

Processing and empty categories in Brazilian Portuguese

Douglas C. Merchant (San Diego State University & UCLA) and
Timothy Gupton (University of Georgia)

We test the predictions of the Movement Theory of Control (MTC, e.g. Hornstein, 1999; Boeckx & Hornstein, 2006) experimentally in order to better understand the online processing of control, raising, and other similar structures as well as the empty categories that form part of their associated accounts. According to the MTC, the coindexed empty categories (*EC*) in apparent control phenomena (1, 2 from Modesto, 2007) should be analyzed as the product of movement and not as *PRO* (as in e.g. Chomsky, 1981; Landau, 2000). Notably, Brazilian Portuguese (BP) allows for agreement in object control (2). The MTC predicts that control should behave in a manner consistent with movement traces/copies in generative grammar. Modesto (2010, 2018) observes an asymmetry between exhaustive control (3) and partial control (4) in BP according to matrix predicate type (Landau 2000). The former requires strict identity with the controlling DP (*O presidente*), while the latter must include the controller. This is unexpected according to the MTC, given that a trace/copy should not be able to alter its identity (i.e. from singular to plural) during the derivation.

Experimental evidence for ECs is based on the assumption that they are covert elements analogous to overt pronouns. Cross-modal lexical priming (CMLP) studies, in which sentence primes and semantically-related probe words are presented in different modalities (audio primes and visual probes), have demonstrated that overt anaphors reactivate their antecedents (e.g., Nicol, 1988; Nicol & Swinney, 1989); and that at least some ECs do as well (e.g., Swinney, Ford, & Bresnan, 1989). Converging evidence for this comes from repetition priming studies, in which part of the antecedent phrase serves as a probe (e.g., Bever & McElree, 1988); such studies have found reactivation in raising contexts as well. Under the MTC, control is analyzed as movement analogous to raising; we would therefore expect a similar pattern of activation in raising and control sentences.

In the current study, we employ a cross-modal repetition priming (CMRP) paradigm, similar to the CMLP paradigm, but with the probe being taken directly from the antecedent phrase, in order to examine the timecourse of processing of phonologically overt pronouns/anaphora and theoretically-predicted ECs in BP, with a particular interest in whether ECs reactivate their antecedents at the predicted gap positions. Native speakers ($n=52$) of BP participated in a three-part procedure (CMRP, bimodal acceptability judgment, linguistic history/handedness questionnaire). In the CMRP, we measured reactivation at three testpoints: 1) following the matrix predicate, 2) at the predicted gap position, and 3) at the end of the sentence (short [S], medium [M], or long [L] latency, respectively) as in (5). We report reaction time results for raising, overt anaphor, partial control, and exhaustive control sentences at the three different latency intervals.

Table 1 shows evidence of similar reactivation in sentence-medial position (i.e. at the [M] gap) in raising sentences and in those with overt pronouns, thus supporting the standard account of movement in raising constructions, where a trace/copy of the raised element reactivates it in the gap position. No such reactivation was found for exhaustive control sentences in the [M] gap; response times were significantly slower in these sentences than in raising sentences and in those with overt pronouns ($p=0.045$ in both instances). We found an unexpected asymmetry in processing of exhaustive and partial control, and limited evidence for sentence-final reactivation in exhaustive control sentences. We suspect this is due to the parser positing the EC *PRO* not in the predicted gap position prior to the embedded infinitive, but in a theta-position following the infinitive (as in Larsen & Johansson, 2020). Notwithstanding, accuracy greatly decreased at the [L] position, suggesting that the EC (i.e. *PRO*) does not fully reactivate its antecedent phrase. This differentiation suggests that 1) the parser makes active use of empty categories in comprehension, *contra* traceless accounts (e.g.

Pickering and Barry, 1991), and 2) different linguistic mechanisms are involved in the processing of raising and control structures, a finding presumably inconsistent with the MTC.

Examples

- (1) Os meninos_j querem (EC_j) nadar(*em).
the boys want.PRS.3pl swim.INF(3pl)
'The boys want to swim'
- (2) Eu_j convenci os meninos_k a ($EC_{*j/k}$) tomar(em) banho.
I convince.PST.1sg the boys to take.INF(3pl) bath.
'I convinced the boys to take a bath.'
- (3) *O presidente_j conseguiu [EC_{j+k}] se reunirem às 6
the president achieve.PST.3sg SE meet.INF.3pl at.the six
intended: 'The president managed for them to meet at 6.'
- (4) O presidente_j preferia [EC_{j+k}] se reunirem às 6.
the president prefer.IMPFV.3sg SE meet.INF.3pl at.the six
'The president preferred for them to meet at 6.'
- (5) Matrix-clause raising predicate (Target probe: *recolhidos*; non-target probe: *falsos*)
Os dados recolhidos resultaram [S] surpreendentemente [M] ser muito problemáticos
para as hipóteses existentes [L]
'The data gathered turned out [S] surprisingly [M] to be very problematic for current hypotheses [L]'

Tables

Table 1. Reaction time (in ms) by prime type and probe latency

| Prime Type | Short | Medium | Long |
|-------------------------|-------|--------|-------|
| Distractor | 682.8 | 734.6 | 674.2 |
| Exhaustive control | 641.6 | 759.8 | 603.8 |
| Non-anaphor | 660.2 | 657.9 | 682.1 |
| Overt anaphor (pronoun) | 675.5 | 634.9 | 635.8 |
| Partial control | 628.0 | 626.6 | 705.5 |
| Raising | 682.7 | 637.1 | 654.8 |

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Microvariation in the resolution of pronominal subjects in Romance: European Portuguese vs. Italian

Ana Madeira*, Alexandra Fiéis* and Joana Teixeira**

* NOVA FCSH / CLUNL

** Universidade do Porto / CLUNL

It is generally assumed that, in null subject Romance languages (NSRLs), null subjects are associated with topic continuity, retrieving subject antecedents, whereas overt pronominal subjects tend to occur in topic shift contexts and retrieve non-subject antecedents in complex sentences (e.g., Carminati, 2002; Alonso-Ovalle et al., 2002). However, recent studies have found differences across NSRLs, particularly in the resolution of overt pronouns (e.g., Filiaci, 2010; Filiaci, Sorace & Carreiras, 2013; Torregrossa, Andreou & Bongartz, 2020). Preferences in overt pronoun resolution also seem to vary intralinguistically depending on the animacy of the antecedent (Cardinaletti & Starke, 1999; Morgado et al, 2018), but this factor is still not well understood, since studies on anaphora resolution have as a rule considered only contexts in which all potential antecedents are animate. Therefore, further research is necessary to understand the role of animacy in overt pronoun resolution. Further crosslinguistic studies comparing NSRLs (including languages that have not been considered in previous work like European Portuguese (EP)) are also needed.

Given the current state of the art, the present study investigates the resolution of overt and null pronominal subjects in EP and Italian, considering intrasentential contexts with the order Matrix – Subordinate and controlling for the animacy of the object antecedent. Sixty adults participated in the study: 30 native speakers of EP and 30 of Italian. Each language group was administered two multiple choice tasks (speeded and untimed) in their L1 to elicit interpretation preferences. A speeded task was used to obtain participant's immediate interpretation of the sentences, unaffected by metalinguistic knowledge and deliberate reasoning. The tasks had a 2x2 design, crossing the following variables: animacy of the matrix object (animate vs. inanimate) and type of pronominal embedded subject (overt vs. null) (6 items * 4 conditions + 24 fillers). The items and the fillers were the same in the tasks used with the two groups; only the language varied. The response options were subject antecedent, object antecedent or neither (cf. appendix). As the option *neither* accounts for only 0% to 9% of the responses in each task, the results concerning this option will not be reported below. Statistical analysis was conducted using linear mixed-effects models with random effects for participants and items.

Participants' responses clearly show that null subjects in EP retrieve antecedents in subject position (S vs. O: all $ps \leq .00127$), while overt pronouns recover object antecedents (S vs. O: all $ps < .001$), regardless of animacy and the type of task. However, response times suggest that there is an animacy effect in overt subject resolution, as times are significantly higher in the inanimate condition than in the animate ($p = .01676796$). This may be evidence of a conflict between the bias of the overt pronoun towards non-subject antecedents and a bias towards animate antecedents.

