub> (2b-c). Interestingly, these comparative issues have both been (independently) treated with regards to verb placement: since Kayne’s (1991) proposal that clitics target a constant functional projection, it is assumed that enclisis is found in grammars where the infinitive moves to a position higher than the *v*/VP, whereas proclisis is found where the infinitive remains low (Mavrogiorgos 2010, Roberts 2010). Similarly, and within a Cartographic framework, the difference between (2a) on the one hand and (2b-c) on the other has been shown to stem from a low position of the infinitive in French (Pollock 1989, Belletti 1990, Cinque 2004, Schifano 2018, Roberts 2019). In this presentation, I will provide a descriptive and theoretically-informed analysis of Old French infinitival clauses, which I will show is key to contextualise the constructions exposed in (1) and (2).

In order to further characterise the variation attested above, I have investigated two corpora: the Corpus ConDÉ (Larrivée and Goux, 2022) and the Base de Français Médiéval (ENS Lyon, 1989-2022). The prediction that Old French patterned alongside other Romance varieties and underwent a series of changes is borne out, since both enclisis (3), and infinitive-adverb<sub>HAS</sub> orders (4), (5) are attested until the early 14<sup>th</sup> century:

- (3) Tu mobliges a ferre **le**.  
you me=force to do.INF it  
‘You force me to do it.’ (*Grand Coutumier*, Seq. 283)
- (4) il s'en ala mengier et dormir **bien** celle nuit  
he REFL=GEN went eat.INF and sleep.INF well that night  
‘He went away to eat and sleep well on that night.’ (*Berin*, p. 244)
- (5) Ilz doivent venir **tousjours** à la bataille.  
they must come.INF always to the battle  
‘They must always come to the battle.’ (*Jouvence* p. 147)

Building on Kayne’s (1991) hypothesis, I adopt the view that enclisis as in (3) indicates V-movement outside the *v*/VP domain. Formally, the clitic is a  $\phi$ -head generated in the complement of the infinitive (Dechaine and Wiltschko 2002), and cliticisation is realised through an AGREE operation with *v* (Mavrogiorgos 2010, Roberts 2010). Since the clitic is

realised on *v*, proclisis is found in languages where the infinitive remains within the *v*/VP (6), whereas in languages with enclisis the infinitive targets a position in the IP domain (7).

(6) [IP I [<sub>VP</sub>  $\phi_j$  [<sub>VP</sub> V  $e_j$ ] ] ]

(7) [IP V<sub>i</sub> [<sub>VP</sub>  $\phi_j$  [<sub>VP</sub>  $e_i e_j$ ] ] ]

In order to further characterise V-to-I movement with infinitives in Old French, I introduce an analysis of the data using the Cartographic approach (Cinque and Rizzi 2010), a theoretical framework which offers an appropriate tool to diagnose verb placement (Schifano 2018). For the purpose of my study, I selected adverbs from the HAS, since they necessarily follow the infinitive in languages that have enclisis (e.g. Italian, Spanish, Catalan), whereas they precede it in those that show proclisis (e.g. French). The prediction that Old French adverbs from the HAS follow infinitives is borne out, as exemplified in (4) and (5) which show the same word order as (2b) and (2c).

Formally, I assume that a head of infinitival IP possesses a [-FIN] feature that attracts the infinitive. Further, I propose that the /r/ suffix is a phonological realisation of [-FIN], which is present in the aforementioned varieties that have both enclisis and Infinitive-Adverb<sub>HAS</sub> order. In so doing, I apply Roberts' (2019) proposal that a morphological cue can serve as 'trigger' for V-movement. The structure of Old French infinitival clauses is given in (8).

(8) [IP V<sub>i</sub>+I[-FIN] [<sub>VP</sub> adverb<sub>HAS</sub>  $\phi_{j+v}$  [<sub>VP</sub>  $e_i e_j$ ] ] ]

Why did this change take place? Incidentally, both the loss of /r/ on French infinitives (Marchello-Nizia et al. 2020) and the loss of enclisis (Olivier 2021) took place at the same time, which further supports the hypothesis that /r/ triggers V<sub>INF</sub>-movement in Old French, Italian and Spanish (the loss of the suffix initially concerned more verbs than it does in Modern French). I conclude that the infinitival IP domain of Old French was stronger, whereas it is weak, or inert (Roberts 2010) in Modern French since [-FIN] is not present. This naturally accounts for the variation observed today, since there is no diachronic evidence that Spanish and Italian transitioned into a grammar with a weak I.

The contribution of this paper is as follows: (i) it provides an empirical description of a set of unexplored data that allows us to characterise the clausal architecture of infinitival clauses in Old French, whilst also drawing comparisons at the pan-Romance level, (ii) it presents a theoretically-informed discussion, since I show that V-movement is best accounted for using the hypothesis that morphology triggers syntactic operations, and that it connects to clitic placement and adverb placement, and (iii) I provide supporting evidence that the variation attested in (1) and (2) is explained by the diachrony of French.

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*Code-switching*, roughly defined as the alternation between two languages in one interaction, is a salient outcome of language contact, particularly in the case of Spanish in contact with English in the U.S. Yet, there is considerable variability in both how and how much different communities and individuals engage in code-switching. At the community level, some communities stigmatize code-switching (Montes-Alcalá, 2000), resulting in different contexts where each language is used (e.g., home vs. work), but few contexts where both languages are used in the same interaction. Other communities permit or encourage language switching across a wide variety of different contexts (Green & Abutalebi, 2013). At the individual level, even within a given language pairing or community, bilinguals express a wide range in the degree to which they engage with and their attitudes towards code-switching (Olson, 2022a). Among other individual factors, language dominance (i.e., the relative strength of each of a bilingual’s two languages) has long been proposed as a key factor that impacts patterns of code-switching.

Considering the impact of language dominance on the use of code-switching, several authors in early code-switching research have highlighted the need to consider language dominance in the study of code-switching (Valdés-Fallis, 1978; Cantone, 2007). Within this line of research, authors have proposed that language dominance may serve to impact both the frequency of code-switching and the directionality of code-switching. In examining the impact of language dominance on patterns of code-switching, there appear to be two competing factors at play. On one hand, given the complex syntactic restrictions, pragmatic functions, and social roles that shape code-switching behaviors, a relatively high degree of proficiency in both languages may be required to effectively engage in code-switching (Gumperz, 1982; Legenhausen, 1991, among many). On the other hand, given that code-switching can be used as a “crutch” (Zentella, 1997), filling in when the speaker lacks the linguistic resources to produce the desired message in a single language, one might expect greater code-switching with less balanced bilinguals. As such, more balanced bilinguals, with more complete linguistic repertoires in both languages, may engage in less code-switching.

Given these competing factors, mixed prior results, and the general underexplored nature of the links between language dominance and patterns of code-switching, the current study examines the relationship between language dominance and both the frequency and directionality of code-switching. Employing a quantitative, self-reported approach, 454 Spanish–English bilinguals from a wide range of dominance profiles, ethnic backgrounds, and geographic communities completed questionnaires regarding language dominance (i.e., Bilingual Language Profile: Birdsong et al., 2012), code-switching engagement (Bilingual Code-Switching Profile: Olson, 2022a), and code-switching directionality.

Results demonstrated a nuanced relationship between language dominance and patterns of code-switching in Spanish–English bilinguals. With respect to overall frequency of engagement with code-switching (Figure 1), more balanced bilinguals reported greater engagement with code-switching, although there was significant individual variation. Yet, the overall proportion of the variation in the code-switching profile score explained by the

language dominance score was small (Adjusted  $R^2 = .241$ ), suggesting a weak relationship between the two variables.

With respect to directionality (Figure 2), the findings showed an overall small effect of dominance on directionality. Taken as a whole, the results suggest that while language dominance may play a small role in determining patterns of language switching (frequency and directionality), other individual and community-level factors are likely to contribute substantially.

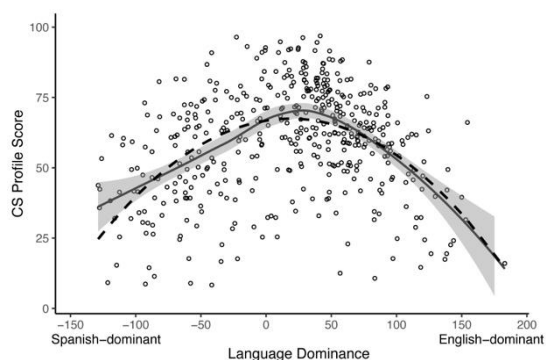


Figure 1: Scatter plot of language dominance score vs. code-switching profile score. The grey line represents a LOESS smoothed curve with confidence intervals (+/- 1SE). The dashed black line represents the fit of the second order model.

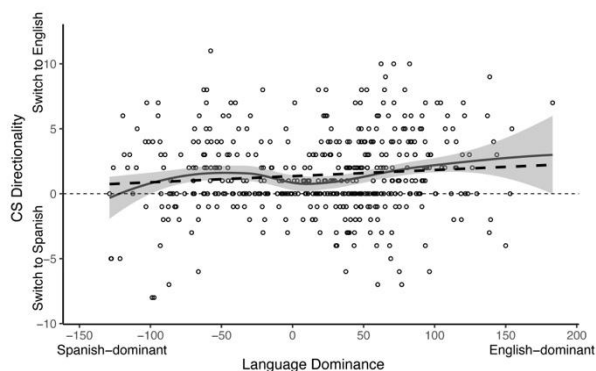


Figure 2: Scatter plot of language dominance score vs. combined directionality score. The grey line represents a LOESS smoothed curve with confidence intervals (+/- 1SE). The dashed black line represents the fit of the simple linear model.

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## The morphosyntactic sources of bareness: bare ‘locative’ nouns in Ladin

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This talk discusses novel evidence on the little-known article-drop construction in spatial PPs in Ladin (Rhaeto-Romance) varieties, where articles are otherwise obligatory. This phenomenon provides new insights on the behavior of lexical classes of ‘locative’ nouns across languages, which tend to show peculiar grammatical properties in spatial expressions (Haspelmath, 2019 a.o.). More precisely, it suggests that the lexical properties of specific classes of nouns can have a blocking effect on different types of modification, giving rise to a reduced / ‘slim’ DP structure. The main proposal is that an approach building on phrasal Spell Out (Starke, 2009, and ff.) allows to reduce the lack of a determiner as well as the syntactic distribution and semantic interpretation of the construction to the amount of structure that nouns licensing article-drop can lexicalize. The talk also discusses how this approach might be extended to similar cases of ‘reduction’ of nominal structures in ‘bare PPs’ (De Swart, 2015) and P-drop (Terzi, 2010), supporting the idea that not all functional layers must always be realized in extended projections (Giorgi and Pianesi, 1997; Cinque, 1999; Cardinaletti and Giusti, 2015).

Ladin varieties allow the omission of the definite article in spatial PPs with a specific set of singular count nouns, whose referent is a spatially salient object in either the domestic space (e.g. rooms of the house, pieces of furniture, etc.) or the outdoor space (1a). On the other hand, overt articles are necessary with definite nominal arguments (1b), as is generally the case in Romance (Longobardi, 1994, and ff.):

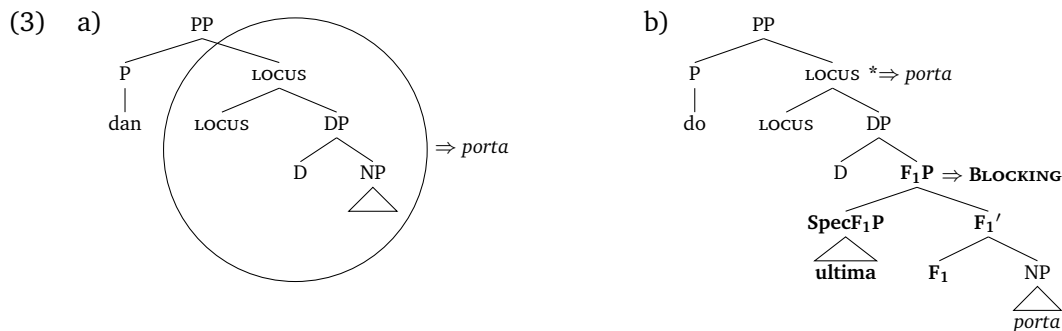
- (1) a. tol l stuel che ie **dan** **porta (de mi majon)** Gherdëina Ladin  
take.IMP the chair that be.3 **in.front.of door (of my room)**  
“Grab the chair in front of the door of my room”  
b. ne son nia bon de gaurì **\*(la) porta**  
NEG be.1SG NEG good of open.INF **\*(the) door**  
“I can’t open the door”

Ladin article-drop is compatible with all kinds of spatial PPs, but is subject to morpho-syntactic restrictions on the internal nominal structure. Specifically, the head noun cannot be pluralized and cannot be freely modified. Thus, the article can only be dropped with a singular ‘locative’ noun, either non-modified or combining with an argumental PP (cf. 1a above). With plural morphology (2a) and almost any DP-internal element (e.g. prenominal adjectives (2b), as well as postnominal adjectives, non-argumental PPs, numerals and relative clauses), the article must be realized:

- (2) a. i se à ascundù **do** **\*(i) ujes** Gherdëina Ladin  
3PL REFL have.3 hidden **behind \*(the) doors**  
“They hid behind the doors”  
b. ti tascia ie **do** **\*(l’) ultima porta**  
your bag be.3 **behind \*(the) last door**  
“Your bag is behind the last door”

The approach argued for in the talk builds on the idea that the ability to license article-drop in Ladin is a lexical property of the relevant class of nouns. Adopting phrasal Spell Out as in use in Nanosyntax (Starke, 2009 and ff.), this lexical information can be explicitly encoded in terms of the amount of syntactic structure the nominal head can lexicalize, providing a fully syntactic characterization of the distribution of the phenomenon. Specifically, the hypothesis

is that ‘locative’ nouns in Ladin license ‘bareness’ and their semantic reading by lexicalizing a larger amount of structure than regular common nouns. This additional stretch includes two components: D, which has the same semantic contribution as *unique*-definite articles (Schwarz, 2009), and LOCUS, which shifts the denotation of the nominal from the domain of objects to the spatial domain (cf. Kracht, 2008; Svenonius, 2010; Matushansky, 2019, a.o.), as required by the semantic computation of the spatial PP. Article-drop is only possible when the lexicalization properties of the noun are matched. The upshot is that under the required lexicalization the DP structure is frozen into a ‘slim DP’, i.e. the minimal configuration in (3a). Assuming plural features and other DP-internal elements involve additional layers in the DP spine (Cinque, 2010; Caha, 2019), their presence disrupts this ‘slim DP’ configuration, thus capturing the generalization that they require the article (3b):



Under this approach, the fact that argumental PPs do not block article-drop can be reduced to the fact that they are either moved or base-generated above the nominal functional spine, as independently proposed in the literature (cf. respectively Cinque, 2005 and Adger, 2013; Baggio, 2021). Moreover, assuming a structural representation of Case in terms of layered KPs (Caha, 2009), we argue that these nouns cannot be bare as verbal arguments is tied to the lack of the K encoding direct cases, which are instead contributed by the overt determiner (or inflectional suffixes in bare mass/plurals, cf. Delfitto and Schrotten, 1991). Thus, the correlation between lexical restrictions, the structurally-dependent distribution of article-drop, and the interpretation of the noun is reduced to the same source, namely the ability of Ladin ‘locative’ nouns to lexicalize a DP structure under the configuration in (3a). The approach is compared to potential syntactic or semantic alternatives (cf. e.g. Longobardi, 2001; Collins, 2007; De Swart, 2015 on parallel phenomena), arguing that these all face problems. An account in terms of N-to-D (or analogous) movement incorrectly predicts bareness to be generally compatible with restrictive modifiers, since noun-movement to D could safely cross them (Longobardi, 1994). On the other hand, an analysis in terms of ‘abstract’ lexical denotations and/or pseudo-incorporation does not account for the possibility of strong-definite readings of bare ‘locative’ nouns in Ladin and the availability of possessor PPs. Generalizing, the present analysis predicts that whenever a language/variety has a class of nominals with analogous lexicalization properties, this will have syntactic reflexes, manifested by restrictions on the internal structure of the nominals involved. We argue that this is the case for instances of P-drop (Longobardi, 2001; Terzi, 2010) and bare PPs (De Swart, 2015) in several languages.