In Italian, anaphora resolution preferences are like those in EP only in the case of overt subjects and when all potential antecedents are animate: in this condition, the overt subject tends to be assigned to the object antecedent in both the untimed and speeded tasks (S vs. O: all $ps < .001$). However, unlike what happens in EP, the overt subject tends to recover the antecedent in subject position in both tasks when the object is inanimate (S vs. O: all $ps < .001$). Italian also differs from EP in the interpretation of null subjects: overall there is no consistent preference in Italian for either a subject or an object antecedent. In the animate condition, speakers exhibit optionality in the untimed task ($p = .216$) and a slight preference for the object in the speeded one ($p = .036$). In the inanimate condition, they display a slight preference for

the object antecedent in the untimed task ($p = .0133$) and optionality in the speeded one ($p = .599$).

Our results indicate that there is microvariation in the resolution of pronominal subjects in EP and Italian. These NSRLs vary with respect to the weight attributed to the position and the animacy of the antecedent. In EP, position is a more relevant factor than animacy, whereas, in Italian, animacy is the preponderant factor. In the spirit of Filiaci's et al. (2013) account of the differences between Italian and Spanish in overt subject resolution (with animate antecedents), we argue that the differences between EP and Italian may be a consequence of the fact that these languages have different pronominal systems. Italian has a tripartite pronominal system, with null pronouns and two types of overt subject pronouns, strong and weak. As a result, its strong pronoun can be semantically more specialized, bearing a [+animate] feature, which explains its strong preference for animate antecedents. The null pronoun, on the other hand, is underspecified for animacy, which, together with Italian's lower sensitivity to the position of the antecedent, may explain the lack of a clear preference in antecedent assignment in our study. Unlike Italian, EP has a bipartite pronominal system, with strong and null pronouns, which leads to less semantic specialization. In this language, both pronouns are underspecified for animacy. This underspecification results in greater permeability to discourse effects: null pronouns are associated with topic continuity and overt subject pronouns with topic shift. The fact that Italian specifies some overt pronouns for animacy (see also Cappellaro, 2017) may account for its lower overall permeability to discourse effects in anaphora resolution.

Appendix

Example of test item: Overt subject+ animate object

O porteiro viu o professor quando ele caiu das escadas.
The doorman saw the teacher when he fell from the stairs.
_____ *caiu das escadas.*
_____ fell from the stairs.

[Note: in the timed task, the sentence was presented word by word at a rate of 450 ms per word, and the question appeared after the final word. Response time was recorded]

o porteiro, o professor, nem o porteiro nem o professor (options presented randomly)
the doorman, the teacher.M.SG, neither the doorman nor the teacher

| | Null subject | Overt subjects |
|-------------------------|---|--|
| Animate object | O porteiro viu o professor quando [-] caiu das escadas. Il portiere ha visto l'insegnante quando [-] è caduto dalle scale. The doorman saw the teacher when [-] fell from the stairs. | O porteiro viu o professor quando ele caiu das escadas. Il portiere ha visto l'insegnante quando lui è caduto dalle scale. The doorman saw the teacher when he fell from the stairs. |
| Inanimate object | O menino viu o brinquedo quando [-] caiu da cadeira. Il bambino ha visto il giocattolo quando [-] è caduto dalla sedia. The boy saw the toy when [-] fell from the chair. | O menino viu o brinquedo quando ele caiu da cadeira. Il bambino ha visto il giocattolo quando lui è caduto dalla sedia. The boy saw the toy when he/it fell from the chair. |

Table 1. Sample test sentences in EP and in Italian per condition

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Dative experiencers and (null) subjects in Spanish infinitives: How similar are they?

Peter Herbeck (Bergische Universität Wuppertal & Universität Wien)

Introduction: The status of dative experiencers as having subject properties has been much discussed in the literature (cf. Masullo 1992, Fernández Soriano 1999, Cuervo 2017, 2020, Fábregas et al. 2017, among others). However, one feature distinguishing datives from structural subjects is that the former cannot be obligatorily controlled (OC; (1)), but OC must be established with the structural (null) subject of the embedded non-finite psych-verb:

- (1) *Espero __ gustarme María. (Fábregas et al. 2017:41)
(I)-hope like-INF-me.DAT María

However, in adjunct infinitives, dative experiencers have apparent similarities with null subjects (compare the corpus example in (2) with the constructed example in (3)):

- (2) “[...]” dijo Amenábar, un “agnóstico”, **quien_i** no hizo esta película
said Amenábar an agnostic who not made this movie
por interesarle_i en particular el tema de la eutanasia. (CORPES XXI)
for interest.INF-him.DAT particularly the topic of the euthanasia

- (3) [...] **quien_i** no hizo esta película por Ø_i interesarse por el tema de la [...]
who not made this movie for interest.INF-REFL for the topic of the

In this paper, we present a corpus study of adjunct infinitives containing psychological predicates in Spanish. We argue that dative experiencers can enter configurations of logophoric or topic ‘control’ (in the sense of Landau 2019), similarly to null subjects. This possibility depends (i) on the degree of ‘(non-)integration’ (Haegeman 2012) of adjunct infinitives and (ii) the licensing of *pro*_{expletive} and [+R(eferential)] subjects in Spanish adjunct infinitives.

Data and coding: We extracted sentences containing a preposition, followed by a non-finite verb (*gustar*, *interesar*, *importar*, *molestar*, *preocupar*, *apetecer*) with a dative experiencer from the subcorpus “Spain” of CORPES XXI. We manually classified the infinitives with respect to their (co-)reference properties. The coded variables are: (i) verb, (ii) preposition, (iii) overt/null subject and strong/weak experiencer, and (iv) locality of the antecedent. 269 adjunct infinitives have undergone a detail analysis. **General descriptive results:**

| | dative | | | subject | | | |
|-----------------|----------------|--------------------|---------------|----------------|--------------------|-------|------------------|
| | weak_ local | weak_ non-local | strong/ DP | null_ local | null_ non-local | overt | expletive +CP |
| other psych-V | 27 | 8 | 4 | 25 | 3 | 10 | 1 |
| <i>importar</i> | 225 | 5 | 0 | 3 | 0 | 121 | 106 |
| TOTAL | 252 | 13 | 4 | 28 | 3 | 131 | 107 |

The most frequent psych-verb in adjunct infinitives is *importar* (almost always with *sin* ‘without’). With this verb, 225/230 dative experiencers have a c-commanding antecedent in the matrix clause (=98%), which indicates a strong preference for local referential dependencies, making them similar to null subjects in other Spanish adjunct infinitives. With *importar*, the structural subject has a strong preference for being realized as an overt DP or as a null expletive associated with a CP (together 227/230 = 99%), which makes subjects with *importar* different from (null) subjects in other Spanish infinitives. Other psych-verbs show more variation, but local referential dependencies of dative clitics are also highly preferred with these verbs.

Discussion: The similarity between dative experiencers and null subjects in certain adjunct NOC contexts receives further support when sentences are considered in detail. Thus, adjuncts with a locally identified dative experiencer can be coordinated with adjuncts with a null subject:

- (4) “[...]” Ø_i había dicho, **sin importar_i**, **ni** Ø_i **sospechar** de las lucubraciones [...]
had.3SG said without matter-him.DAT nor suspect.INF of the lucubrations
- (5) “[...]” añadió_i **sin** Ø_i **bajar** el tono y **sin importar_i** los que [...]
added.3SG without lower.INF the tone and without matter-him.DAT those who
- (ex. (4) and (5) from CORPES XXI, RAE)

Furthermore, even though Jaeggli & Safir (1989) argue that PRO cannot be a null expletive, similar structures *are* frequent with psychological predicates in adjunct infinitives:

- (6) *Es posible agraderle que María esté enferma. (Jaeggli & Safir 1989:19)
 is possible like.INF-him.DAT that Mary is sick
- (7) Ambos permanecían sentados al fogón, cruzando unas pocas palabras,
 both remained sitting at-the stove interchanging a few words
sin importarles que ahí hubiera un extraño (CORPES XXI, RAE)
 without matter.INF-them.DAT that there was a stranger

This indicates that the null subject of Spanish adjunct infinitives can be *pro* (Rigau 1995, Torrego 1998, Hernanz 1999). However, not all adjunct infinitives sanction apparent ‘control’ of dative experiencers. With *para*-infinitives, OC of the structural null subject obligatorily arises when there is an intentional relation between the matrix Agent and the adjunct infinitive (see (8)). However, when the *para*-infinitive adopts a concessive meaning, overt realization of the structural subject and, at the same time, local identification of the dative experiencer becomes a preference (see (9)):

- (8) **Elige_i** con detalle la lencería, el perfume, la ropa, la barra de labios
 chooses with detail the lingerie the perfume the clothes the lipstick
para Ø_i gustarle_x a él, para Ø_i enamorarle, [...]. (CORPES XXI, RAE)
 for please.INF-him.DAT to him for make.fall.in.love.INF-him
- (9) pues **para no gustarle_i la medicina** como me dijo al principio/
 well for not like.INF-him.DAT the medicine as me told at-the beginning
Ø_i sabe muchísimas cosas (CORPES XXI, RAE)
 (he) knows many things

We argue that this is due to the non-integrated status of concessive *para*-infinitives in Spanish. **Towards an analysis:** Following Landau (2000), OC is not a direct relation between two nominal expressions, but it is a relation that is mediated by a functional head (= anaphoric AGR; Borer 1989). The embedded nonfinite T *agrees* with PRO and a matrix antecedent:

- (10) María_i promete [_{FinP} [_{TP} PRO_i T_[φ:self]-gustarle_j toda la vida]]

Agree between T and PRO blocks OC of the dative clitic. Adjunct infinitives, apart from OC via predication, sanction logophoric and topic control (Landau 2019). Apparently controlled experiencer clitics arise if the adjunct is not within the matrix VP (as in (8)), but it appears in a peripheral position (as in (9)). From this position, *Agree* between T/PRO and a matrix antecedent is impossible, the only option being identification to a (discourse) antecedent via logophoric or topic coordinates in C. If the structural subject is expletive *pro* in Spec,TP or a [+R] subject in Spec,VP, the experiencer is the closest *legitimate* Goal for being bound by logophoric or topic coordinates in Fin/C, yielding the illusion of ‘control’:

- (11) [_{PP} Para [_{TopP} **Top** [_{FinP} **Log** [_{NegP} no [_{TP} T_{[φ:def]/[NOM]}-gustar [_{AppIP} **le** [_{VP} **la medicina**...

The data give further support to the hypothesis that dative experiencers have certain subject properties, but that these do not arise through association with T, but by means of the configuration in which they are embedded (see Cuervo 2020). In some peripheral adjunct infinitives, T+NOM licenses (expletive) *pro* and [+R] subjects *in situ*, which makes a dependency between the dat-Exp in AppIP and Log in Fin or Top possible.

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PREDICATION WITHIN PREDICATION: A CASE STUDY IN ITALIAN SYNTAX
Davide Mocci (Scuola Universitaria Superiore IUSS Pavia)

§1. The problem. (1) and (2) are very similar on the surface. However, the *di*-phrase can be fronted in (1) but not in (2), as illustrated by the contrast between (3) and (4). We shall provide a unified treatment of (1) and (2) which reduces this contrast to a minimal difference between (1) and (2).

- (1) Caterina è ampia di vedute. (2) Caterina è una perla di ragazza.
 Caterina.F.SG is broad.F.SG of view.F.PL Caterina.F.SG is INDF.ART pearl.F.SG of girl.F.SG
 ‘Caterina’s views are broad’ ‘Caterina is a pearl of a girl’.
- (3) Di vedute, Caterina è ampia. (4) *Di ragazza, Caterina è una perla

§2. Literature review. Here we abstract away from the inalienability requirement which is operative in (1) (see Español-Echevarría 1997:225-226 and Sioni 2002:167-169, 175), and rather concentrate on the contrast between (3) and (4). Español-Echevarría (1997:221-222) explicitly discusses the ungrammaticality of the Spanish counterpart to (3). In accordance with his account, *di vedute* starts out as the complement of *ampia* in (1), but as a clitic left dislocated phrase in (3). Following Cinque (1990), he claims that clitic left dislocated phrases are base-generated in the left periphery: accordingly, (3) is grammatical because it involves trivial base-generation of *di vedute* in the left-periphery of a matrix sentence; the absence of an overt clitic that doubles *di vedute* in (3) would be due to the unavailability of this clitic in languages such as Spanish and Italian.

Consider next (2). According to Kayne (1994:106) (cf. also Dikken 1998, Moro 2000:49-61), *una perla di ragazza* should be analyzed as a DP/PP headed by *di*, as in (5). Under this analysis, the impossibility to front *di ragazza* in (4) follows from the Maximality Principle, which states that only maximal projections can be moved (Rizzi 2016:116): since *di ragazza* is an intermediate projection (i.e., D/P') in (5), it is inert to movement.

- (5) una [DP/PP [NP perla]_i [D/P' di [I° [NP ragazza I° t_i ...

The analyses by Español-Echevarría and Kayne assign completely different structures to (1)/(3) and (2)/(4): this makes it impossible to provide a unified treatment of the ungrammaticality of (4) vis-à-vis the grammaticality of (3). In what follows we search for such a unified treatment.

§3. Proposal. A subject-predicate link is understood to hold between *una perla* and *ragazza* in *una perla di ragazza* of (2). *una perla* is the predicate that selects the subject-of-predication *ragazza*, in the sense of Chomsky (1986:86-87), Moro (1997:115): to wit, *una perla* specifies that *ragazza* has the properties typically associated with pearls. Since every subject-predicate link is codified in syntax by a small clause (Moro 2019:4), (2) should be derived as in (6), with the predicate *una perla* raising to the Spec of a silent linker L° (slightly modifying Kayne’s analysis, reported in (5)). We deal with the status of *di* below.

- (6) [LP [NP una perla]_i [L' L° [SC [NP ragazza]] t_i]].

When the whole structure (6) combines with *Caterina* to form (2), a new small clause is obtained in which (6) is the predicate and *Caterina* the subject-of-predication. By letting again the subject-predicate link be codified by a small clause, we obtain (7).

- (7) [SC₂ Caterina è [LP [NP una perla]_i [L' L° [SC₁ [NP ragazza]] t_i]]]].

Note that *ragazza* behaves as a predicative expression with respect to *Caterina* in (2)/(7), i.e., *ragazza* does not refer to a specific girl, but rather ascribes the properties typically associated with girls to the entity referred to by *Caterina* (see Geach 1987:9-10, Moro 2017:49-52, 164). That is, *ragazza* and *Caterina* do not contribute two distinct participants to the eventuality denoted by (2)/(7): this eventuality involves one single participant, named *Caterina*, which has the properties typically associated with girls and with pearls.

Let us now return to (1). In this sentence *ampia* specifies that *Caterina*’s views have the property of being broad. Thus, *ampia* is a small clause predicate that selects the subject *vedute* (see SC₁ in

(8)). Next, the complex predicate *ampia di vedute* is formed by moving *ampia* to Spec-LP. Finally, this complex predicate is predicated of *Caterina*, thereby forming a new small clause SC₂:

(8) [_{SC2} Caterina è [_{LP} [_{AP} ampia]_i [_{L'} L° [_{SC1} [_{NP} vedute]] t_i]]]].

Here *vedute* does not behave as a predicative expression with respect to *Caterina*: *vedute* does not ascribe the properties typically associated with views to *Caterina*. Accordingly, *vedute* is a referential expression with respect to *Caterina* (i.e., the contrary of a predicative expression).

We have thus found a difference between (1)/(7), and (2)/(8): the same predicate is predicated of two distinct referential expressions in (8) (i.e., *ampia* is predicated of *Caterina* and *vedute*), but of one single referential expression in (7) (i.e., *una perla* is predicated of *Caterina*, *ragazza* being a predicative expression with respect to *Caterina*). Another construction exists in which the same predicate is predicated of two distinct referential expressions: i.e., passive constructions. In passive constructions the VP predicate is predicated of the external argument (e.g., *John* in (9)) at the initial stage of the derivation (i.e., within SC₁, as shown in (9a)), but is predicated of the internal argument (*Mary*) at a later stage of the derivation (i.e., within SC₂, as shown in (9b)).

(9a) [_{SC1} [_{NP} John] [_{VP} kisses Mary]] > (9b) [_{SC2} [_{Mary}]_i [_{SC1} [_{NP} John] [_{VP} is kissed t_i]]] >
> (9c) [_{SC2} Mary_i [_{SC1} [_{VP} [_{VP} is kissed t_i] [_{VP} by John]]]]].