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## The parametric variation of possessives in Italian and some Italian dialects

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**Introduction** - This study investigates the parametric variation of possessive in Italian and in some dialects of Northern, Central, and Southern Italy, focusing on third person singular and plural possessives when used with a kinship term.

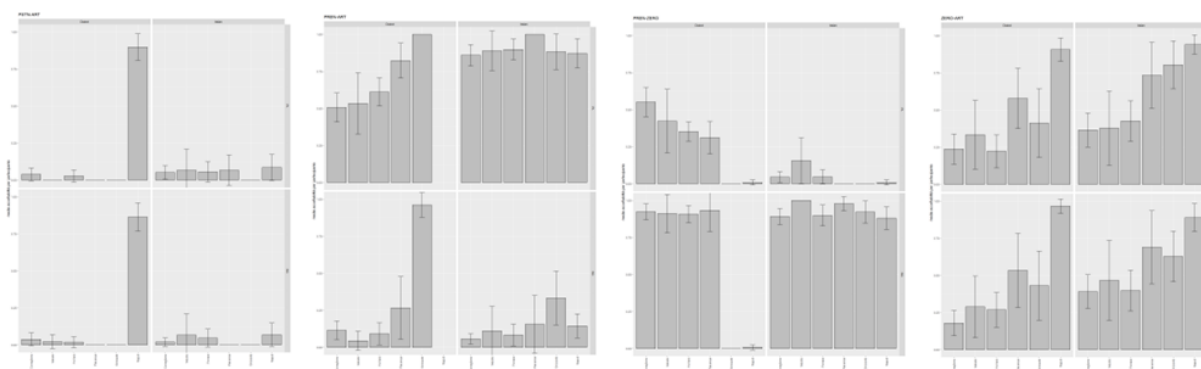
In Italian, possessives may occupy a prenominal or a postnominal position, and may also occur with an article, depending on the type of nouns they are associated with. When prenominal possessives occur with a common noun, the article is always placed before the possessive. When possessives are combined with a kinship term, nouns appear without the definite article, when they are in the singular (*suo fratello* “my brother”, *sua sorella* “my sister”), regardless of the person features of the possessive. The article has to be obligatorily expressed when the possessives occur with plural nouns (*i miei fratelli* ‘the my brothers’, *le mie sorelle* ‘the my sisters’).

Based on AIS maps (Jahberg and Jud, 1928/1940), Rohlfs (1968) and Cardinaletti and Giusti (2019) offer an overview of the attested combination of possessives with singular and plural kinship nouns in different Italian dialects. In Italian dialects, much diatopic variation is observed with kinship nouns regarding the position and either the presence or the absence of the possessive and its co-occurrence with the definite article. In northern Italy, in Veneto, the prevailing pattern consists in prenominal possessives without definite article for all noun forms (singular, plural, masculine, and feminine) (PREN-ZERO). In Emilia-Romagna, for singular nouns, possessives occur in prenominal position and the article is omitted, as in Veneto, whereas in the plural, kinship nouns occur with both possessive and definite article (PREN-ART). In Tuscany, kinship nouns are always preceded by both possessive and article under all conditions (PREN-ART). In Campania, two patterns are found. In some locations, the possessive occupies the postnominal position and the definite article precedes the noun (PSTN-ART). In some other locations, the possessive is omitted, and the noun is only combined with the article (ZERO-ART).

Using an online questionnaire controlling for the above-mentioned variables, the aim of this study is to investigate how the different dialects behave as for the order of possessive when they are combined with kinship names. In addition, we want to verify whether their distribution is different from what reported in the AIS maps. Finally, we want to investigate whether regional Italian has been influenced by the dialect spoken in that area.

**Methodology** - An online questionnaire was used to investigate the diatopic variation of possessive in Italian and in Italian dialects. We analyzed the responses of 174 participants, recruited in different areas of Northern, Central, and Southern Italy. In Northern Italy we collected data from the varieties spoken in Conegliano, in the province of Treviso (Veneto, N=52), in the area of Mestre-Venezia (Veneto, N=15), Ferrara (Emilia-Romagna, N=36), and Piacenza (Emilia-Romagna, N=15). In Central Italy, we collected data from the varieties spoken around Grosseto (Tuscany, N=17). In Southern Italy, we collected data from the varieties spoken around Naples (Campania, N=39). The participants were asked to judge the acceptability of some sentences in Italian and in their dialect showing the four patterns presented above. Before the questionnaire with experimental items was administered, participants were asked to answer some questions concerning their language dominance (Italian vs. dialect), using the Dilalic Language Profile developed by Procentese et al (2022).

**Results** - The distribution of the four forms in the different locations is shown in Figure 1. In Italian, the prevailing form in the plural is PREN-ART in all locations, although Piacenza, Grosseto and especially Naples also show a high percentage of ZERO-ART. In the other locations (Conegliano, Mestre-Venezia, Ferrara), ZERO-ART is quite frequent. ZERO-ART is also frequent in the singular in Naples, and a high rate of occurrence is also observed in Piacenza. With singular nouns, the prevailing form in all locations is PREN-ZERO. The second most frequent form is ZERO-ART. In dialects, much more variation is observed. The form PSTN-ART is found only in Naples both in the singular and in the plural. In the other locations, this form is rare. The form PREN-ART is the prevailing form in the plural in almost all locations, especially in Grosseto and Piacenza. In Piacenza, this strategy competes with ZERO-ART. The form PREN-ZERO is the prevailing form in the singular in Conegliano, Mestre-Venezia, Ferrara, and Piacenza, as in Italian. In the plural, this form occurs to a lesser extent, however, it is well attested in all these locations.



**Figure 1:** distribution of the four forms in the different locations distinguishing between Italian (on the right) and dialects (on the left), and between singular (above) and plural (below).

**Discussion** - The pattern that emerged from the analysis of our data shows some differences compared to the patterns depicted in the AIS maps. The fact that in the locations in Emilia-Romagna a number of occurrences has been observed in the dialect for the plural form PREN-ZERO shows that the article omission that was more frequent in Veneto (AIS maps, Rohlfs 1968), has also extended to some areas of Emilia Romagna. These two phenomena appear to be modulated by language dominance only for the speakers from the Veneto region.

Finally, we interpret the fact that in Naples the form PSTN-ART is frequent in the dialect while in Italian it is not attested as a sign of the fact that the dialect does not influence Italian.

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## The productivity of velar stop epenthesis in Spanish verbs

**1. Overview** Some, but not all, of the 2nd and 3rd conjugation Spanish verbs exhibit a [k] or [g] between the stem and the suffix in the 1SG.PRS.IND and all PRS.SBJC forms (e.g. [kres-k-o] ‘I grow’, yet not in [mes-o] ‘I rock’). The verbs with these added velar stops have traditionally been considered irregular because no exceptionless phonological generalization has been identified which can predict which verbs exhibit the velar alternation (Lloyd 1987). This analysis presents a corpus study of Spanish verbs which shows that there are few exceptions to the generalization that [k,g] are epenthesized after stems ending in [r,l,n,s] and before suffixes beginning with a back vowel in the 2nd and 3rd conjugation alone. It follows from application of the Tolerance Principle (TP; Gorman & Yang 2019) that k/g-epenthesis is productive, and that it is the forms without velar epenthesis which in fact are memorized.

**2. The puzzle** Most Spanish verbs are termed “regular” (Harris 1972), where inflectional suffixes are combined with stems. I follow Clahsen et al (2002) in defining stems as combinations of theme vowels and roots. The verbal paradigm for regular verbs is exemplified by the 2nd conjugation verb, [mes-er] - ‘to rock’, in the present indicative and subjunctive tenses in Table 1 below. Among verbs termed irregular is a class of verbs in the 2nd and 3rd conjugation where a velar stop ([k] or [g]) appears between the stem and the desinence in the 1SG.PRS. and all of the present subjunctive, as is the case with [kres-er] - ‘to grow’, which is also shown in Table 1 below:

**Table 1:** Examples of verbs with and without a velar stop before a suffix

	[mes - e - r] - ‘to rock’		[kres - e - r] - ‘to grow’	
	Pr. Ind.	Pr. Subj.	Pr. Ind.	Pr. Subj.
<b>1sg.</b>	mes - ∅ - o	mes - a	kres - k - ∅ - o	kres - k - a
<b>2sg.</b>	mes - e - s	mes - a - s	kres - ∅ - e - s	kres - k - a - s
<b>3sg.</b>	mes - e	mes - a	kres - ∅ - e	kres - k - a
<b>1pl.</b>	mes - e - mos	mes - a - mos	kres - ∅ - e - mos	kres - k - a - mos
<b>2pl.</b>	mes - é - is	mes - á - is	kres - ∅ - é - is	kres - k - á - is
<b>3pl.</b>	mes - e - n	mes - a - n	kres - ∅ - e - n	kres - k - a - n

Given the existence of these contrasting verbs, the puzzle is the following: why does the velar appear in some, but not all of these verbs? Harris (1972) argues that velars are inserted in a specific class of verbs that are lexically marked with a diacritic, essentially forming an irregular class. But this analysis is unexplanatory from a phonological perspective because it does not help us predict which verbs have a velar and which ones do not. I present a corpus analysis that shows that verbs with the epenthetic velar stop constitute a class, and that re-conceptualizing them as such provides the best framework to solve the puzzle.

**3. The corpus analysis** The corpus was first created by extracting all 1SG.PRS. verbs from the combined lexicons of LEXESP (Sebastián et al, 2001) and Unimorph (Christo et al, 2018), which amounted to a total of 6168 verbs. Then, I removed 1st conjugation verbs because they exhibit no velar alternation. With the remaining 2nd and 3rd conjugation verbs, I removed verbs with shared prefixes to avoid inflating the counts of any of the relevant verb classes. Following Harris (1985), I assume that only stems should be considered lexically distinct to the exclusion of stems with shared prefixes. Then, I removed verbs with stems that do not end in [r,l,n,s], given that the sonorant coronals and [s] are the codas that are most frequently permitted in coda position (Harris 1983), while other obstruents are attested only in “guarded speech” (Nuñez-Cedeño 2007). Within

the group of verbs ending in [r], I also removed two additional types: (1) those with mobile diphthongs, given that they are in complementary distribution with those that exhibit velar alternation (e.g. [muer-o]/\*[muer-g-o] - ‘I die’); and (2) those that end in a consonant cluster, given that velar insertion is phonotactically ungrammatical in these contexts (e.g. [abr-ir]/\*[abr-g-o] - ‘I open’)<sup>1</sup>. The final corpus consists of 117 verbs in the 2nd conjugation, and 42 verbs in the 3rd. I then tabulated the number of verbs ending in [r,l,n,s] with and without the velar stops, shown in Table 2 below.

**Table 2:** Counts of alternations with and without velar stops

Total counts with a velar stop:	Total counts without a velar stop
-r,l,n,s+k/g+suffix: 131	-r,l,n,s+∅+suffix: 28

**4. The results** I used Charles Yang’s Tolerance Principle to determine if the class of verbs without a velar stop is predicted to be productive (Gorman & Yang 2019). The TP is based on two variable quantities: the total number of verbs which a rule could apply to,  $N$ , and the number of verbs which the rule does not apply in spite of the fact that they have a compatible phonetic environment,  $e$  (Gorman & Yang 2019). More specifically, the TP formula shown below is based on the following logic: if  $e$  is less than or equal to the threshold,  $\theta_N$ , then a rule is said to be productive, or to generalize (Gorman & Yang 2019).

$$e \leq \theta_N = \frac{N}{\ln N}$$

Thus, to determine if the class of verbs with a velar stop is productive, the total number of non-first conjugation verbs with stems ending in [r,l,n,s],  $N = 159$ , is divided by  $\ln(N) = 5.069$  to get the threshold,  $\theta_N = 31.37$ . Because there are 28 exceptions,  $e = 28$ , to the generalization that stems ending in [r,l,n,s] must have a velar stop, a TP calculation reveals that this generalization is predicted to be productive, for  $28 \leq 31.37$ .

**5. Concluding remarks** Harris (1972) uses a phonological framework in isolation to argue that verbs with velar stop insertion are lexically bound and unproductive, but the results of the TP calculation described above suggest that the opposite may be true. Given that this phenomenon only happens in 2nd and 3rd conjugation verbs—to the exclusion of 1st conjugation verbs like [kas-o]/\*[kas-k-o]-‘I marry’—future work should investigate the extent to which morphological conditioning is also playing a role.

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<sup>1</sup>Vowel final stems that exhibit velar alternation were eliminated from the corpus because they are beyond the scope of this analysis. However, my preliminary investigation of these verbs suggests that there is a robust generalization that velar insertion only occurs with non-front stem-final vowels.