Both *John* and *Mary* qualify as referential expressions with respect to one another in (9), so that the VP predicate results as being predicated of two different referential expressions. Crucially, *John* (i.e., the referential expression of which the VP predicate was predicated within SC₁) is demoted to the role of adjunct and takes on oblique Case once the VP predicate is predicated of *Mary* within SC₂. Whatever the ultimate reason for this demotion (see Manzini 2017:239 for some suggestion), we may simply extend it to (1)/(8): after *ampia* is predicated of *Caterina* in SC₂, *vedute* (i.e., the referential expression of which *ampia* was predicated at the initial stage of the derivation, within SC₁) is demoted to an adjunct position and takes on oblique Case, spelled out as *di*. That *di vedute* is an adjunct in (1)/(8) is confirmed by the fact that it cannot undergo *ne*-extraction: **Caterina ne è ampia*. Indeed, extraction out of adjuncts violates Subjacency (Cinque 1990:40-43; cf. Español-Echevarría 1997:220 for an alternative explanation).

If *di vedute* is an adjunct in (1), then its fronting becomes trivially possible as an instance of adjunct movement in matrix sentences: whence the grammaticality of (3). Why is then (4) ungrammatical? Indeed, the condition necessary for triggering the demotion of *ragazza* to an adjunct position is not met in (2)/(7): the predicate *una perla* is not predicated of two distinct referential expressions here. This means that *ragazza* remains in the subject position of SC₁ in (2)/(7). Movement of the small clause subject is disallowed unless this subject triggers agreement on a local head (Moro 1997:45-46): no such agreement is triggered by *ragazza* in (4), hence (3) is ungrammatical.

Finally, what purpose does *di* serve in (2)? *ragazza* occupies the subject position of SC₁ in (2) (see (7)). In this position *ragazza* cannot copy the nominative Case of the phrase in Spec-TP (i.e., *Caterina*), because *ragazza* is too deeply embedded within LP: *una perla* intervenes between Spec-TP and *ragazza*. Thus nominative alignment is unavailable for *ragazza* in (2)/(7). Following Manzini (2017:239), we assume that when nominative alignment is unavailable, the phrase in subject position is marked oblique. Oblique Case is realized as *di* in (2) on a par with (1).

§4. Conclusion. We have proposed a unified derivation of (1) and (2). The core idea is that (1) and (2) differ in one minimal respect: the *di*-phrase is a referential expression with respect to *Caterina* in (1) but not in (2). The contrast between (3) and (4) follows from the interaction of this single factor with the theory of locality. Botwinik 2008, in Armon-Lotem et al., eds. Chomsky 1986 *Knowledge of Language*. Cinque 1990 *Types of A-dependencies* Español-Echevarría 1997 *Lingua* 101. Dikken 1998, in Alexiadou & Wilder, eds. Geach 1987 *Philosophy* 62. Kayne 1994 *The antisymmetry of syntax*. Manzini 2017, in LaCara et al., eds. Moro 1997 *The Raising of Predicates*. Moro 2000 *Dynamic Antisymmetry*. Moro 2017 *A Brief History of the Verb To Be*. Moro 2019 *Phil Trans R Soc B* 375(1791). Rizzi 2016 *The Linguistic Review* 33(1). Siloni 2002, in Ouhalla & Shlonsky, eds.

***Mica*-preposing as focus fronting: an asymmetric puzzle**

Giuseppe Magistro – Ghent University
giuseppe.magistro@ugent.be

Italian and similar Italo-Romance varieties can deploy the pragmatic reinforcer *mica* to reject a presupposition or old-activated information together with its clause-mate negator *non* (1). For this reason *mica* has often been dubbed a presuppositional negator (Cinque 1976, Zanuttini 1997). Notably, *mica* can also surface at the beginning of the sentence (2), apparently yielding the same pragmatic import. In this paper we aim at addressing such positional alternation, trying to extract the pragmatic environments and syntactic distribution of *mica*.

(1) *Non ho mica passato l'esame*

(2) *Mica ho passato l'esame*

'In any case I didn't pass the exam after all'

Based on an acceptability rating experiment, which was run online using Psyt toolkit (Stoet 2017), with 56 speakers across Italy, we found significant differences ($p < .05$) regarding the informational status and the licensing of *mica* in different positions. First, both structures in (3b) were found to be completely acceptable (Median = 7): in this case, the proposition under the scope of negation was explicitly mentioned in the previous turn. Second, when the proposition in the scope of negation is not explicitly mentioned or presupposed previously, the initial position of *mica* is found to be less acceptable.

(3) a) *Dai, festeggiamo, hai passato l'esame!*

b) *Non ho mica passato l'esame / Mica ho passato l'esame*

a) 'Let's celebrate! You have passed the exam!' b) 'But I didn't pass the exam after all'.

(4) a) *Cos'è successo?*

b) *Non ho mica passato l'esame* (M = 5) / b) **Mica ho passato l'esame* (M=3)

a) 'What happened?' 'I haven't passed the exam the exam after all'

In particular, it seems that the bipartite structure in (4b) is acceptable even though the denied proposition is not mentioned explicitly, though it is at least inferable. In contrast, clause-initial *mica* cannot appear in out-of-the-blue contexts nor engender the presupposition that the proposition was already under discussion. Such behaviour may pose problems for syntactic theory regarding the nature of the two possible positions of *mica* and its incompatibility withthetic sentences. Pescarini and Penello (2008) already noted some differences in terms of the position of *mica* and scalar adverbials, and proposed the presence of an exclamative operator that forces an interpretation with the denial of an extreme of the scale. We aim to put forth a broader syntactic model which encompasses the general mechanism of *mica*-preposing (Poletto 2020) under an informational perspective.¹ In order to shed light on this phenomenon, we parallel it to Focus Fronting (FF), as analysed by Cruschina (2021). He argues that focused constituents can move to left-peripheral positions only under a certain type of focus. In brief, he defines a gradient taxonomy of focus (information, exhaustive, mirative, and corrective focus), ranked by the operations applied to the focal alternatives. For example, the expression of corrective focus is the result of a conventionalization of a corrective implicature where one explicit alternative proposition is incompatible with the proposition expressed in the corrective reply (Bianchi, Bocci, Cruschina 2015). Vice versa, in information focus the set of alternatives

¹ It has already been noted in the literature and in the experiment that the preposed *mica* is preferred by southern speakers over the bipartite structure. We leave aside such preference for future research, as both constructions are accepted in the experiment regardless of diatopic factors.

is still open and has smaller contrastive potential. Cruschina shows that Romance languages vary in their sensitivity to the type of conventionalized implicatures (and in particular the operations of focus on alternatives), and the distinct parametrization of such sensitivity accounts for licensing different syntactic operations such as movement. For example, Italian allows FF only with mirative and corrective focus, not with the information one (5 vs 6) (as opposed to, say, Spanish).

- (5) a) *Chi hanno invitato alla festa?*
 b) **Marina hanno invitato / Hanno invitato Marina*
 ‘Who did they invite at the party?’ ‘They invited Marina’
- (6) a) *Hanno invitato Elena alla festa?*
 b) *Marina hanno invitato! / Hanno invitato Marina!*
 ‘Did they invite Elena at the party?’ ‘They invited Marina’.

We argue that Italian *mica* can move because of the same sensitivity to corrective focus. When a certain proposition (p) is uttered by a speaker, a closed set of alternative propositions $\{p, \neg p\}$ is contextually triggered. In the corrective reply, *mica* marks that p is incompatible with the corrective $\neg p$, as an effect of the conventionalization of corrective focus in the negator. Such contrastive potential allows *mica* either to surface in its *in situ* position or to undergo FF (3b). On the other hand, in (4), speaker A does not open any closed set and the rejection of p is more related to speakers’ expectation than to specific discourse-linked alternatives encoded in corrective focus. As a result, the type of focus is not contrastive and *mica* cannot move to the left-peripheral slot in Italian.

The difference in the two types of implicature is modelled syntactically in Bianchi, Bocci, Cruschina (2015) through the presence or absence of a feature [*corr*] specified in the head of a Focus-Associated Implicatures (FAI) projection. This head is held responsible for the activation of a lower FocusP, triggering the optional movement. Hence, we propose an analogous structure, where *mica* is licensed by a FAI head, if the corrective implicature is indeed encoded in the head of FAI, the latter will also activate a possible landing site FocP for *mica*.

- (7) [ForceP ... [FaiP FAI⁰[*corr*] [FocP mica_i [+foc] Foc⁰[+foc]... [TP ... ~~mica~~ ...]]]]

Interestingly, this results in a series of derivational effects. First, fronted *mica* is completely unacceptable with other focalized constituents (8a), unless it is part of another whole focalized constituent (8b), where a narrow corrective interpretation is forced. Another effect is the ban on *mica* with restrictive relative clauses (9) and conditionals (10) documented by Cinque (1976). It is known that such types of subordinate clause lack main clause phenomena because of intervention effects (Haegeman 2010): if this assumption holds, then the FAI projection may not be available, prohibiting the licensing of any *mica*.

- (8a) **MARINA MICA hanno invitato*
- (8b) *MICA MARINA hanno invitato (ma Elena) (M=5)*
- (9) **Quella è la ragazza che non vuole mica essere invitata a ballare* (Cinque 1976)
 ‘That is the girl who does not want to be invited to dance’
- (10) **Me ne vado, se non arriva mica fra cinque minuti* (Cinque 1976)
 ‘I will leave, if he doesn’t come in five minutes’

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FRENCH IS NOT SO DIFFERENT AFTER ALL: ON THE DISTRIBUTION OF VS IN DECLARATIVE MAIN CLAUSES

Karen Lahousse (KU Leuven)

INTRO. Studies on word order in Romance generally start from an Italian and Spanish perspective and then oppose ‘outlier’ French to these languages, assuming more or less explicitly that French syntax is fundamentally different. This of course is reminiscent of the pro-drop parameter, which established a relation between the presence/absence of null subjects and free inversion in a language, but which has been challenged (see d’Alessandro 2014 for overview). In this talk I zoom in on nominal inversion (VS) in declarative main clauses in French, which is understudied. I show that French VS is not fundamentally different from VS in other Romance languages, but just a subtype. The data are analyzed as the result of a micro-parameter (Biberauer et al. 2010) operating on the discourse feature of the sentence-initial element. Moreover, I show that these data are only compatible with a syntactic analysis of VS which is *not* based on the discourse-driven movement of the subject, and allow us to decide between conflicting hypotheses on the syntactic analysis of VS.

UNEXPLAINED SYNTACTIC CONSTRAINT. VS in declarative main clauses in French (but not in other Romance languages) is subject to a syntactic constraint: it must be licensed by a sentence-initial element X (1). It is however not well understood which sentence-elements precisely license VS and why (1). Kayne & Pollock (2001), for instance, show that VS does not occur with sentence-initial PPs (3a) and clitic left-dislocated topics (3b), but do not consider sentence-initial adverbs and adjectival predicates.

- (1) * \emptyset *écrivait Alexandre.*
lit. * \emptyset wrote Alexander.
- (2) *{Ainsi / * Probablement} écrivait Alexandre.*
lit. { So / * Probably } wrote Alexander.
- (3) a. *À Jean ne parle jamais Marie.* (K&P 2001: 132)
to John neg speaks never Mary
b. *Ce livre-là l’a lu Marie.* (K&P 2001: 133)
that book there it-has read Mary

DATA. On the basis of corpus research, I show that VS in French declaratives occurs in three types of configurations:

- (4) TYPE I Overt or covert stage topic (spatio-temporal) X + [_{all focus/presentative} VS] (5)
- TYPE II Anaphoric X + [_{all focus/presentative} VS] (6)
- TYPE III Mirative focus X + [_{background} VS] (7)
- (5) *En septembre apparaissent les grosses araignées.*
lit. In September appear the big spiders.
- (6) *Il resta un moment sans bouger, espérant que la nuit durerait toujours.*
‘He stayed without moving for a while, hoping the night would never end.’
Ainsi doivent espérer les condamnés à mort. (Carrere 1995, Frantext)
lit. So must hope the men condemned to death
- (7) *Ah! douce est l’herbe du Sahel! ... suaves sont les odeurs de tes jasmins!* (Gide)
‘Ah! How soft is the grass in the Sub-Sahara! ...How heady is the scent of your jasmins!’

If the sentence-initial X is not a stage topic (I), not anaphoric (II) or does not have a mirative focus interpretation (III), VS is ungrammatical:

- (8) a. * *Bruyamment sont entrés des enfants.*

- lit. Noisily have entered some children
- b. * *Légalement* peuvent être organisées des élections.
lit. Legally can be organized elections.
- c. * *À cause de la pollution* sont morts des poissons, des oiseaux et des milliers d'insectes.
lit. Because of the pollution have died fish, birds and thousands of insects.

CLAIM. I argue that these three types of XVS in French are subtypes of XVS in Romance, and residual V2 cases (Wolfe 2018), in a non-strict definition of V2 (Ledgeway 2007). **Type I** is a subtype of locative VS (Pinto 1997; Tortora 1997, 2001, 2014; Sheehan 2007, 2010, 2016; Corr 2016, Sluckin, Cruschina & Martin 2020), which is an all-focus configuration. **Type II** is a subtype of resumptive preposing (Cinque 1990, Benincà 2001, Cardinaletti 2010, Leonetti-Escandell-Vidal 2009, Cardinaletti 2009, Costa & Martins 2011, Leonetti 2018), which is “related to the absence of a topic-comment partition and gives rise to a presentational reading” (Leonetti 2018:911). As for **type III**, I will show that it occurs in French when X has a scalar interpretation (Sleeman 2020) or when XVS as a whole reasserts what has been stated before. I will argue that these are specific instances of VS triggered by focus preposing with a mirative (or verum) focus interpretation (Cruschina 2009, 2011a, 2021:22 Bianchi, Bocci and Cruschina 2016, Leonetti and Escandell-Vidal 2009, Leonetti 2018:913), and have “a covert focus-background partition, with narrow focus falling on the positive polarity of the proposition” (Leonetti 2018:913). Hence, XVS in Romance is characterized by a micro-parameter affecting the discourse-value of sentence-initial X, i.e. the mapping of information structure and syntax in X, and the three types of French XVS in (4) are the result of different settings of this micro-parameter.

CONSEQUENCE: SYNTACTIC ANALYSIS OF VS. In the three XVS types I-III in (4), the discourse interpretation of the construction is determined by that of the sentence-initial element and crucially not by that of the postverbal subject. This argues against accounts of VS which rely on discourse-driven movement of the subject e.g. Kayne and Pollock (2001)’s analysis of VS in French, in which the subject moves to Rizzi’s (1997) clausal left periphery, and Belletti’s (2004) analysis of VS in Italian, in which the subject moves to a focal or topical projection in the low vP periphery. Hence, I argue in favor of the ‘classical’ analysis in which the postverbal subject stays in situ (Déprez, 1988; Déprez, 1990; Valois and Dupuis, 1992; de Wind, 1995; Longobardi 2000, Lahousse 2006):

$$(9) \quad \left[\begin{array}{c} \text{TP} \\ \text{TP} \end{array} \left[\begin{array}{c} \text{verb} \\ \text{VP} \end{array} \left[\begin{array}{c} \text{subject} \\ \text{VP} \end{array} \left[\begin{array}{c} \text{t}_{\text{verb}} \\ \text{verb} \end{array} \right] \right] \right] \right]$$

To the extent that the postverbal S did not move through TP in this analysis, the question rises what satisfies (whatever version of) EPP (Cardinaletti 2004, Rizzi & Shlonsky 2006, see Sluckin et al. 2020, Sheehan 2010 for an overview). We argue that EPP is satisfied by sentence-initial X. Independent evidence for this comes from the fact that expletive *il* in impersonal passives (10) (see the original observation Kayne and Pollock 1978) can be left implicit in the three types of licensing contexts of VS in (4), as shown by the authentic examples in (11-12):

- (10) *Il / * Ø sera mis fin au conflit.* (Kayne and Pollock 1978)
lit. *There / * Ø* will be put end to the conflict.
- (11) *Ce jour-là Ø sera mis fin à l'injuste monopole de Go Sport sur le site.*
lit. That day *Ø* will be put end to the unfair monopoly of Go Sport on that site.
(<http://aspexplorer.livejournal.com/315692.html?thread=6225708>)
- (12) *Ainsi Ø sera mis fin à de longues sagas comme le permis unique.*
lit. In this way *Ø* will-be put end to long sagas such as the unique permit