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**The realization of post-tonic *-a* in the Occitan of the Azun Valley:  
influence of the degree of prominence of the previous stress**

The Azun Valley belongs to the Lavedan region, in western Bigorre, in the Hautes-Pyrénées in France. It is located between Argelès-Gazost and the Col du Soulor, which communicates with the municipalities of Arbéost and Ferrières in high Valley of Ouzoum, and then with the adjacent Ossau Valley in Bearn. It includes the municipalities of Arrens-Marsous, Aucun, Gaillagos, Arcizans-Dessus, Bun and Arras.

In Occitan, the pronunciation of *-a* in post-tonic position is subject to diatopic variation (Gilliéron & Edmond 1901-1910; Ronjat 1930: 206-218). The majority realization is a velarized [ɔ] or [o] – or even closed punctually to [u] in some localities (Viaut & Burov 2011) –. However, centralized realizations [ə], sometimes rounded to [œ], are also found, especially in Western Gascon (Allières 1976: 51-52). Finally, a few Occitan varieties, such as those from around Nice, Montpellier or the Aran Valley, for instance, maintain – or have restored – the Latin pronunciation [a].

The accentual phrase (AP) is a prosodic unit that includes a lexical head and all the function words that depend on it, as well as prenominal adjectives and auxiliaries (Beckman & Pierrehumbert 1986; Jun & Fougeron 2000; Post 2000). Only AP-final stress is necessarily realized with a certain prominence, marked by a tonal movement, a lengthening of the syllabic rhyme and an increase in intensity. Even though they present the variety of vocalic phonemes typical of stressed syllables in Occitan, AP-internal stressed syllables are usually less prominent, or sometimes even acoustically undistinguishable from unstressed syllables (Sichel-Bazin 2015: 343-389).

In the Pyrenean Gascon variety from the Azun Valley, the phonetic realization of post-tonic *-a* oscillates between [a], [ə], and [ɔ]. Our first observations lead us to formulate the hypothesis that [ɔ] would mostly be found in AP-final position, whereas the pronunciation would be closer to [a] AP-internally.

In order to test this hypothesis, a dozen native speakers from the Azun Valley were recorded. They were asked to translate into Occitan French sentences that were designed to exhibit post-tonic *-a* in different positions within the AP. We intend to measure the frequency of the formants in the middle of each post-tonic *-a*, as well as the variation in fundamental frequency, length and intensity in the immediately preceding stressed syllable. A statistical analysis of these acoustic values will allow us to determine whether the position in the AP and/or the relative prominence of the preceding stress have a significant influence on the post-tonic vowel's timbre. If this happens to be the case, beyond explaining the variation in the realization of the post-tonic /a/ phoneme in this Pyrenean variety, this will bring an element more to confirm the relevance of the AP in Occitan phonology.

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## *The sibilant system in Northern Italy. Some considerations from a marginal area*

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This study investigates the Romance varieties in Istria, a region nowadays part of the Republic of Croatia. The linguistic landscape of this territory is complex: starting from the 11<sup>th</sup> century, the peninsula was under the influence of Venice and a process of Venetianization lasted until the fall of the Republic in 1797. This quite long period led to the development of a Venetian-based koine, today known as Istro-Venetian. The Slavic languages present in the territory are the Čakavian dialects, which have been strongly influenced by Venetian throughout the centuries, and Croatian, the official language of the Republic of Croatia. The Slavs settled in Istria for the first time in the 6<sup>th</sup> century and ever since, a Romance-Slavic co-presence has been attested.

The focus of this research will be on Istriot, an archaic Romance dialect present on the territory which encompasses six varieties still spoken in the following cities and villages of the Southern part of the region: Rovigno, Valle, Dignano, Fasana, Gallesano and Sissano (see Filipi 2002). In particular, the study will offer a description of the sibilant system of Istriot, more precisely of the Sissanese variety. Trumper (1977) identified seven possible consonantic systems, based on the coronal phonemes, that could be applied to the North-Eastern Italo-Romance varieties. The first one, that presents the lowest number of oppositions (/t/ ~ /d/, /s/ ~ /z/), characterize the major part of this area including the Istriot varieties of Rovigno and Valle (Deanović 1954, Cernecca 1979). The surveys conducted in the first quarter of the 20<sup>th</sup> century for the  *AIS*  linguistic atlas reveal this system in the Istriot variety of Dignano (p. 398) too, consider the following case: [ˈsɛntɔ] ‘one hundred’ (AIS 304), [ˈsɛntɔ] ‘hear.PRS.IND.1SG’ (AIS 1645 “I hear a noise”). However, our research found that the Istriot variety of Sissano still show a phonological distinction between [ˈsɛntɔ] ‘one hundred’ and [ˈsɛntɔ] ‘hear.PRS.IND.1SG’, feature that was present even in Venetian till the end of the 19<sup>th</sup> century before the process of dephonologization was completed (Zamboni 1974: 12-13). This archaism means that the Sissanese is part of the system 4 described by Trumper, presenting the following type of phonological distinctions: /t/ ~ /d/, /s̺/ ~ /z̺/, /s/ ~ /z/.

After a brief description of the sibilant systems in Northern Italy and some diachronic considerations, this study will concentrate on the description of the Sissanese’s system. In particular, this presentation will focus on the intergenerational variation of the sibilant realizations. Items were elicited in isolation and a first analysis reveals that the phonetic system is compromised. The data show a clear pattern for the younger generation passing from [s] to [ʃ] and from [z] to [ʒ]. For

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example, the older speakers present the regular outcome [ʃol] ‘sun’, while the new generation have [ʃol]. This research will take into consideration the contexts in which the changes apply, analysing the possible consequences on the phonological system of this variety. This study will also try to offer a possible explanation of this change: an external influence of the Slavic varieties could be plausible because of their increasing prestige and the widespread bilingualism; the internal perspective will also be contemplated, taking into consideration Kenstowicz’s (1994) «coronal syndrome». This kind of microvariation is still understudied and this aspect was described in the Italo-Romance area only for the regional Italians of Bologna (Rizzi 1986) and Carrara (Barbera *et al.* 2007).

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This study discusses original acoustic data concerning the output of /s/ in #/sw/ clusters in Italian. Broadly speaking, we observed two patterns (details below). In the native lexicon, #/sw/ is realised as [sw] ([sw]ono “sound”, [sw]olo “ground”), while in loanwords, mostly from English, the same cluster surfaces as #[zw] ([zw]atch “Swatch”, [zw]ing “swing, musical genre”). In Italian, /s/ is phonetically voiceless before a voiceless consonant ([sp]eranza “hope”, [st]ato “stato”, [sf]era “sphere”), but it is realised [z] before a voiced consonant ([zb]attere “slam, inf.”, [zr]egolato “unregulated”, (Bertinetto, Loporcaro, 2005: 134). Word-initially, before a vowel, /s/ surfaces as a voiceless sibilant [s] ([#sa]le “salt”, Bertinetto, Loporcaro, 2005). In this respect, glides /j w/ behave as vocalic segments since they do not trigger voice assimilation ([sj]ero “serum”, [sw]ora “nun”, Bertinetto, 2010).

As far as the labiovelar glide [w] is concerned, also the masculine definite article selection hints at a vocalic, hence nuclear, interpretation, since *l’* is selected before #/wV/ (*l’uomo* “the man”), the allomorph recurring before vowels, as in *l’albero* “the tree” (Marotta, 1988; Marotta, 1993; Bertinetto, Loporcaro, 2005; Canalis, 2018); *il* is selected before (branching) Onsets (*il treno* “the train”, *il cane* “the dog”), while *lo* is preferred before sC and the so-called “intrinsic geminates” /ʃ ɲ ʎ ts dʒ/ (Marotta, 1993), e.g. *lo sparo* “the shot”, *lo [f:]ame* “the swarm”, *lo [d:]ero* “the zero”, etc.). In loanwords, interestingly, *il* is selected before #/w/, as in *il weekend*, *il workshop* (Bertinetto, Loporcaro, 2005), while *lo* recurs before #/sw/, e.g. *lo Swatch*, *lo swing* (Janni, 1992). Even though /w/ may only precede /ɔ/ in Italian (unless it follows /k g/, as in [kw]into “fifth”, Marotta, 1988), the allomorph selection pattern observed in loanwords cannot be attributed to the syllabification of /w/ in Onset position when illicit diphthongs, as in [wi]kend and [swi]ng, are concerned: in loanwords, also [wɔ] and [swɔ] select *il* and *lo*, respectively. However, the CV syllabification in loanwords (vs. VV in the native lexicon) of /wV/ diphthongs cannot be excluded. The CV interpretation is likely to depend on some property of the loanword phonology in Italian, where /w/ is always a consonant. We refer to this view as the Loanword Phonology Hypothesis (LPH). Alternatively, as Janni (1992) observed, the consonantal status of the grapheme <w> representing /w/ leads to a consonantal interpretation of the glide itself in the phonological representation. This is in fact Baroni’s (2020) conclusion when discussing results from an article selection task involving glide-initial (pseudo-)words in Italian and French. Thus, if /w/ is a C segment, the preceding /s/ cannot occupy the Onset position, since /s/-headed branching Onsets are illicit in Italian (Kaye, Lowenstamm, Vergnaud, 1985). This view is referred to as the Orthographic Hypothesis (OH).

In line with the article selection, the /s/-voicing observed in our data (#/swV/ > #[zwV] in loanwords, > #[swV] in the native lexicon) can be explained by positing two syllabifications: C.CV in loanwords, i.e. a case of *s impurum*, CVV in the native lexicon, i.e. /s/ in Onset position followed by a branching Nucleus. As claimed above, both LPH and OH assume this. The two hypotheses make different predictions, though. LPH predicts a CV syllabification for every /wV/ diphthong in loanwords, while OH only predicts that when /w/ : <w>. LPH and OH have been tested by analysing acoustic data, obtained through a reading task (30 Italian L1 speakers, 20-30 years old). Readings have been recorded with a Zoom Handy 5 recorder. Stimuli were meaningful sentences in standard Italian. Each sentence included, as a target word, a loanword or a native lexeme, in a prosodically prominent position, showing a word-initial /sC/ or /sw/ cluster; filler sentences were added in order to distract the speaker/reader from the real aim of the study. Among loanwords, we included also (non-English) lexemes commonly used in Italian whose glide /w/ is not represented by <w>, rather by vocalic graphemes, e.g. *soirée* “elegant party”, *Suarez* “person name”. According to LPH, we expect /s/ > [z] in the production of *soirée*-like words, while OH implies a voiceless realisation [s] in the same context.

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Data were analysed by means of the *voice report* function of Praat, which indicates the percentage of voiced portion in a segment, according to the classification in Davidson (2015): [z], if more than 90% of the segment is voiced; [s], if less than 10% is voiced; values between 10% and 90% are considered partially voiced. It resulted that [z] or a partially voiced alveolar sibilant are systematically produced before a voiced consonant or before /w/ if written <w>. In all other contexts, i.e. /s/ preceding a voiceless obstruent or /w/ represented by vocalic graphemes, /s/ surfaced as [s]. The results indicate thus that OH is more adequate than LPH in our case study. Moreover, Oh can also account for the article selection, considering that before native spellings of loanwords, such as <sua(h)ili> (a less common variant of <swahili>), the allomorph selected is *il* (*il sua(h)ili* vs. *lo swahili*).

Still, the Orthographic Hypothesis is controversial among linguists. In fact, it is by no means clear how orthography interacts with phonology. Nevertheless, much psycholinguistic literature has discussed the possibility that the alphabetic knowledge is able to influence the phonological representation or the way literate speakers access it – a process generally defined as the Orthographic Effect (Seidenberg, Tanenhaus, 1979; Ziegler, Ferrand, 1998; Taft, 2006; Bassetti *et al.*, 2017). The theoretical relevance of the Orthographic Effect (OE) has been often diminished, mostly due to the metaphonological tasks used in the literature above, such as phoneme counting or rhyme detection (Ziegler, Ferrand, 1998). Tasks of that kind involve an indirect access to phonology: orthography may thus be used by participants in order to facilitate the task accomplishment. Consequently, the Orthographic Effect could not be interpreted as an evidence of an actual influence of orthography on phonology. Bassetti (2017) and Ziegler, Ferrand (1998) may be viewed as counter-examples, though.

In any case, it is difficult to interpret our data by solely making reference to phonological properties without taking into account the orthographic level. Probably, the “orthographic effect” we observed is enhanced by the ambiguous nature of glides, in particular of /w/: there is no widely accepted consensus about their phonological status among linguists. Further research is certainly needed in order to test the Orthographic Hypothesis here advocated.

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## The syntactic distribution of information focus and the mapping between syntax and information structure

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**1. Introduction: The problem.** In crosslinguistic research, answers to wh-questions are still “the most widespread and most widely used test for focus” (van der Wal 2016: 265) and, in particular, for information focus. When studying the syntax of focus, however, this test is problematic because the most natural answer to a wh-question is often a fragment that only includes the focus, while the given background material is elided. This problem has led to considerable controversy in the literature about the position in which information focus is realized, particularly for Spanish, but also for Catalan and Italian. On the basis of their intuitions and introspection, most scholars claim that information focus, including subjects, must appear at the end of the sentence (Zubizarreta 1998, Belletti 2004). Other researches, however, have questioned this claim on the basis of experimental data, arguing that information focus can occur preverbally, especially in the case of focal subjects (see Gabriel 2010, Hoot 2016, Vanrell & Fernández Soriano 2013, 2018, Feldhausen & Vanrell 2014, Jimenez Fernández 2015a,b on Spanish and Catalan; for Italian most quantitative studies are on language acquisition, see Belletti 2008 and references therein). These experimental studies, however, are not free from criticism, in that, the adopted elicitation technique often included explicit instructions to the participants, who were explicitly asked to repeat in their answer all the constituents appearing in the question (e.g., Gabriel 2010, Vanrell & Fernández Soriano 2018), even though the most natural answer would have been a focal fragment.

**2. The production experiment.** In order to enhance the naturalness and reliability of the question-answer test, we designed an experiment with a new elicitation technique, i.e. *questions with delayed answers* (QDA), in which some material is inserted between the question and the point in which the participant is asked to answer the question, so that participants would spontaneously utter a full sentence instead of a fragment, without being explicitly instructed to do so (cf. (1) with a subject question and (2) with an object question).