(europe-liberte-securite-justice.org)

Syntactically-integrated gestures in Southern Italy

Valentina Colasanti
Trinity College Dublin

Introduction. In recent years gestures have been a topic of much interest in formal linguistics, especially with respect to their semantic and pragmatic contribution (Ebert and Ebert 2014; Schlenker 2018; Esipova 2019; *i.a.*). A consistent observation within this literature is that the semantic content of gestures can be integrated into the meaning of spoken utterances; hence, gesture can behave like speech, e.g. presenting the same kind of semantic behaviour (taking scope, projecting, etc.). One way to explain the semantic integration of gestures is to treat them as part of the *grammar*, namely if gestures can participate in semantic relations it is because they appear in *syntactic representations* (see also Jouitteau 2004). In particular, since gestures are performed with the same articulators as sign languages (e.g. hands, eyebrows), this would mean that syntactic features are externalised at the PF interface as gesture (visual-gestural modality) rather than speech (auditory modality); i.e., syntax is modality-blind. Based on novel experimental data, I argue that gestures found in the gesture-heavy languages of Italy provide especially clear evidence for this syntacticization of gesture. In particular, the co-speech gesture *Mano a Borsa* (henceforth MAB, represented as ) or ‘pursed hand’ exhibits the same syntactic distribution as its spoken counterpart, namely *wh*-phrases, participating in the very same syntactic operations and hierarchical relations (e.g. movement, *c*-command/scope-taking).

Background. MAB has been reported to have an interrogative component to its interpretation, as it is mainly found in *wh*-questions in several Italo-Romance varieties (Neapolitan: De Jorio 1832, Kendon 1995, 2004; Romano: Poggi 1983; Italian: Giorgi & Dal Farra 2019; Ippolito 2020). However, since MAB distributes like a *wh*-item, the question arises whether it has the syntactic status of a *wh*-item too.

Experimental design. To investigate this question, a three-part experiment was designed and run with 54 native speakers of Neapolitan, a stable urban variety of Italo-Romance spoken in the South of Italy where gesture use is extremely widespread (Kendon 1995). Speakers were recruited from all across Naples, with ages ranging from 20 to 85. The experiment, hosted on Gorilla, was administered in person or online (only for younger speakers), and comprises three parts: Parts 1 and 3 are forced-choice tasks, and Part 2 is an acceptability judgement rating.

Part 1 tests the acceptability of MAB in different sentence types (i.e. declaratives, canonical/non-canonical interrogatives, and exclamatives). For each context, participants were shown two different pre-recorded videos: both contained the same utterance (spoken by a native Neapolitan speaker), but one was performed with an accompanying MAB gesture, and one without (see (1)-(3)). The participants were then asked to chose the most natural choice between the two in a given context, and to provide a brief rationale for their choice. (Underlining indicates the temporal alignment of the gesture to speech.)

(1) *Antonio and Teresa are at home when suddenly it starts raining. Antonio asserts with certainty:*

a. Sta chiuennə.
it.stands rain.GER

b. *Sta chiuennə .
it.stands rain.GER MAB
‘It’s raining.’

b. *Tu tienə a casa a Posillipə  ?
you keep a house at Posillipo MAB
‘Do you own a house in Posillipo?’

(3) *Antonio has a meeting with Valeria and Aldo at a café, but when he arrives he finds only Valeria. He asks her:*

a. Addò sta Aldo?
where stands Aldo

b. Addò sta Aldo  ?
where stands Aldo MAB
‘Where is Aldo?’

(2) *Antonio and Mario are getting to know each other in a bar in Posillipo. Mario asks:*

a. Tu tienə a casa a Posillipə?
you keep a house at Posillipo

Part 2 tests the temporal alignment of MAB in canonical and non-canonical questions, based on the hypothesis that the onset and duration of a co-speech gesture reflects its *c*-command/scope domain, following work in gestural semantics (Schlenker 2014 *et seq.*) based on analyses of non-manual markers in sign languages (Liddell 1977; Aarons 1994; Neidle et al. 2000; see Wilbur 2021 for an overview). For a given context, participants were shown four to five pre-recorded videos and asked to indicate the degree of naturalness of each (0 = unnatural, 10 = natural). In one of the videos, MAB is articulated throughout the entire utterance; in the others, other alignments were tested (details to be presented during the talk).

Part 3 tests the interpretation of MAB in utterances where the gesture is produced with an accompanying *wh*-question which lacks a spoken *wh*-item. (Such contexts arise naturally, and the interpretation of the gesture can be deduced from the responses it licenses.)

Results/Discussion. For Part 1, the choice rates show that co-speech MAB cannot be paired with declaratives ((1a) vs (1b)) or yes-no questions ((2a) vs (2b)): 99% of the participants preferred these sentence types without MAB. On the other hand, the opposite pattern arises with wh-questions: 97% of the speakers preferred wh-questions accompanied by MAB rather than without it.

The results of Part 2 show that participants clearly rejected items in which the articulation of MAB entirely follows (4a) or precedes (4b) the spoken utterance. Even more strikingly, they dispreferred items with MAB aligned to the DP subject *Aldo* (4d). On the other hand, they clearly accepted items where MAB is articulated across entire wh-clause, reflecting the scope/c-command domain of the wh-item *addò* ‘where’ (4c). This holds for both canonical and non-canonical questions tested in the experiment.

(4) *Context: Antonio has a meeting with Valeria and Aldo at a café but when he arrives he finds only Valeria. He asks her:*

- | | | | |
|----|-----------------------|---|-----------------------|
| a. | *Addò sta Aldo |  | acceptability: 0.5/10 |
| | where stands Aldo | | |
| b. | *addò sta Aldo |  | acceptability: 2.5/10 |
| | MAB where stands Aldo | | |
| c. | Addò sta Aldo |  | acceptability: 9/10 |
| | where stands Aldo | MAB | |
| d. | *Addò sta Aldo |  | acceptability: 3.5/10 |
| | where stands Aldo | MAB | |
| | ‘Where is Aldo?’ | | |

This shows that the temporal alignment of MAB reflects its putative scope, consistent with the behavior of a wh-item (see refs. above on non-manual marking in signed wh-questions). In the talk, I will present further evidence for this involving MAB in echo-questions, where the wh-item can move either to the left periphery or stay *in-situ*. In *ex-situ* and questions MAB aligns over the c-command domain of the wh-item. However, in the case of *in-situ* questions, preliminary results show that MAB does not only align with the wh-item *in-situ*, but with its wide scope domain.

Concerning Part 3, the majority of speakers choose the wh-questions (which lack a spoken wh-item) produced with MAB over the ones produced without MAB. Based on these results, I argue that MAB is a Q-morpheme which lexicalises a $C_{[+Q, +wh]}$ head (see also Branchini et al. 2013 for a similar analysis in LIS). In fact, in all the utterances tested the temporal alignment of MAB in both *in situ* and *ex situ* wh-questions signals the c-command domain of the head it lexicalises (e.g. C). Hence, MAB does not distribute syntactically as a wh-item.

Contributions. The distribution of co-speech MAB in Neapolitan constitutes empirical evidence for the syntactic integration of gesture. This non-iconic gesture is grammaticalized, and thus is part of the lexicon of Neapolitan and related Italo-Romance languages (and has been for millennia: Kendon 2004). From a more general theoretical perspective, the experimental evidence presented here strongly supports the claim that syntax is modality-blind: i.e., that the gestural vs. spoken distinction arises at PF, and isn’t visible to the syntax.

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Strength and weakness in Campidanese Sardinian (*Alexander Chabot* - Un. Côte d'Azur)

The ambition of this talk is to analyze an intricate pattern of spirantization and gemination in Campidanese Sardinian (CS), where voiceless /T/ and voiced stops /D/ are partially neutralized as surface spirants. The data are based on field-work in Sardinia and show two things: that a model of phonology needs some way of showing strength and weakness as positional effects, and that neither can be reliably understood in phonetic terms (contra for example Bauer 2008).

The CS pattern resists analysis based on surface properties since spirantization is not a reliable correlate of lenition (weakness), and increased relative duration is not a reliable correlate of geminancy (strength). Thus, phonetic cues are not adequate in the discovery procedure—only phonological behavior can be used. The analysis developed here reveals a surprising and novel fact: spirant realizations of /D/ cannot be viewed as the product of lenition, and must rather be seen as the product of fortition.

In *some* external sandhi contexts, intervocalic /T/ and /D/ show a clear asymmetry: while /p t tʃ k/ are realized as spirants, [β ð ʒ γ] as in (1), /b d ɟ g/ are either dropped entirely or, more commonly, unaffected: /ssu bentu/ may be realized as [s:u bentu] or as [s:u entu].

- (1) [puɖ:a] 'hen' [s:a βuɖ:a] 'the hen'
[tʃivraʒu] 'durum bread' [s:u ʒivraʒu] 'the durum bread'
[kuat:ru] 'four' [dɛ γuat:ru] 'of four'

Curiously, while the specific context in (1) never triggers spirantization of /D/, there are intervocalic contexts in which /D/ alternates with spirants (2):

- (2) [βid:a] 'village' [a βid:a] 'to the village'
[d̪əmu] 'house' [kus:a ðəmuʒu] 'those houses'
[guat:ru] 'cat' [trɛ γuat:ruʒu] 'three cats'

Complicating the surface pattern further is the fact that in some intervocalic contexts, rather than undergoing lenition /T/ is instead realized as geminate (3):

- (3) [tempus] 'time' [kustu ttempuzu] 'at that time'
[kojai] 'to marry' [oβia k:ojai] 'want-3PS to marry'

/T/ thus exhibit a disjunctive pattern in the intervocalic context, spirantizing as in (1) but lengthening as in (3). In traditional terms, these two surface output patterns correspond to weakening and strengthening, respectively.

Careful analysis of each process shows that there are in fact two complementary intervocalic contexts—one strong and one weak—distinct in their prosodic structure. In the prosodically weak context, /T/ lenites and is realized as a spirant, while /D/ is unaffected. In prosodically strong contexts, however, /T/ geminates; unexpectedly, /D/ is realized in this position as a spirant. That is, for /D/ in CS, the surface manifestation of strength is as spirantization.

To see how strength works in CS, there are three contexts to consider. The first is *compensatory lengthening*: word-initial following a final stop in a preceding word, such as the plural marker /-s/ or the 3SG verbal marker /-t/. In such cases, the stem-final stop cannot surface as coda and is elided, lengthening a following /T/ (4a), while a following /D/ is realized as a spirant (4b).

- (4) a. /beniat p̥iʃʃi/ → [benia p̥i:ʃi] ‘sell-3SG. fish’
 b. /iat d̥efendiu/ → [ia d̥efendiu] ‘defend-3SG.PST’

The second context arises from a process of synchronic metathesis in words that begin with a vowel and are disyllabic as in (5):

- (5) a. /ssu arku/ → [s:rak̥u] ‘the bow’
 b. /ssu argu/ → [s:raɣu] ‘the sour one’

When /r/ moves it triggers lengthening of /T/ and spirantization of /D/; a parallel disjunction to that of (4).

The third context of strength is one of Raddoppiamento Fonosintattico (RF). That is, an initial consonant is realized as geminate if immediately preceded by lexically-specified trigger (6):

- (6) a. [pr̥eũ] ‘full’ [ɛ pr̥eũ] ‘and full of’
 [ʃ̥eβu] ‘heaven’ [a ʃ̥eβu] ‘to heaven’
 b. [boɣizi] ‘put out’ [nɔ βoɣizi] ‘don’t put out’
 [d̥omu] ‘house’ [a d̥omu] ‘to the house’

As in (4) and (5), there is a disjunction: /T/ is realized as geminate (6a), while /D/ is realized as spirant (6b).

There is thus a direct link between the context of /T/ lengthening and /D/ spirantization: despite the phonetic identity of /D/ as spirant, this context is one of strengthening for all stops. To suppose otherwise is to interpret as an accident the fact that compensatory lengthening, metathesis and RF induced compensatory lengthening all have complementary scope over /T/ and /D/. I argue all three are the result of a singular process of strengthening which is reflected in prosodic structure.

The analysis uses CVCV phonology (Lowenstamm 1996; Scheer 2004, 2012) to establish explicit prosodic representations for weak and strong contexts. Lenition of /T/ is loss of melodic material, while strengthening of both /T/ and /D/ is the spreading of melodic material into empty skeletal positions. Thus, all intervocalic allophony effects are phonological in CS, although only lenition of /T/ results from melodic material being changed by computation; the realization of geminate /DD/ as spirants is a performance effect in the interface between phonetics and phonology, not in phonology itself.

The consequence for phonological theory is not just that phonetic inspection is inadequate as a discovery procedure: strength and weakness in CS also show the intricate way in which computation and representations interact to give rise to surface patterns. To approach explanatory adequacy, both must be modeled (cf. Anderson 1985: 350).

When DOM is not dependent on a higher c-commanding nominal (Monica Irimia - Un. Modena)

Setting the stage. We discuss an impersonal construction from Moldovan (Romanian), as in (1), which exhibits D(ifferential) O(bject) M(arking), despite the absence of a syntactically projected implicit argument in Spec, Voice. We propose that this configuration contains a licenser, *v*, which together with a discourse-related functional projection (building on López 2012, a.o.) below VoiceP can license DOM.

1. Subjects and differentially marked objects. DOM has been equated with a strategy to disambiguate objects (with certain types of features, such as animacy, etc.) from subjects, in a long line of research from the functionalist tradition (Comrie 1989, etc.) to the formal generative one (Burzio's Generalization, Dependent Case (Marantz 1991, Baker 2015, Levin and Preminger 2015)), the Distinctness Condition (Richards 2010), a.o.). The case study addressed here is problematic under these assumptions.

2. The data. The construction under interest comes from Moldovan (Romanian spoken in the Republic of Moldova). As seen in (1), it contains as the main verb the modal *trebuie* 'must/it is necessary', which cannot inflect for person and number, being instead restricted only to 3rd person singular morphology. This modal embeds the so-called 'supine', which in Moldovan (just like in Romanian, see especially Ionescu 2002, Soare 2007, 20012, or GR:233) is composed of a prepositional element (in this case, *de*) and a *non-inflected* form of the past participle (see especially Sandfeld and Olsen 1936: 281; Marin et al. 1998: 115-116; Gabinschi 2010; Dragomirescu and Hill 2014; Dragomirescu 2015; Dragomirescu and Nicolae 2016; Hill and Alboiu 2016: 292-295; Costea 2021, a.o. for details about the Moldovan supine). As also emphasized in the literature, (1) allows only an arbitrary/impersonal interpretation and a lexical subject is strictly ungrammatical.

- (1) (*Omul) trebu(ie) de-*i* ajutat pe cei mai slabi.
man-the must.3.SG SUP-CL.ACC.3PL help.PST.PRT LOC=DOM those.M.PL more weak.M.PL
'One/*the man needs to help the weaker ones.' MOLDOVAN (adapted from Costea 2021)

3. DOM and the supine. The puzzle has at its center the direct object, which is differentially marked, as it is animate (and also contains a demonstrative). Animacy-based DOM is robust in Moldovan, just like in standard Romanian (see especially Dobrovie Sorin 1994, Cornilescu 2000, Tigău 2011, Mardale 2015, Hill and Mardale 2021 for Romanian DOM), and uses a locative maker, under a type of the so-called *oblique* DOM strategy (Bossong 1991, 1998 or Manzini and Franco 2016, a.o.). Moreover, the differentially marked nominal is also clitic doubled using the accusative form of the clitic (in Moldovan, similarly to standard Romanian only DOM can be clitic doubled, and not unmarked objects). The presence of the clitic (as well as topicalization, as in (9), or negation, etc.) is a strong indication that the Moldovan supine projects a CP structure - see especially Costea (2021) whom we follow in labelling the construction as the *clausal de-supine*. However, despite this extended clausal spine, the application of various tests indicates the absence of a syntactically projected implicit argument (IA) in Spec, Voice. This conclusion is strengthened by a comparison with other configurations with non-expressed agents.