- (1) *‘You go to your parents’ place. You show your mum a watercolour portrait of yourself. She asks “Who drew it?”. At that point you get a phone call. Somebody got the wrong number. You hang up and, to answer your mum, you say:’*
- (2) *‘You are watching a film with your roommate. Since she wakes up really early every day, she falls asleep and misses the ending. When you switch off the TV, she wakes up and asks you: “What did they find? I don’t think I’ll watch this movie again. I’m sure I would fall asleep again.” To reply you say:’*

This experiment was carried out in three null-subject Romance languages, using the same material (16 items [8 with subject questions + 8 with object questions] + 16 fillers) in the target language:

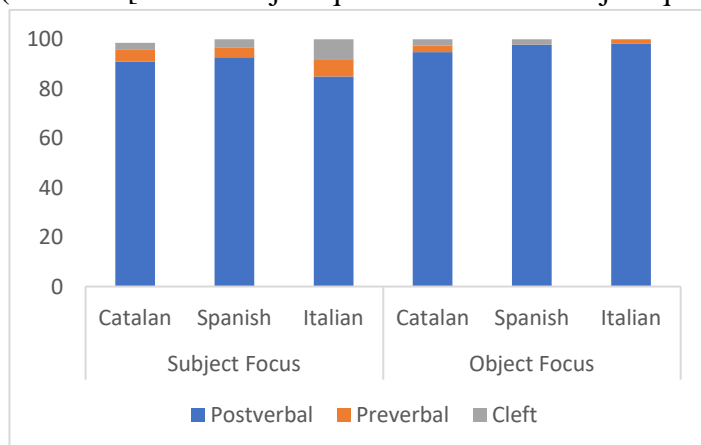


Figure 1: Results of the production experiments: % of elicited foci

20 native speakers of Catalan, 20 of Spanish and 32 of Italian (20 from continental Italy + 6 Sardinians and 6 Sicilians) took part in the online elicitation sessions with the experimenter. The results are in Fig. 1. Only a small percentage of the answers were fragments, meaning that the experimental items were largely successful in eliciting full sentences. The results are very similar in all languages: overall, participants overwhelmingly produced postverbal

foci with both subjects and objects, along with a marginal number of preverbal and clefted foci.

**3. The acceptability-judgement experiment.** We additionally conducted a rating experiment on the acceptability of preverbal and postverbal information foci in Catalan, Spanish and Italian. For this acceptability rating study, we used the same contexts as in the production experiment, but an answer to the question was provided, which was the target of the rating task. Each answer was shown in two versions: with a postverbal focus and with a preverbal focus (cf. (3a/b) and (4a/b), which are answers in Catalan and Spanish to the questions in (1) and (2), respectively).

- |     |    |                           |     |    |                           |
|-----|----|---------------------------|-----|----|---------------------------|
| (3) | a. | Ho ha dibuixat una amiga. | (4) | a. | Han encontrado un tesoro. |
|     | b. | Una amiga ho ha dibuixat. |     | b. | Un tesoro han encontrado. |
|     |    | ‘A friend drew it.’       |     |    | ‘They found a treasure.’  |

A total of 390 native speakers of Catalan, 197 native speakers of Peninsular Spanish, and 200 native speakers of Italian took part in the experiment; the participants were asked to rate the degree of acceptability of each answer in the relevant context on a Likert-scale from 1 to 7. The results

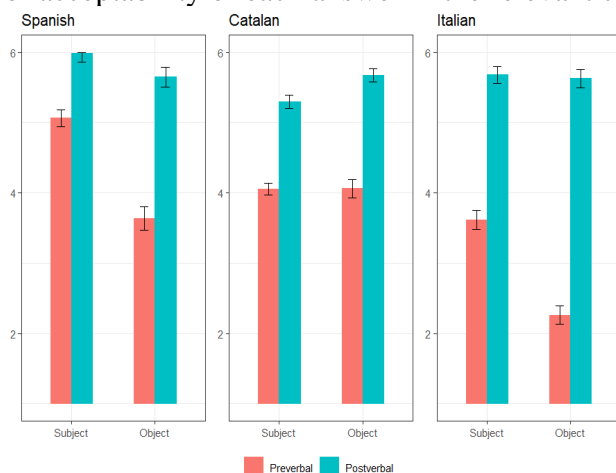


Figure 2: Results of the rating experiments

of this study confirm the findings of the production experiment: in all languages postverbal focus is always preferred over the two types of preverbal focus, both in the case of subjects and objects (cf. Figure 2). However, the study also reveals differences across languages between the two languages. While in Catalan, the interaction between position and the grammatical function is not significant ( $\beta=-0.19$ ,  $p = .57$ ), in Spanish ( $\beta=0.51$ ,  $p < .001$ ) and in Italian ( $\beta=0.61$ ,  $p = .001$ ) it is, and the rating scores of the preverbal subjects are higher than those of the preverbal objects.

**4. Discussion and analysis.** From a methodological viewpoint, we believe that our QDA-technique offers significant advantages in the strive for natural data in the elicitation of informational focus, both in production and in rating tasks. Our findings, moreover, provide experimental evidence in support of the theoretical view, mostly based on native speakers' intuitions and introspection, that in Catalan, Spanish and Italian, informational foci are preferably realized in a postverbal position. A focal interpretation of the preverbal constituent in answers to questions, however, cannot totally be excluded. This interpretation is especially available with preverbal subjects in Spanish (mean score=4.98, cf. Fig. 2), showing an important difference with the other two languages. We interpret this difference in the light of the hypothesis formulated in Leonetti (2017), according to which Catalan and especially Italian are more restrictive than Spanish with respect to the mapping between syntax and information structure. While all languages resort to the dedicated word order with a more transparent information-structure partition for a focal subject (i.e. VS), Spanish is more permissive in also allowing a narrow focus interpretation of the subject in an SV order.

In order to account for the optionality of focus realization and for the variation in the degree of acceptability of preverbal foci across the three languages, we finally propose a model based on the alternative spellout of chain links (Bianchi 2019) and on a set of soft constraints that operate at the interface between LF and PF and that regulate the gradient acceptability of preverbal foci.

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## Three experiments on early parsing of subject-verb agreement in Catalan

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Agree is one of the basic operations that constitutes UG, and subject-verb agreement is one of its many manifestations. The literature provides some surprising results on subject-verb agreement in acquisition, vis à vis what we know about production, which is early. First, Johnson et al. (2005) tested the processing of subject-verb agreement in English in contexts in which number marking in the noun had been shadowed and thus only verb agreement was a cue to number; their results showed poor identification of number features even at age 4. Pérez-Leroux's (2005) study on Spanish led to the same result, despite richer verbal inflection in Romance than in English. Later research led to the idea that the delay in number identification had its source in the methods used in experimentation (Brandt-Kobele & Höhle 2010, Gonzalez-Gomez 2017), while others maintained that delay was subject to crosslinguistic variation (Legendre et al. 2014). Here we present new results from three experiments on Catalan, conducted under different methods. The conclusions we draw allow us to resolve the conflict that the results of Johnson et al. and Pérez-Leroux raise between late comprehension and early production of agreement (extensively attested in Romance).

Experiments 1 and 2 were two sentence-picture matching tasks, conducted with 111 Catalan-speaking children between the ages of 3 and 6; experiment 1 followed that of Pérez-Leroux for Spanish, testing comprehension of sentences with null and overt, singular, and plural, subjects, plus unrelated distractors. Experiment 2 was identical to experiment 1 except for the presence of distractors with numerals (*Tres ànecs volen* 'Three ducks are flying'). While both experiments granted better results than those of Pérez-Leroux for Spanish, the younger group was above chance in all conditions only in experiment 2, showing a clear effect of the presence of a numeral in the experiment, drawing the children's attention to numerosities (see Table 1). The older group's performance was above-chance in all conditions. These results point, therefore, to the effect of experimental confounds in some results obtained in this experimental paradigm. Crosslinguistic variation is not supported, given that performance in the same languages depends on method.

Table 1. Mean estimation, percentage of adult-like answers, Experiments 1 and 2

Exp1	Distractor	Overt subject		Null subject	
Age group					
		Singular	Plural	Singular	Plural
3-4	96.7%	77.2%	76.9%	45.5%	66.5%
5-6	97.3%	91.7%	89.5%	72.4%	88.5%

Exp2	Numeral	Overt subject		Null subject	
Age group		Singular	Plural	Singular	Plural
3-4	88.2%	76.5%	73.1%	59.8%	69.6%
5-6	96.1%	87.6%	85.1%	72.8%	89.3%

Turning to a younger age range, experiment 3 targeted infants using the preferential looking paradigm. We measured the gaze duration to number-matching vs. mismatching videos (with both videos played simultaneously) when the infants heard a sentence with an overt or null subject, singular or plural, produced three times after a baseline window. By hypothesis, if an infant can parse subject-verb agreement, she will look longer at the matching event than at

the mismatching event. Similar to those in experiments 1 and 2, the conditions in this experiment are exemplified in (1), with an overt subject, and (2), with a null subject. 20 children were tested in Catalonia.

- |        |   |    |  |
|--------|---|----|--|
| (1) a. | L'animal balla.<br>the animal dance.3sg<br>'The animal is dancing.' | b. | Els animals ballen.<br>the animals dance.3pl<br>'The animals are dancing.' |
| (2) a. | Balla.<br>dance.3sg<br>'(He) is dancing.'                           | b. | Ballen.<br>dance.3pl<br>'(They) are dancing.'                              |

Infants were divided into two groups, younger (Mean age = 19 months) and older (Mean age = 32 months). We performed the Wilcoxon signed rank test – for condition (overt and null), time window (S1, S2, and S3), and group (19 months and 32 months). Parsing of number agreement can only be truly measured with null subjects; we only report results for that condition (see Figure 1). For 32 month-olds, we found significant differences in gazing performance to matching and mismatching videos during exposure to S1 and S3 in the singular condition and S2 in the plural condition, with longer looks at the matching video. For 19 month-olds, we found significant differences during exposure to S2 and S3 in the singular condition. No other significant differences were found in the other windows, i.e. the younger infants showed no identification of plural items. Analyses against chance showed that statistical significance, if detected in the matching condition, corresponded to above chance performance. Statistical significance, if detected in the mismatching condition, corresponded to looks away from the matching condition.

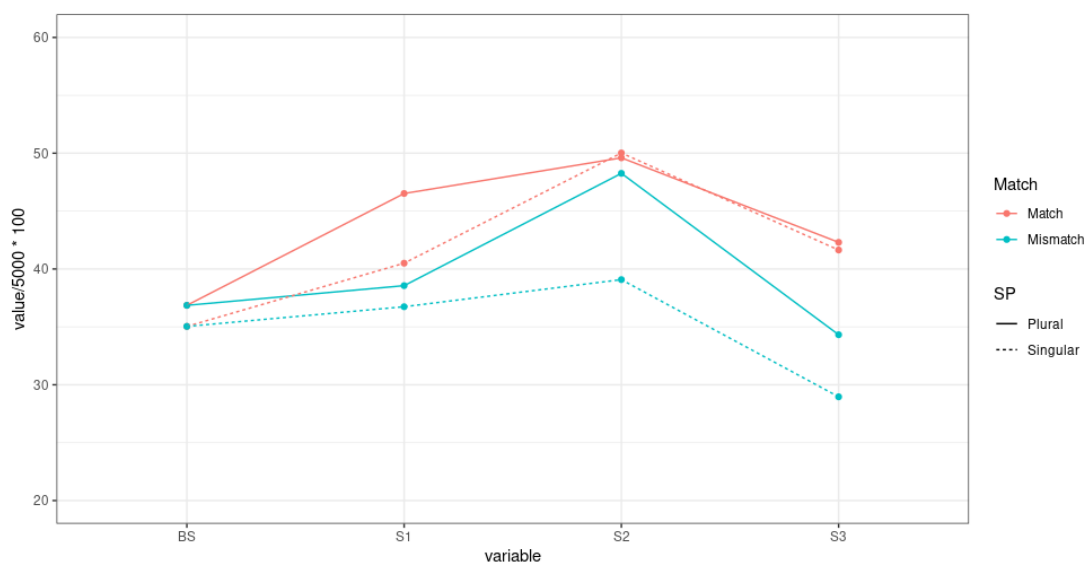


Figure 1: Gazing towards the matching (red) and non-matching (blue) scene by 19 month-olds.

Taken together, the results indicate the impact of the experimental method (cf. the results of experiment 1 and experiment 2) and the infants' sensitivity to number marking from 19 months (experiment 3), in line with a growing body of evidence on the acquisition of the syntax at the preverbal stage (see Franck et al. 2013 on word order parameters and Perkins & Lidz 2021 on long-distance dependencies).

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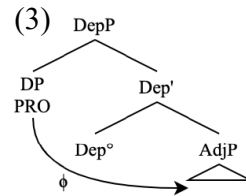


## Two Is Better Than One: A Number Mismatch with Deficient Implicit Arguments

**1. Introduction:** Spanish has a third person plural arbitrary subject with an arbitrary/existential interpretation, which is always null (2). The referent of arbitrary *pro* here must be animate and human, but not plural (Jaeggli 1986). (1) and (2) have the same interpretation, except the implicit agent in (1) can be inanimate, and *pro* in (2) excludes the speaker and the addressee as the agent.

- (1) La ciudad fue destruida  
the city was destroyed  
'The city was destroyed'
- (2) *pro* destruyeron la ciudad  
*pro* destroyed-3.pl the city  
'The city was destroyed'

This *pro* can be modified by a secondary depictive predicate adjective, which is merged as an adjunct in Spec,vP. The agreement on the adjective comes from an OC PRO in the specifier of the depictive phrase (Pylkkänen 2008), whose structure is shown in (3).



**2. Multiple Subject Positions:** When a secondary predicate appears in a sentence with 3<sup>rd</sup> plural arbitrary *pro*, a number mismatch occurs with the verb and secondary predicate.

- (4) (No sé quien es el autor, pero) *pro* escribieron la carta borracho  
(no know-1.sg who is the author, but) *pro* wrote-3.pl the letter drunk-m.sg  
'(I don't know who the author is, but) They wrote the letter drunk'

Data from native speakers and from Google show that this mismatched agreement pattern – singular secondary predicate morphology and plural verbal morphology – is obligatory with this arbitrary subject. Conversely, a sentence whose verb cannot license the plural arbitrary subject, such as unaccusatives (Jaeggli 1986), must show matched number agreement.

- (5) *pro* llegan cansado\*(s) después de un viaje tan largo  
*pro* arrive-3.pl tired-m.pl after of a trip so long  
'They arrive tired after such a long trip'

The two different agreement patterns in (4) is evidence that distinct elements are agreeing in their phi-features with the verb and the secondary predicate. I propose that a feature-deficient implicit argument is externally merged in Spec,vP, which gives the secondary predicate masculine singular phi-features. The number mismatch in (4) is not the only reason to posit multiple subjects, however. I discuss the EPP, the nature of implicit arguments, and the Case assignment as further evidence for multiple subjects in this construction.

**3. The EPP:** Much has been written about the status of the EPP in Spanish (Alexiadou & Anagnostopoulou 1998, Goodall 2001, Kučerová 2014). Sufficient evidence suggests that Spanish has an active EPP feature. As evidence I give the contrast in (6) and (7) that exists in some varieties of Spanish. I claim that the optionality of singular vs. plural agreement follows from the existence of a null expletive in Spec,TP, so the verb can show singular agreement with the expletive or plural agreement with the postverbal subject. I compare this to the same optionality of agreement in many varieties of English (8-9), which always involve an overt expletive. Note that, with preverbal plural subjects, the agreement in both languages must be plural (10-11).

- (6) *pro<sub>expl</sub>* llegaron las niñas  
*pro<sub>expl</sub>* arrived-3.pl the girls  
'There arrived the girls'
- (7) *pro<sub>expl</sub>* llegó las niñas  
*pro<sub>expl</sub>* arrived-3.sg the girls  
'There arrived the girls'
- (8) There were no problems here
- (9) There was no problems here
- (10) Las niñas (llegaron/ \*llegó)  
the girls (arrived-3.pl/\*arrived-3.sg)  
'The girls arrived'
- (11) a. Problems are (uncommon) here  
b. \*Problems is (uncommon) here

These data show that Spec,TP is an available landing site for external and internal merge in Spanish, which is relevant as I analyze this construction as having a null DP in this position.

**4. Implicit Arguments:** Subject-oriented secondary depictive predicates are externally merged as adjuncts within vP and controlled by the nearest c-commanding DP, so the element from which the depictive predicate gets singular number would have to be in Spec,vP. If this DP was specified for phi-features, however, nothing would stop it from entering into an Agree relation with the verb. For this reason, and for the reason that masculine singular inflection is the morphological default, it makes sense to reason that the DP in Spec,vP is deficient for all phi-features, which causes masculine singular inflection on the secondary predicate. Collins (2021) describes an existential implicit argument UN (12) which matches the description of the element in Spec,vP of this construction. For Collins, UN appears as the external argument of short passives like (1), which has a similar interpretation to this construction (see (1) and (2)).

- (12) Existential Implicit Argument UN:  
 a. UN is a DP  
 b. Phi-features: none

Since UN cannot enter into an Agree relation with the verb, the derivation would fail if it moved into Spec,TP to satisfy the EPP. Instead, a DP that is specified for phi-features is externally merged in Spec,TP to satisfy the EPP and in this case to agree with the verb. This has plural phi-features. I call this *pro<sub>arb</sub>*. The following table gives the properties of these two subjects *pro<sub>arb</sub>* and UN in this construction.

(13)

	Merged in	Phi-features	Inflection	Theta role	Case
<i>pro<sub>arb</sub></i>	Spec,TP	3 <sup>rd</sup> , plural	Verb	None	Nom
UN	Spec,vP	None	2ndary pred	Agent	None

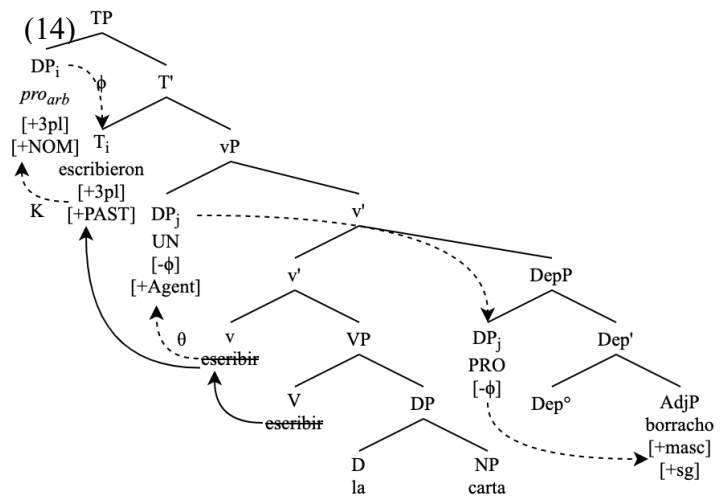
**5. Case:** Collins (2021) states that UN does not receive Case. The Inverse Case Filter states that every head that is able to assign Case must do so. If UN doesn't receive Case, a second DP must be inserted in Spec,TP since T needs to assign Case. I claim that UN's feature deficiency is what makes it unable to receive Case and to enter in an Agree relation with the verb.

**6. Derivation:** I now return in (14) to the full derivation of the sentence in (4), in which UN is externally merged in Spec,vP which controls PRO of the DepP and causes it to show masculine singular default inflection. The deficiency of this DP makes it unable to enter in an Agree relation with the verb and to receive Case. To satisfy the EPP feature on T, *pro<sub>arb</sub>* with plural phi-features is merged in Spec,TP. This DP is specified for phi-features, so it enters into an Agree relation with the verb and received nominative Case.

**7. Conclusion:** The derivation of this

construction has very interesting implications for the nature of the EPP in null subject languages like Spanish. This data can only be made sense of if there is a *pro* with plural phi-features that checks an EPP feature on T. Additionally, it sheds light on the distribution of implicit arguments cross-linguistically, as this mismatch is notably not observed in other varieties of Romance.

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## Underuse and overgeneralization in child heritage Romanian

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**Background and aim.** A significant amount of research focused on the similarity of biases in language acquisition and diachronic change. Some studies show that children do not only create innovative forms but they also increment incipient changes (Biberauer 2019, Cournane 2019). Other studies show that children underuse certain overt elements, a preference for economy also attested in language change (Roeper 1999). The present study is intended to contribute to this debate, presenting a case where the acquisition of one property, undergoing a change in the target-language, involves both underuse and overgeneralization. Heritage language acquisition offers a good testbed for language change; incipient changes in the baseline are accelerated in this learning context (Kupisch & Polinsky 2021). We probe into the acquisition of differential object marking (DOM) in child heritage Romanian, with a view to shedding some light on the conditions under which an incipient change may get amplified in acquisition under “extreme language contact” (Kupisch & Polinsky 2021:2). **DOM in Romanian in a nutshell.** In Romanian, DOM is obligatory with animate proper names (PNs) and (in)animate (definite) pronouns (1). In this case the marker is clitic doubling (CD), i.e. the object is preceded by the preposition *pe* and doubled by an Accusative clitic. DOM is optional with descriptive DPs. In this case, the marker is either *pe* alone or CD (2) and it applies to animate DPs. But DOM may be (rarely) encountered with inanimate DPs in spoken Romanian (with an upgrading effect) (3) and there are configurations where animacy can or must be overridden (Irimia 2020); these configurations always involve CD. Additionally, optional DOM is undergoing a diachronic change, with CD gradually replacing single *pe*. The contemporary language features two parallel systems. Some speakers accept exclusively CD as DOM. Others allow both single *pe* and CD. **Predictions for language acquisition.** The input children receive includes samples of both grammars. If children drive incrementation of incipient changes, they should use CD to the detriment of single *pe*. The extended use of CD, which is more permissive with respect to animacy, may further weaken the role of this feature in the system, possibly creating the conditions for one more incipient change. If child generalization is in the direction of (possible) incipient changes, we expect learners to use DOM with inanimate DPs at a rate higher than the one in the input. **Method.** In order to test these predictions we designed an acceptability judgment task with 16 test sentences across 2 conditions: DOM (= CD) with (i) proper names (PNs); (ii) common nouns (CNs), balanced for animacy (4-6). 45 child heritage speakers (CHSs) of Romanian (7-, 9- and 11-year-olds), born to Romanian families living in France, took part in the study. Their responses were compared to those of 45 age-matched Romanian monolinguals (RMs) living in the homeland. **Results and discussion.** All CHSs used DOM with animate DPs at a relatively high rate, increasing with age. But they incorrectly accepted unmarked animate PNs and under-accepted (optional) DOM with CNs as late as age 11, i.e. CHSs underuse and overgeneralise DOM (Fig. 1). RMs accepted DOM with PNs almost at ceiling as early as age 7 and at very high rates in optional contexts (70% at age 7, 92% at age 9 and 100% at age 11), indicating that changes in progress are amplified by monolingual learners. We argue that CHSs underuse DOM because it is a property at the syntax-discourse interface. According to Hill & Mardale (2021), DOM involves a topic feature, checked by *pe* in

single *pe* DOM (6) and by the clitic in CD (7). In bilingual acquisition, properties at the syntax-discourse interface are vulnerable (Sorace 2011). Diachronic incrementation probably cannot obtain in language contact situations when the property undergoing change is an interface one. All CHSs accepted DOM with inanimate DPs at high rates, diverging from the input. There was a slight increase from age 7 to age 9, followed by retraction at age 11 (Fig. 2). The 7-year-old monolinguals also accepted DOM with inanimate PNs (45%) but there was a significant decrease from age 7 to age 9, when inanimate DPs are marked at a rate below 10. These findings show that CHSs amplify a possible incipient change to an extent higher than the one found with monolinguals. This extension is not random and does not reflect a deteriorated DOM system. It reflects a developmental path in line with the changing potential of the system. Retraction, the result of perfect input matching, is slower under conditions of language contact. When the input is reduced, the innovative property may get amplified over a longer period.

### Examples

- (1) a. \*(L-) am desenat \*(pe) Ion/ \*(pe) el.  
CL.3m.s have drawn PE Ion PE him  
'I drew Ion/him.'  
b. \*L- am vizitat \*pe București.  
CL.3m.s have visited PE Bucharest  
'I visited Bucharest.'
- (2) a. (L-) am desenat pe copil.  
CL.3m.s have drawn PE child  
'I drew the child.'  
b. Am desenat copilul  
have drawn child-the  
'I drew the child.'
- (3) Uitați cum o facem pe mămăliguță.  
look how CL.3f.s make PE polenta-DIM  
'Look how we are making this little polenta'
- (4) a. Turiștii vizitează Parisul./ \*Turiștii **îl** vizitează **pe** Paris. 'Tourists visit Paris.'  
b. \*Mama piaptână Ioana./ Mama **o** piaptână **pe** Ioana. 'Mother is combing Ioana.'
- (5) a. Copilul a tăiat hârtia. / \*Copilul a tăiat-**o** **pe** hârtie. 'The child cut the sheet of paper.'  
b. Mama ajută fetița./Mama **o** ajută **pe** fetiță. 'Mother is helping the little girl.'
- (6) [KP [K<sub>[TOPIC]</sub>[PERSON] *pe* [DP D<sub>[DEFINITE]</sub>...]]
- (7) [KP K-clitic<sub>[TOPIC]</sub> [DP D<sub>1</sub> - *pe*<sub>[PERSON]</sub> [DP D<sub>[DEFINITE]</sub> NP ...]]]

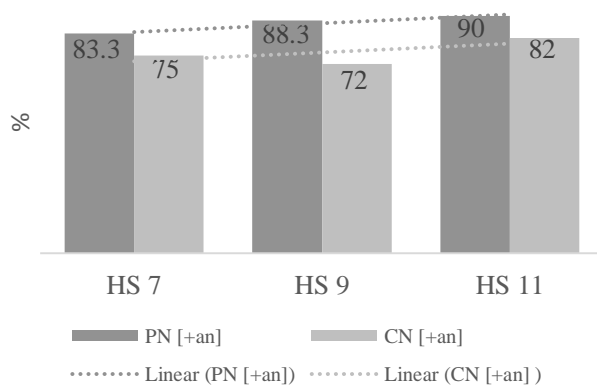


Fig. 1. CHSs: DOM with [+animate] objects

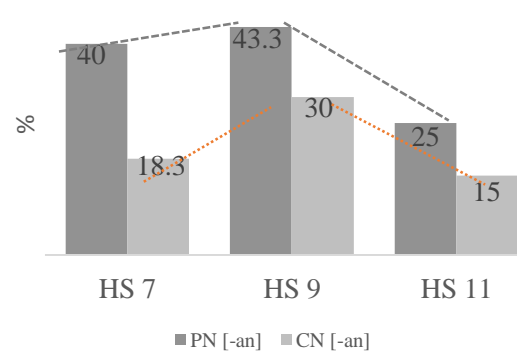


Fig. 2. CHS: DOM with [-animate] objects

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## Using Diachronic Distributional Models to Study Semantic Variation in Spanish Idioms

Research on word variation over time is fundamental for the development of language models, as well as for the understanding of language change. Idioms are the result of language change, thus are subjected to a high degree of variation (Jimenez et al, 2018). Because technology progresses in such a fast pace, multiword expressions, such as idioms, appear, disappear and change in meaning continuously. At the same time, technology allows us to track semantic change employing word embeddings as a diachronic tool (Rosenfeld & Erk (2018), Hamilton et al. (2018)). While word embeddings show promise in the study of language variation over time, diachronic distributional models in languages such as Spanish need to be investigated further. In this paper, I study diachronic variation in Spanish idioms utilizing word embedding models from large corpora.

Idioms are a type of multiword expression (MWE) whose meaning is non-compositional. Thus, the meaning of “*ya salió el peine*” (to uncover the truth) cannot be derived by breaking it down and examining the meaning of its constituent parts (Peng and Feldman, 2016). It is well established within the field of linguistics that the properties attributed to idiomatic expressions represent great challenges for several linguistic applications (e.g. idioms present different degrees of statistical idiomacity; idioms can be syntactically ill-formed or semantically ambiguous without context). Despite that, the development of word embedding models, as well as the rise of big data facilitate the study of word variation over time. I describe a method using word embeddings for tracking variation in idiomatic expressions based on two hypotheses: 1) the proposed diachronic distributional model can detect semantic variation by comparing vectors for a given idiom across different time points, 2) an idiom should be treated as a single token the models Idiom Principle (see Peng & Feldman, 2016).

Diachronic distributional models use words embedded in vector spaces correspondent to their co-occurrence relationships where the vector changes over time (Hamilton et. al, 2018). These vectors are then compared across time utilizing metrics to quantify semantic change. The method used to construct word embeddings is SkipGram with Negative Sampling (SGNS) (i.e. Word2vec). Then, the distance between words (semantic similarity) is calculated at different points in time using the cosine similarity (Turney and Pantel, 2010) to measure change over time. A nearest neighbor analysis then is performed in order to understand in which way a word has changed (Rosenfeld & Erk, 2018). For example, with this method we can observe the idiom ‘*ser/parecer un bodrio*’ has changed its meaning over time. We observe in sentence (1) the meaning of ‘*bodrio*’ is closer to the one described in *Diccionario de Las Lenguas Española e Inglesa*, printed in 1837: a mixture of things put together without any order. Differently, in sentence (2) ‘*bodrio*’ refers to something very ugly, in bad taste or boring, which aligns with a more modern use of the expression (see García-Robles, 2012).

1. ...**es bodrio** confusísimo del que pueden hacerse mil explicaciones...<sup>1</sup>

*...it is a very confusing mess of which a thousand explanations can be made...*

- 
2. No **es** más que un **bodrio** vergonzoso que demuestra que ni siquiera sabemos nada de ella. <sup>2</sup>

*It's nothing more than an embarrassing creature that shows we don't even know about her.*

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<sup>1</sup> Un Final para Rachel by Jesse Andrews, 2015. Penguin Random House Grupo Editorial

<sup>2</sup> Tratado del verdadero origen de la religión y sus principales épocas, en que se impugna La Obra de Dupuis. José de Jesus Muñoz. Vol I. 1828. p14

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## VOTs in contact: Guatemalan Spanish and Maya K'iche'

The acoustic analysis of voice onset time (VOT) has often been used in studies in order to determine small but measurable aspects of bilingualism and language contact. For example, Spanish has been described as a language with short-lag voiceless VOTs (Hualde, 2005), and the majority of studies that investigate L2 Spanish VOTs analyze speakers whose L1 has long-lag VOTs, e.g., English (Amengual, 2012; Flege & Eefting, 1986, 1987). However, studies in bilingual and language contact contexts have demonstrated that speakers tend to produce longer Spanish VOTs than those produce by monolingual Spanish speakers in non-contact situations, even if the other language spoken by the bilinguals does not have long-lag VOTs (Caramazza, et al., 1973; Flege 1987, 1991; Fowler, et al., 2008; Lamy 2016). The present study analyzes and compares voiceless Spanish VOTs in Guatemala among L1 and L2 speakers from geographically distinct locations within Guatemala and compares them to voiceless VOTs from K'iche', the most widely spoken Mayan language in the country.

Although Mayan languages do not have long-lag VOTs in word-initial position (AUTHOR, 2017), Guatemalan Spanish has been anecdotally described as having a “strong consonantism” (García Tesoro, 2008:105), i.e., voiceless stops are produced with longer VOTs than what is typical in other varieties of Spanish. Furthermore, García Tesoro (2008) claims that this is particularly the case among L2 speakers. However, recent sociophonetic analyses have demonstrated that although Spanish-Mayan bilinguals do indeed produce VOTs that are longer than non-contact Spanish monolingual VOTs, there were no significant differences in VOTs between bilingual speakers and monolingual speakers in these studies: Michnowicz & Carpenter (2013) among Spanish-Yucatec Maya bilinguals and McKinnon (2020) among Spanish Kaqchikel bilinguals. However, both of these studies were limited to the geographical region where the specific Mayan language was spoken.

Following the elicitation and analysis methods of Amengual (2012), this study employs a controlled production task to examine Guatemalan Spanish VOTs of 44 participants across three groups: Spanish monolinguals from Guatemala City (eastern Guatemala) Spanish monolinguals from Quetzaltenango (western Guatemala), and L1 K'iche'-L2 Spanish speakers from Quetzaltenango. Additionally, the K'iche' VOTs of the L2 Spanish speakers group were analyzed in order to interpret possible L1 transfer. All target words contained a word-initial unstressed /t/, were followed by either /e/ or /o/, and were produced in the carrier phrases *Puedo decir* TARGETWORD and *Kinkowinik kimb'ij* TARGETWORD; both meaning “I can say TARGETWORD” in Spanish and K'iche' respectively. 40 Spanish tokens were produced by each participant and an additional 40 K'iche' tokens were produced by each L2 Spanish speaker.

Preliminary results suggest that, overall, Guatemalan Spanish VOTs are longer than monolingual Spanish VOTs in other contexts. Additionally, Guatemala City monolinguals have significantly shorter Spanish VOTs than the two Quetzaltenango groups and Guatemala City VOT results are closer to those of McKinnon (2020). However, no differences in Spanish



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VOTs were found between the Spanish monolinguals from Quetzaltenango and the L2 Spanish speakers from Quetzaltenango. Moreover, there were no significant differences between Spanish and K'ichee' VOTs for the L1 K'ichee'-L2 Spanish speakers, indicating that word-initial /t/ VOT is similar among both languages in this area of Guatemala.

The results of this study indicate that, in concordance with previous studies, Guatemalan Spanish VOTs demonstrate longer VOTs than monolingual varieties in non-contact situations. Although it would be erroneous to propose that Guatemala City Spanish is not in contact with Mayan languages, these findings demonstrate geographical variation within the same country in the VOTs of word-initial /t/ that may be at least partially caused by the language contact. L2 Spanish speakers in this study do not demonstrate different VOTs than L1 Spanish speakers from the same region. In other words, the L2 speakers have acquired the same Spanish VOTs as the L1 speakers from the same area, which is consistent with previous work (Michnowicz & Carpenter, 2013, McKinnon, 2020).

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## Variable articulations of the fricative /ʒ/ in the Poitevin-Saintongeais language of France

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Previous research on the fricatives of Poitevin-Saintongeais (P-S) –a Gallo-Romance language spoken only sparsely in south-western France– has described an alternative articulation for the fricative /ʒ/, but a lack of consensus as to the actual identity of the allophone remains: Hull (1968) and Carmichael (2008) both indicate the allophone of /ʒ/ to be [h], which also occurs phonemically elsewhere in the language; Gautier (1993) suggests the allophone is more like an aspirated /ʒ/; and Massignon and Horiot (1971) observed both [h] and [j] as possible articulations for /ʒ/. Given the varying descriptions found in earlier research, the present study seeks a) to clarify which sound(s) alternate(s) with /ʒ/ in P-S, and b) to identify some of the conditioning factors of the variation.

We assembled a corpus consisting of 325 tokens of /ʒ/ appearing in a variety of lexical and phonological contexts in 29 audio recordings of 12 speakers of P-S reading and/or reciting stories and poems. As each speaker was reading a different text, the character and number of tokens vary from one speaker to another. The differences between [ʒ] and its possible allophones are generally distinct enough that consonant identity can be determined impressionistically; however, the spectra of a few tokens were analyzed more closely in Praat (Boersma & Weenink, 2016) in order to determine the identity of the sound in question. This spectral analysis suggests that the approximant [j] is actually a more common allophone in our data than the fricative [ʒ] described by Massignon and Horiot (1971).

Results suggest the distribution of variable /ʒ/ pronunciation to be heavily speaker-dependent within the P-S language: three speakers produced /ʒ/ exclusively as [ʒ] in the 49 tokens of /ʒ/ contained in their recordings (15.1% of the corpus); three speakers produced /ʒ/ as [ʒ] in 94.1% of their 101 /ʒ/ tokens (31.1% of the corpus), while the six other tokens of /ʒ/ were realized once as [h] and five times as [j]; three other speakers produced /ʒ/ as [h] in 96.3% of their 107 /ʒ/ tokens (32.9% of the corpus), with other tokens of /ʒ/ realized three times as [ʒ] and one time as [j]; greater variation was seen among the 68 /ʒ/ tokens (20.9% of the corpus) produced by the final three speakers, where 42 tokens were produced as [ʒ], 21 as [h], and 5 as [j], of which 4 were produced by a single speaker.

Based on these data, it appears that allophonic variation in the articulation of /ʒ/ is not ubiquitous among speakers of the P-S language. When speakers of this variety do have an allophone for /ʒ/ in their speech, it is primarily realized as [h], with [h] being the primary surface-level articulation for /ʒ/ among 25% of the speakers in this study.

While previous accounts of the allophones of /ʒ/ in P-S have only described them as regional variants, we identify a number of phonological and lexical environments that appear to influence

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the realization of this phoneme. Across most of the speakers, an implicational hierarchy applies. While the realization [ʒ] is most common overall, the allophones [h] and [j] appear most commonly in word-medial position. Among some speakers, [h] and/or [j] appear word-initially as well as word-medially. These variants are only produced word-finally by the three speakers for whom [h] is the predominant form overall. Word frequency appears to play a role as well, as among speakers that produce [j] this allophone is especially common for the frequent word *jhe* 'I'. In several instances, the same word with word-initial /ʒ/ (e.g. *jhusce* 'just', *jhour* 'day', *jhamae* 'never') is produced by the same speaker with two allophonic variants. In these cases, salience and speaker attention may explain the variation; the name *Jhob* is produced by one speaker as [hɔb] in isolation in a story's title but as [ʒɔb] within later sentences. It therefore seems that among modern speakers of P-S, phonological and lexical environments play a significant role in conditioning this allophonic variation alongside regional factors.

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**Variant patterns of sibilant debuccalization in Camuno:  
Phonetic and phonological implications of \*s > h in Valcamonica**

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Camuno is a variety of Eastern Lombard spoken in Valcamonica, Italy - one of the largest valleys in the central Alps, usually divided into three parts: lower (Pisogne – Breno); middle (Breno – Edolo), and upper (Edolo – Tonale Pass). Phonological study of varieties in the lower and middle areas (including the villages of Cogno, Esine, Gorzone, Prestine, Breno, Malegno, Darfo, Piamborno, Bienno) shows clear evidence of a sound change of \*s > h as illustrated in Table 1, though the same change has not occurred in the upper parts of the valley (represented by the villages of Rino, Garda, and Temú) (Bonfadini 1995; Cresci 2014).

	CAMUNO	COMPARANDA	GLOSS
V_V	mahét	Lat. MASSA	small bunch/lump
	róħo	Lat. RUSSU(M)	red
V_CV	dəħbutuná	Cat. <i>desbotó</i>	unbutton
	kahtél	Lat. CASTELLU(M)	castle
V_C#	fóħk	Lat. FUSCUS	hazy/ muffled, dusky
	móħt	Lat. MUSTUM	must (n.)
VC_V	kalhét	Lat. CALCEUS	sock/ shoe
	porhél	Lat. PORCUS, Fr. <i>porcelet</i>	pig / pig / piglet
V_#	mýħ	OFr. <i>musel</i>	face / muzzle
	póħ (< pós)	Lat. PUTEUS	well (n.)
#_V	hédħ	Lat. SETA(M)	silk
	hét	Lat. SEPTE(M)	seven
#_C	htélħ	Lat. STELLA	star
	hpért	Lat. EXPERTUS	smart / experienced
C_#	(v)éħ (<véns)	Lat. VINCIT	s/he wins
	fáħ (<fáls)	Lat. FALSU(M)	false

**Table 1. \*s > h in Camuno lower and middle valley varieties**  
(Lat. = Latin; Cat. = Catalán; Fr. = French; OFr. = Old French)

The environments in the first column of Table 1 exhaust the phonotactic positions of historical \*s, showing that, at least for some varieties of Camuno, the sound change was context free and occurred without exception. However, in at least one Camuno variety, the sound change is context sensitive: in Cerveno, debuccalization occurs intervocalically only.

In this study we attempt to explain dialect variation in Camuno in terms of \*s-debuccalization as a weakening or lenition process (cf. O’Brien 2012) within the general framework of Evolutionary Phonology (Blevins 2004, 2006, 2015). The probability of articulatory undershoot is greatest in the V\_V environment, and all dialects with \*s > h show the sound change in this context, beginning at the phrasal level, and accounting for phonetic variants such as *Servé* vs. *Hervé* in Cerveno. In initial clusters like \*st, \*sp, \*sk, where there is articulatory overlap, and longer sustained constriction, articulatory undershoot is less likely, and \*s is most likely to be maintained. A treatment of \*s > h as lenition implies that [s] is produced with spread vocal folds in languages where this sound change occurred. If the folds are not spread widely, but merely in a “neutral” position, the expected result of articulatory undershoot in a V\_V environment would be a voiced continuant of some sort as, for example, in the intervocalic change of \*s > z > r in Latin. But why would Camuno speakers produce [s] with spread vocal folds, while their ancestors, speaking Latin, produced

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similar sounds with a neutral position of the folds? A suggested answer is that speakers of Camuno and other neighboring Romance languages have been influenced by contact with Germanic languages. As demonstrated by Cresci (2015), Camuno shows clear evidence in its final devoicing patterns of aspiration associated with laryngeal spreading gestures, while other Gallo-Romance languages (e.g. French, Catalán) have been classified as true “voicing” languages (Jansen 2004) and appear to lack these gestures. Additional support for laryngeal spreading gestures in Camuno is found in the study of nasal loss, where, via rhinoglottophilia, aspiration and nasalization are confused (Cresci 2019).

A final question explored in this study is what potential factors might facilitate or inhibit context-free \*s>h sound change in the world’s languages. In a typological survey targeting this change, we have identified two structural properties that hold of all known cases: (i) the language in question does not have contrastive /h/ prior to the change; and (ii) the language does not have consonant clusters. The first property suggests that the absence of contrast between [s] and [h] plays a significant role. The second characteristic supports the view of \*s>h as lenition: although it appears to be context free, in languages without consonant clusters, the canonical context of change (excepting absolute phrase-initial and phrase-final position) will be intervocalic V\_V. Data from Kambera, a language of the Lesser Sundas, is instructive: wordlists from 1872, 1891 & 1909 show the language before, during and after \*s>h, reinforcing V\_V as the phonetic conditioning context for change (Klamer 1998:12-13). Indeed, context-free \*s > h may not exist: either a sound change begins (and ends) as \*s > h/V\_V, or begins as such (as in Cerveno), with \*s > h then spreading to other pre- or post-vocalic contexts, and only at the latest stage (as in the Camuno data in Table 1) to consonant clusters. This view is consistent with some of the best-studied context-sensitive cases of \*s > h. For example, in the transition from proto-Indo-European to Ancient Greek, \*s was generally preserved word-finally, in \*sT clusters where T was an obstruent, and in \*Rs clusters where R was a sonorant, but shifted to /h/ elsewhere. This trajectory distinguishes leniting \*s>h from common coda \*s>h (as in many varieties of Spanish) which begins in pre-consonantal position (Núñez-Méndez 2022), and has been linked to general coordination of gestures in tautosyllabic V-C sequences (Goldstein et al. 2008; Tilsen 2013).

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# Voicing of Plosives in Murcian Spanish: Current state of the production of /d t g k/.

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## Author keywords

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## Abstract

The ‘spirantization’ process of intervocalic voiced stops (e.g., /aba/ > [aβa] ‘bean’, /ada/ > [aða] ‘fairy’) has been largely documented in the languages of the Iberian Peninsula (Simonet et al., 2012, and references therein). Simultaneously, the voicing of intervocalic voiceless stops has also been observed in some Spanish varieties: Andalusia, Toledo, Barcelona, Madrid, Cuba, Panama (e.g., Torreira & Ernestus, 2011). Few studies examined these two stop reduction processes within the same dialect, e.g., Gran Canarian Spanish (Broś et al., 2021), and explained the re-organization of a voicing contrast into a manner contrast by means of linguistic and demographic factors, e.g., rural vs urban origin (Broś et al., 2021).

The present study investigates the current state of plosive production in the Region of Murcia, as only one case study by Martínez-Celdrán (2009) has attested the presence of the two reduction processes, namely spirantization and voicing, in this area. Altogether, the above circumstances make Murcia an ideal place to study: (1) the interaction of these two reduction processes in a single dialect and their consequences in the re-organization of a voicing contrast; and (2) the effect of social factors, such as origin and residence, on the two reduction processes in the speech of Murcia.

Twenty-one speakers from the Region of Murcia produced target words with intervocalic /t k d g/ while describing the illustrations of a story (840 productions=21 speakers\*4 stops\*10 repetitions). They also completed a demographic questionnaire. The 840 productions were manually annotated for consonant closure, burst and aspiration, adjacent vowels, and intervocalic voicing. A Praat script extracted measures of duration, intensity (RMS, Intensity Difference), and energy distribution (spectral tilt). For the statistical analysis we applied mixed-effects regression modeling using individual speaker and lexical items as random factors, duration, intensity, and energy distribution measures as dependent factors, and underlying voicing (voiced, voiceless), age, gender, origin, and residence as fixed factors. Preliminary results suggest that (1) despite the large variation in the degree of /tk/ voicing and /dg/ spirantization, there is no merger between underlying voiced and voiceless stops within a speaker; (2) duration and intensity of the plosives vary among individuals in a way that these cues help distinguish /dg/ and /tk/ avoiding the merger. Final results will illustrate

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the importance of psycho-social factors in the re-organization of the stop class, and their interaction with linguistic and social factors.

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## What a modal superlative is anchored to

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Intuitively, sentences containing a superlative of quality assert that an entity is top ranked along the relevant dimension. For instance, the standard superlative in (1) identifies an entity in a group as the one that uniquely shows the highest degree of the ‘height’ quality, either because i) it directly displays the quality, e.g. being a mountain and comparing the height of mountains in the absolute reading of (1), or ii) it shows a derived quality, e.g. being a mountain climber and ranking climbers using the height of the mountains they climbed in the relative reading of (1). Formal analyses implicitly agree that ultimately one is comparing entities, both for absolute and relative readings. Thus, individuals play the role of ‘single anchor’ in standard superlatives. On the contrary, more discussion is often assumed to be needed as to how the property used in the comparison is constructed and what it contains. In this abstract we pick up the former point, because we are concerned with modal superlatives (2). The issue is whether the single anchoring is the right one. Our proposal is to explore the possibility of using world+individual pairs instead.

(1) She climbed the highest mountain.

(2) Lia era il più serena possibile (Italian) (Lia was the calmest possible)

**Modal superlatives** A wellknown peculiarity distinguishes modal superlatives from standard ones, namely Lia comes out as displaying the highest amount of calm, not as being ‘the’ calmest in (2), which is paraphrased as ‘Lia kept as much calm as possible’ (Larson 2000, Schwarz 2005, Romero 2013, Loccioni 2019). This goes under the name of ‘equative reading’. Lia’s calm is compared to that of individuals  $x'$  who are in possible worlds. A modal base can encode (modal) dimensions (circumstantial, deontic, etc.) and restrict the possible worlds (e.g. the scene takes place in a shop, or employees must comply with a minimum set of rules, etc.). These are dimensions that are ‘independent’ of  $x'$ , who does not necessarily have a counterpart in the real world. However, additional information about  $x'$  and the situation in which it finds itself must be taken into account and cannot be fully expressed in a modal base. We capture the consistency of situations considered across accessible worlds by assuming that the predicative modal superlative presupposes that there is a relation  $Q$  selecting a type of situation to be verified in the worlds. Let us assume that a situation in a world is (merely) a part of this world (Barwise and Perry 1980 and subsequent work), just as an event in a world is a part of the world, implying a temporal dimension.  $Q$  is applied to an individual  $x'$ , an amount  $q'$ , in a world  $w'$ , and describes a situation involving these three components.  $Q$  is a predication extracted from the linguistic material of the sentence, substantiated by the context, plus an attribution of an amount  $q'$  to  $x'$  in the world  $w'$ , namely  $x'$  was  $q'$ -calm in the world  $w'$ , (which is the minimum that  $Q$  is asked to do). Its role is also to describe additional features that constitute the right content of the situation and engage  $x'$  in the world  $w'$  (e.g. there is a certain unpleasant person opposite  $x'$ ).

**Stage-level only** A less discussed peculiarity of modal superlatives is that they only admit a stage-level interpretation of the adjective, cf (2) vs (3), in contrast with standard superlatives, where both interpretations are available, cf (4) and (5).

(3) #Questo bimbo è il più intelligente possibile (Italian) (This child is the most intelligent possible)

(4) Lia era la più arrabbiata (stage-level) (Italian) (Lia was the angriest)

(5) Lia era la più intelligente (individual-level) (Italian) (Lia was the most intelligent)

In the modal superlative in (2), the calmness of individuals  $x'$ , to which Lia’s is compared, is relative to a situation  $Q$ , and the adjective can hardly be interpreted as individual-level. If calmness were individual-level, it could not vary according to the situation and would be independent of it. On the contrary, interpreting the adjective with a similar situation dependence is impossible



in (3), as intelligence is individual-level. Example (3) is difficult to interpret out of context, in the absence of a very specific modal base, which is indicated by the hash sign. The restriction behind the data in (2)–(5) is intuitively clear. We propose to take account of it in formal terms by intervening on the single anchoring strategy with a modification.

**Working out what a predicative modal superlative is anchored to** In modal superlatives, the variables of individual  $x'$  and world  $w'$  are closely connected. First, it is not possible to identify an individual  $x'$  independently of the world  $w'$  that hosts it. Since the individual  $x'$  does not necessarily have a counterpart in the real world, its identification crucially rests on the characterisation of the situation in which it is found in the host world, more precisely on the verification of certain properties of degree and certain properties related to the type of situation, captured by the predicate  $Q$ . Second, an accessible world  $w'$  is determined relative to an individual  $x'$ . One cannot select a world  $w'$  independently of an individual  $x'$  hosted by it. Ultimately, the pair  $(w', x')$  is inseparably determined by applying the predicate  $Q$ . In addition, amounts can be associated neither with given individuals  $x'$  nor with given worlds  $w'$ , but with pairs  $(w', x')$  of individuals and worlds, which are organised in equivalence classes, according to their amount. A world  $w'$  can be in several equivalence classes. The same is true for an individual  $x'$ . In our proposal, the modality based on the accessibility relation does not apply to a complete proposition. It appears to be one of the components of the word *possible* which is understood as a mixed modal operator that conveys both the restriction of accessible possible worlds and the type of situation.

The pairs  $(w', x')$  are collected into a set called  $S$  by going through all individuals  $x'$  and accessible worlds  $w'$  so that  $x'$  is in  $w'$ , and  $x'$  and  $w'$  verify predicate  $Q$  for some amount  $q'$ —possibly also with a presupposition of homogeneity for individuals  $x'$  and the homogeneity of situations via  $Q$ . The definition is in (6). For each pair  $(w', x')$  in  $S$ , there is a unique amount  $q'$  verifying  $Q(w')(x')(q')$ . We say that the amount  $q'$  is associated to  $(w', x')$ , and define an equivalence relation  $\sim$  on  $S$  as in (7). Partitioning  $S$  yields the set  $C$ , made up of all the equivalence classes defined on amounts. Set  $C$  works as the comparison class for the modal superlative. Comparison is done between the equivalence class of  $(w_0, x_1)$  and all the other classes in  $C$ , where  $w_0$  is the real world and  $x_1$  is Lia in (2). Function  $f$  allows us to associate to each equivalence class  $c' \in C$ , the unique amount  $q'$  associated to the elements of the class  $c'$ , written  $f(c')=q'$ .

$$(6) S = \lambda x' \lambda w' [\exists q' [w' \in Acc(w) \wedge Q(w')(x')(q')]]$$

$$(7) (w_1, x_1) \sim (w_2, x_2) \text{ iff } \lambda q' [Q(w_1)(x_1)(q')] = \lambda q' [Q(w_2)(x_2)(q')]$$

Finally, the superlative operator, defined as in (8), is a function that applies to a partition and returns True iff the amount of the class  $c$ , e.g. the class of Lia in (2), is the largest amount among all the cells of the partition. Leaving the semantic type of at least  $C$ ,  $f$  and  $c$  underspecified, enables the operator to work for modal and standard superlatives.

$$(8) \lambda C [\exists q [f(c)=q \wedge \forall c' \in C [f(c') \leq f(c)]]]$$

**A ‘fake’ overt comparison class** The idea that modal superlatives handle pairs  $(w', x')$  and not individuals allows us to deal with another empirical fact, represented by the contrast in (9). The group of individuals to which Lia belongs can be overtly expressed in an ordinary superlative clause (9a), but the sentence is perceived as incoherent when the superlative is a modal one (9b).

- (9) a. Lia è la più calma di tutti (Italian) (Lia is the calmest of all)  
 b. \*Lia è il più calma possibile di tutti (Italian) (Lia is the calmest possible of all)

The contrast is no longer surprising if we observe that a comparison class consisting of individual-world pairs is difficult to express. These pairs are not in the real world, so to speak. It is difficult to characterise the individuals at stake. The only way to (partially) characterise them indirectly is to make explicit the type of situation concerned.

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## What does your accent say about you? An Analysis of Cuban and Peninsular Spanish Varieties

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Individuals have been found to make judgements on a person's personality, income, education, and employment in as little as 30 seconds after listening to their voice (e.g., [1], [2], [3]). However, while this has been extensively studied with varieties in English (e.g., [4], [5], [6]), it has received less attention in Spanish, particularly among highly stigmatized and prestigious varieties, as is the case with the varieties of Spanish spoken in Cuba and Spain respectively. Consequently, this study has two main goals. The first is to investigate the perceptions of Cuban and Peninsular Spanish voices by four groups of individuals with differing levels of exposure and proficiency in Spanish to determine if there is a predominant stigma or notion of prestige attributed to either accent on the basis of perceived personality, income, education, and employment. The listener groups included native Spanish speakers from Cuba (CU) and Spain (SP), in addition to second language (L2) learners with an intermediate to advanced level of proficiency, and monolingual (M) English speakers. The second objective is to compare the ability of these four groups to correctly categorize the Peninsular and Cuban varieties as distinct. Little is known about the latter two groups regarding their categorization rates and perceptions towards distinct varieties ([7], [8], [9]).

The stimuli consisted of a total of 5 Cuban (Havana) and 5 Peninsular (Madrid) voices which were recorded and later rated by 50 adult listeners (i.e., 13 native Cuban speakers, 10 native Peninsular speakers, 13 L2 learners, and 14 monolingual English speakers). The speakers all read the same short prompt adopted from [10] which contained instances where Cuban and Peninsular speakers are known to diverge in terms of pronunciation (e.g., *cocina* [ko'sina] in Cuba and [ko'θina] in most regions of Spain, meaning 'kitchen'). All the speakers were female to control for the variable of gender, were born and living in either Havana, Cuba or Madrid, Spain, and did not speak any additional languages. The methodology for the listeners included the administration of a Bilingual Language Profile (BLP) questionnaire and a survey for evaluating the listeners' perceptions of the voices they heard in terms of personality, income, education, and employment on a scale of 1-5.

Preliminary analysis of the results revealed that listeners make unconscious assumptions about an individual's voice, as the Peninsular variety was often attributed to a higher educational level (62%), income bracket (37%), and was more closely associated with a CEO position in comparison to the Cuban variety for the same measures (40%, 27%, 14%) respectively. The Cuban voices were associated with being more pleasant (average score 3.52 CU, 3.12 SP, 3.64 L2, 4.00 M) and likeable (3.12 CU, 3.08 SP, 3.64 L2, 3.40 M) in comparison to the Peninsular voices in terms of pleasantness (3.32 CU, 2.36 SP, 3.36 L2, 3.32 M) and likeability (2.48 CU, 2.60 SP, 3.36 L2, 3.32 M). Regarding categorization rates, the native Cuban (92%) and Peninsular (70%) listeners outperformed the L2 learners (54%) and monolingual English (14%) speakers in correctly categorizing the voices.

This study offers a novel contribution to the field of accent perceptions through the inclusion of these underrepresented groups, namely, the Cuban and Peninsular Spanish varieties, in addition to

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L2 learners and monolingual English speakers. The results obtained also suggest the existence of broader systemic struggles in the lives of speakers belonging to stigmatized language varieties such as the Cuban variety of Spanish - a topic we recommend for future research.

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## Word- or root-derived? A semantic test for instrument denominal verbs in Italian

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We present a novel semantic test aimed at establishing whether Italian instrument denominal verbs (IDVs), i.e., verbs where the corresponding noun is an instrument in the event expressed by the verb (Adams 1973; Clark & Clark 1979, a. o.), are word- or root-derived.

In spite of the label *denominal*, IDVs are taken to fall into two groups, i.e., those which are derived from nouns and those which are derived from roots (Kiparsky 1982, 1997; Arad 2003, 2005). In the former case, there is a direct derivational relation between V and N. In the latter, there is no derivational relation between V and N, since both are derived from one and the same root (Marantz 2000; Arad 2003, 2005).

In languages like English, IDVs are zero-related to the Ns, that is, no morphology indicates the derivational relation between them: e.g., *tape*<sub>V</sub> – *tape*<sub>N</sub>; *hammer*<sub>V</sub> – *hammer*<sub>N</sub>. Word-derived verbs are distinguished from root-derived ones via semantic cues (Kiparsky 1982, 1997; Arad 2003). The former – but not the latter – entail the existence of the corresponding noun (Arad 2003). Roughly, one cannot *tape* without a *tape* (noun-derived verb) whereas it is possible to *hammer* without a *hammer* (root-derived verb). The contrast between (a) *He hammered the nail with a rock* and (b) *\*She taped the picture to the wall with pushpins* (both from Kiparsky 1982), is taken to be a proof of *tape* being noun-derived and *hammer* being root-derived and, thus, used as a diagnostics to establish whether a verb is noun- or root-derived.

This syntactic test is not uncontroversial (Rimell 2012). First, other factors may contribute to the difference in acceptability between (a) and (b), e.g., unacceptable sentences may result from the choice of an element whose manner of use is too different from the manner of use of the instrument noun (Harley & Haugen 2007). In addition, some unacceptable sentences become acceptable in specific scenarios (Harley & Haugen 2007). Lastly, we claim that since the criterion used for identifying noun- and root-derived verbs is semantic, a semantic test is more appropriate to measure the semantic entailment of existence of the instrument noun.

In order to address this issue, we propose a novel semantic test aimed at distinguishing root-derived verbs from noun-derived ones, focusing on Italian IDVs. As in English, they are zero-related to the instrument noun (Fabrizio 2013), e.g., *martellare* ‘hammer<sub>V</sub>’ – *martello* ‘hammer<sub>N</sub>’; *recintare* ‘fence<sub>V</sub>’, *recinto* ‘fence<sub>N</sub>’.

Through an online questionnaire, we asked 89 participants to name the “top 10 instruments” for 26 IDVs. Participants were instructed to only write instruments that they thought could be used to perform the actions described by the verbs, which were presented in isolation to maximize the semantic factor. For each verb, all the instrument nouns produced by all the participants were considered, with their frequencies. Based on the number of instrument nouns produced by all the participants for each verb, three classes of verbs were identified:

- i. **Noun-derived verbs** (18/26): for these verbs, few instrument nouns were produced by the participants (range: 1-3); for each verb, the base N represents at least the 71% of the total occurrences (range: 71%-100%). Examples of these verbs are: *grattugiare* ‘to grate’, *segare* ‘to saw’, *sciare* ‘to ski’, *martellare* ‘to hammer’, *incatenare* ‘to chain’, etc. The verbs of this class semantically entail the existence of the instrument nouns, which is proved by the fact that all the participants named few instrument nouns and that the base N was produced by all the participants as the first instrument.

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- ii. **Root-derived verbs** (4/26): for these verbs, a higher number of instrument nouns was produced by the participants (range: 6-15), none of which represents more than the 36% of the total occurrences (range: 17%-36%). These verbs are *evidenziare* ‘to highlight’, *profumare* ‘to perfume’, *colorare* ‘to color’, *recintare* ‘to fence’. The verbs of this class are independently derived from a root and do not entail the existence of the incorporated nouns: with these verbs, the apparently incorporated noun was never pronounced as the first instrument and – interestingly – for *recintare* ‘to fence’ and *colorare* ‘to color’, the nouns *recinto* and *colore* were not produced at all.
- iii. **Parasynthetic verbs** (4/26): these verbs, which are both denominal and prefixed, are taken to be noun-derived (Iacobini, 2004; Serrano-Dolader, 2015). These verbs are: *insaponare* ‘to soap’, *sciacquare* ‘to rinse’, *avvelenare* ‘to poison’, *incollare* ‘to glue’. In spite of being noun-derived, these verbs elicited an intermediate number of instrument nouns (range: 5-12). The base nouns were however the most frequently produced for all the verbs. A possible explanation for the behavior of this group of verbs – that do not neatly pattern with either root- or noun-derived verbs – lies in their meaning. As a matter of fact, these verbs are derived from nouns that denote substances, which can be found in different objects: precisely these objects were produced as instrument nouns. For e.g. *poison<sub>v</sub>*, the base noun is *poison<sub>N</sub>*, which can be found within *mushrooms*, *medications*, *food*, and can be administered with a *syringe*. These are all the instrument nouns which were produced for the verb *avvelenare* ‘to poison’.

Through our semantic test, we identified three classes of IDVs in Italian: noun-derived (i), root-derived (ii), and parasynthetic verbs (iii). We claim that our test is more suited than acceptability judgments: first, it directly tests the semantic entailment of existence of the instrument; second, it is less prone to the problems observed for acceptability judgments, as mentioned above; lastly, it can be applied to different languages, allowing researchers to make cross-linguistic comparisons on IDVs and also to extend it to other denominal verbs.

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Here we report and analyze several features of Written Spanish (WS) used by Deaf adults who are native signers of Peruvian Sign Language (LSP, Spanish acronym), and suggest that Deaf Spanish should be recognized as a variety of L2 Spanish.

Social context. LSP is a language indigenous to Peru, created by the Peruvian Deaf community. Its users have been subject to the heavy burden of discrimination and isolation for a long time. They had to adopt some hearing practices to survive in a predominant hearing community; among others, they had adopted literacy practices, like Written Spanish (WS). For older generations, WS has been self-taught, since education was almost nonexistent; in the last 20 years, the situation has improved, not only because Deaf education has been gradually implemented, but because internet expansion has created an opportunity to share written messages more easily, and therefore, WS has become a more longed-for skill. Many young Deaf Peruvians read and write in many social media outposts.

Previous works. As expected, WS by the Deaf exhibits specific properties, which reveal its second language (L2) nature, as it has been observed in several other cases of contact between sign language and written varieties of oral languages (Charrow & Fletcher 1974, Tovar 2000, Fernández & Pertusa 2005, Lissi et al 2001, 2012, Massone et al 2005, 2010, Morales 2015, Pérez 1997, Fernández y Pertusa 2005, Zambrano 2008, Serpa 2012, Guio 2014, Morales 2015, Rusell 2016, Herrera et al. 2016, Ortiz 2018, León 2019,). As for WS in contact with LSP, the only studies are Catalán 2021, describing WS morphosyntactic properties for Deaf school students; and Arnaiz 2021, analyzing patterns of prepositions, articles and verbs in WS in Deaf adults.

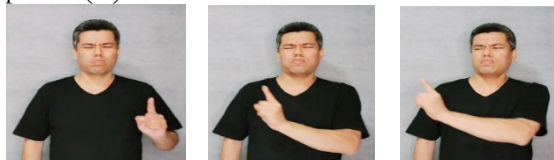
Methodology. For this study, we selected 7 Deaf consultants (20–43 years old; 4F, 3M), High School graduated. In an elicitation task, each of them watched one video with an animated short story (no sound). Also, each consultant was assigned a different video with a second story (animated, no sound). Their task was to watch both videos and narrate each story in LSP, first; then, they had to write down the same stories in Spanish by hand (so they would not use the grammar checker). This produced 14 different stories in WS, which we could compare with its corresponding LSP version.

Results and analysis. These texts show several properties specific to WS-LSP contact, including some ones with LSP structures. As other sign languages, LSP uses depictive verbs (verbs with an incorporated classifier: **CL**)—in the sense of Baker 1988, and Sandler & Lillo-Martin 2006. In (1) a **person-CL** is incorporated inside the WALK verb, which in turn consists in a movement from one side to a previously specified location (IX), i.e., a single sign expresses subject, the verb and the direction, something possible because LSP allows simultaneous morphemes. Since Spanish does not allow it, LSP users adopt a linear incorporation strategy, as we see in (2), where the preposition *hacia* (toward) has incorporated into the verb *camina* (walk), which we interpret as an attempt to create a directional verb in WS. In turn, (3) seems to allow for two verbs to share the same object; its corresponding LSP sentence starts with a handling **CL**, which simulates taking a coin, and continuously, without changing the **CL**, the verb transforms from picking to inserting. We hypothesize that the WS user tries to reproduce this continuity by making two verbs share the same object. In (4) there is a novel verbal structure with the complementizer *que* (that), which can be used in Spanish in a few combinations (*tener que*, *haber que*: “have to”); attempting to integrate into a single unit a sequence of predicates: it must be noted that it does not actually calque any LSP structure, but it constitutes an innovation by the SW user, creatively repurposing Spanish structures.

Conclusions and beyond. We have seen that SW users who have LSP as first language, when prompted to write a text in Spanish, sometimes reproduce LSP directly into their WS, but also produce novel structures, showing the same linguistic creativity than other second language learners. This allows us to suggest that Deaf WS should be included when considered the many varieties that Spanish takes when in contact with other languages, something that is never done, as even a cursory revision of the literature on contact Spanish varieties will show. We will also discuss the implications of this variety for the one-grammar model of acquisition (López 2022), since we believe Deaf WS has the potential to illuminate some theoretical issues with respect to language contact, as well as helping us to envision a more nuanced understanding of the social conditions of communities in contact with Spanish.

(1) ~~LSP: person(d)-WALKS-TOWARD-IX~~

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- (2) El oso gordito esta contento también hacia camina en el puente.  
The bear fatty is happy also TOWARD WALK IN THE BRIDGE  
“The fatty bear is happy; he also walks toward the bridge”
- (3) Toma moneda ingresa a retirar galleta  
Takes coin enters to take out cookie  
“She takes the coin and put it (into the vending machine) to take the cookies out”
- (4) Ellos logran que caminar a cruzar el puente  
They achieve that walk to cross the bridge  
“They manage to cross the bridge walking”

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### “Elsa tiene el pelo largo”. Some remarks on the structure [Tener [DP AP]]

In a large number of works on possession, including the seminal work of Kayne (1993), it is proposed that the verb *tener/have* arises from the structure of the copular verb *ser/to be* plus a D/PP. Uriagereka (2002) proposes that there are two types of structures with *tener/have*, depending on the relationship established between the whole and the part. Thus, the example in (1), adapted from the work cited above, gives rise to the two following readings: first, we interpret that the engine is part of the car (integral reading), while the second gives us an interpretation in which, for example, we can understand that there is an engine in the trunk of the car (but that it is not part of it) (standard reading). Uriagereka proposes that the different interpretations follow from two different structures; in the integral reading my car and an Audi engine are part of a reduced clause; in the case of the standard reading, there is also a minimal clause but it is composed of an Audi engine and a PP in my car.

- (1) Mi coche tiene un motor Audi (My car has an Audi engine).

In a similar vein, Español (1997) proposes that secondary predication contexts with *tener/have* involving a possessum and a possessor also derive from a basic structure formed from the verb *ser* plus a D/PP:

- (2) Elsa es de cara guapa                      → Elsa tiene la cara guapa (‘Elsa has a nice face’)  
Elsa is of face handsome                      Elsa has the face handsome

This author points out that these structures must meet three requirements: a) a relationship of inalienable possession must be established between the possessor and the possessum (similar to Uriagereka’s integral relationship); b) the adjectives involved in these structures must be gradable; and c) in the *be* sentences, the adjectival property must contribute to the possessor having this property. This third condition allows us to establish contrasts such as the following:

- (3) a. Elsa tiene {las piernas / el pelo} largas/o → Elsa es larga {de piernas / \*de pelo}  
Elsa has {the legs / the hair} long                      Elsa is long {of legs / of hair}  
b. Juan tiene {las caderas / la nariz} ancha(s) → Juan es ancho {de caderas / \*de nariz}  
Juan has {the hips/ the nose} long                      Juan is wide {of hips/ of nose}

The object of study of this talk are those secondary predication structures that involve an inalienable relation between the possessor and the possessum but do not give rise to the contrasts pointed out by Español (we will say nothing of other examples in which an inalienable relation of possession is not established, of the type *Ese supermercado tiene los tomates muy baratos* ‘These supermarket has cheap tomatoes’). These are examples such as those in (3):

- (4) a. Elsa tiene el pelo rubio/largo / a’. Marta tiene las uñas duras  
Elsa has the hair blond / long /                      Marta has the nails hard  
b. Elsa tiene el pelo sucio                      / b’. Marta tiene las uñas sucias/largas  
Elsa has the hair dirty                      Marta has the nails dirty / long

To do so, we will follow the work of Gumiel Molina, Moreno-Quibén and Pérez-Jiménez (2015) [henceforth, GMP (2015)] where it is pointed out that in Spanish the distribution of the verbs *ser* and *estar* followed by adjectives is based on different ways of introducing a comparison. These authors propose that gradable adjectives are inserted by a Degree head (*pos*) that introduces a comparison class. When the comparison class is established by comparing the subject with other similar individuals, we have a **between individuals comparison class** (*BIC*) and the copula that surfaces is *ser* (*Su pelo es largo*, ‘her hair is long’); when the class of comparison is established by comparing counterparts of the subject, we have a **within individual comparison class** (*WIC*) and the copula that surfaces is *estar* (*Su pelo está sucio*, ‘Her hair is dirty’).

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Our proposal is that the verb *tener* is a **categorized root** in the lexicon (Embick, 2021) that selects for an external argument but has no internal argument. It combines with a PredP that is an unmarked phrase projected whenever there are no selectional restrictions (see GM and AEP). This PredP introduces the subject DP of the secondary predication and a DegP that determines the comparison class of the predicate:

(5) [<sub>VP</sub> DP  $\sqrt{\text{Tener}}$  [<sub>PredP</sub> DP Pred [<sub>DegP</sub> *pos* AP]]]

This structure helps to explain the following facts:

(a) Only the examples in which a *WIC* is introduced allow a **wide focus interpretation** since there is no contextual standard previously fixed and the introduction of the comparison standard can be considered new information (GMP 2015).

(6) – ¿Qué pasa? / – #Que Elsa tiene el pelo rubio/ Que Elsa tiene el pelo sucio.  
 – What’s up? / – #That Elsa has the hair blond / That Elsa has the hair dirty

(b) Only the second type of DPs, the one that includes a gradable adjective with a *WIC*-based predication, can be **embedded to verbs of the Object-Experiencer-type like *molestar***, ‘to annoy’. The stages introduced by the *WIC*-based predication can be correlated with the psychological event, but this is not the case with the individuals introduced by the *BIC*-based predication.

(7) a. Me incomoda muchísimo el pelo {#rubio / sucio} de Elsa  
 ‘I’m very uncomfortable with Elsa’s {#blond / dirty} hair.’  
 b. Me encanta el pelo {#largo / limpio} de Elsa  
 ‘I love Elsa’s {#long / clean} hair’.

(note that the odd reading is only possible if Elsa is interpreted as having one part of his hair blond and one part of another color or one part of his hair short and one part long)-

(c) Only *tener/have*-sentences in which the secondary predicates are a gradable adjective that introduces a *WIC* allow **the insertion of an adverb between the noun and the adjective**, since only in this case we have stages.

(8) a. ??Elsa tiene el pelo {siempre/ a veces} rubio  
 Elsa has the hair {always / sometimes} blond  
 b. Elsa tiene el pelo {siempre / a veces} sucio.  
 Elsa has the hair {always / sometimes} dirty

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