4. Clausal *de-supine* vs SE medio-passive. Across Daco-Romance, another construction with an implicit agent/initiator is the one using the Pan-Romance SE clitic, which can construct medio-passives, impersonals, anti-causatives, etc. (see especially Dobrovie Sorin 1998, 2007, 2021, etc. for Romanian SE). In (2) we see a medio-passive SE (SE_{MP}) with an intransitive unaccusative which allows a depictive tracking the IA; (4) shows SE_{MP} with an adjunct *by-phrase*, and (3) SE_{MP} with a reciprocal which can track the IA. These tests might indicate that an IA is syntactically projected in these examples (note however that not all SE_{MP} types pass these diagnostics). Crucially, clausal *de-supine* does not permit any of these elements, no matter whether the object is differentially marked or not, as shown in (5) [orthography has been simplified in all examples].

- (2) Nu să vini băut la noi. (3) Să merge de la unu' la altu'.
NEG SE_{MP} come.3SG drunk.M.SG at we SE_{MP} go.3SG from one.the to other.the
'One doesn't come drunk to our place.' Lit. 'One goes from one to the other.'
- (4) S-o dat o lege (de către guvern).
SE_{MP}-have.3SG give.PST.PRT a.F.SG law (by government)
'A law was issued (by the government).'

- (5) Trebu(ie) de-*i* ajutat **pe** cei mai slabi_i/de
 must.3.SG SUP-CL.ACC.3PL help.PST.PRT LOC=DOM those.M.PL more weak.M.PL/SUP
 scris lucrarea *binevoitor(i)_j/*unu’ la altu’/*de către noi.
 write.PST.PRT paper.the *well.intended.M.SG/M.PL/*one.the at other.the/*by we
 ‘It is necessary to help the weaker ones_i/to write the paper *well-intended_j/*to each other/*by us.

Armstrong (2017) has proposed that the inalienably possessed body part in SE_{MP} in (6) needs a possessor in the syntax and the IA takes on this task. The application of this test, however, does not output clear-cut results in (7) [Context for (6) and (7): *The teacher asked a question*]; the speakers consulted expressed skepticism with respect to the clausal *de*-supine (see Dobrovie Sorin 2021 for independent problems with the reliability of this test as an IA indicator). To summarize, the various tests (depictive, reciprocal, etc..) repeated in Table 1 indicate that an IA does not appear to be syntactically projected in clausal *de*-supine.

- (6) S-a ridicat o mână.
 SE_{MP} -has raised a hand
 Lit. ‘A hand was raised.’
- (7) ??Trebu(ie) de ridicat mână.
 must.3SG SUP raise.PST.PRT hand.the
 ‘It is necessary to raise the hand.’

5. DOM is not dependent on a higher c-commanding nominal. We follow Dobrovie Sorin (2021) in assuming that clausal *de*-supine comprises a type of Voice which is ‘devoid of features’ in the sense that it does not introduce an initiator (Voice $\{\emptyset\}$, see also Schäfer 2008, Alexiadou et al. 2015, Wood 2015, a.o.). Dobrovie Sorin’s (2021) analysis was formulated for types of passive SE in standard Romanian. The absence of the IA (initiator) in Spec,Voice $\{\emptyset\}$ can explain why DOM is not possible in passive SE in Romanian/Moldovan. However, we have seen that oblique DOM *is* possible in the clausal *de*-supine. Thus, we take a somehow different approach to Burzio’s Generalization and adapt some recent observations in Šereikaitė (2020), who has discussed an active existential from Lithuanian where Voice checks accusative case in the absence of a syntactically projected IA in Spec, Voice. Clausal *de*-supine similarly motivates the conclusion that accusative can be licensed in the absence of a syntactically projected implicit argument in Spec, Voice. Assuming the presence of both *v* and Voice (following Legate 2014, a.o.), we propose that the locus of accusative Case licensing in Moldovan is *v*. Oblique DOM contains additional δ -features (grammaticalized animacy that is relevant in the discourse, specificity, etc.). An additional licenser, for example López’s (2012) α head (below VoiceP) is recruited and oblique DOM gets licensed by both *v* and α , as in (8). [uC] licensing by *v* (as opposed to Voice) better explains why oblique DOM without clitic doubling does not allow binding into the indirect object (examples omitted here for lack of space), pointing towards (raising to) a lower licensing locus.

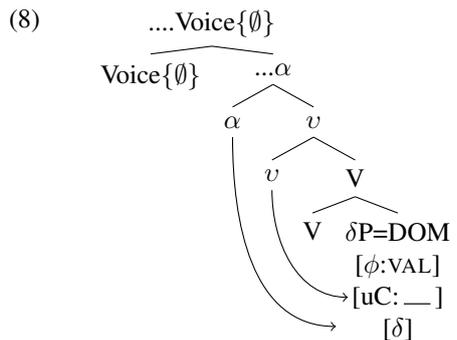


Table 1. SE_{MP} and clausal *de*-supine

| DIAGNOSTIC | SE_{MP} | Clausal <i>de</i> -supine |
|--------------------------|-----------|---------------------------|
| IA-oriented depictive | ✓ | * |
| reciprocal | ✓ | * |
| by-phrase | ✓ | * |
| inalienably possessed DP | ✓ | ?? |

- (9) Trebu(ie) ca **pe** cei mai slabi mereu de-*i* ajutat....
 must.3.SG CA LOC=DOM those.M.PL more weak.M.PL always SUP-CL.ACC.3PL help.PST.PRT
 ‘One should always help the weaker ones...’ (Costea 2021: ex.1, adapted)

6. Conclusions. Moldovan clausal *de*-supine (less studied formally) allows DOM in the absence of a syntactically projected IA, providing support for theories which do not link the accusative to the presence of a higher c-commanding nominal (Šereikaitė 2020, a.o.). It also illustrates a novel observation, namely that even accusative clitic doubling on DOM is possible in the absence of syntactically projected IA. Moreover, placement of DOM in a preverbal position is *not* blocked either, as seen in (9).

Selected references: Costea, S. 2021. Clausal *de*-supines in Moldovan. The state of the art. Ms. Dobrovie Sorin, C. 2021. Implicit agents and the Person Constraint on SE-passives. *Unraveling the complexity of the SE clitic*, eds. G. Armstrong and J. MacDonald. Šereikaitė, M. 2020. Active existential in Lithuanian. LI.

Psych verb transitivity: the English-Romance crosscut

Eugenia Mangialavori Rasia (CONICET, Argentina) & Rafael Marín (CNRS, France)

Transitivity alternations sparked great interest over the last forty years. Recently, attention has also been drawn to a less-often considered (intransitive) variant of verbs with causative alternation. This monadic variant [IC] has a cause(r) as sole argument, leaving the external argument as constant (wrt the transitive frame). Although not as productive as in Romance, English allows for a relatively regular IC productivity.

- (1) a. *El tabaco mata*. b. *La lejía desinfecta*. c. *El calor excesivo deshidrata*. d. *El arroz estriñe*. (SPANISH)
(2) a. *Tobacco kills*. b. *Bleach disinfects*. c. *Excessive heat dehydrates*. d. *Rice constipates*. (ENGLISH)

Yet, major asymmetries pull languages like English (1) and Romance (Spanish) (2) apart.

PRODUCTIVITY. It has been pointed out that intransitive causative (IC) constructions are far more (regularly, systematically) productive in Spanish than in English (Mangialavori & Ausensi, 2020). However, a major crosscut arises with a specific set of further verbs argued to allow causative alternation: notably, *object-experiencer psych verbs* (OEPV). As (3) shows, Spanish OEPVs are perfectly fine in ICs, while English OEPVs are not (4)a. Curiously, English uses a copula construction (*be+ing*) to somehow fill in for the productive gap unseen in Romance (4)b.

- (3) *La economía preocupa/alarma/entristece/fascina/intriga/confunde/asusta*. (SUBJECT=CAUSE)
(4) a. **Economy worries/alarms/upsets/fascinates/intrigues/confuses/intimidates*.
b. *Economy is worrying/alarms/upsetting/fascinating/intriguing/confusing/intimidating*.

SUBJECT CONSTRAINTS. English shows deviant acceptability based on subject (\pm animated/ \pm volitional) type (5). Conversely, Spanish subjects do not yield asymmetric acceptability. Thus, while Spanish intransitives (6) do not constrain the interpretation of the argument and animate subjects can be equally interpreted as active agents or as nonvolitional causes (6)b, English, which only allows the former, reveals a constraint crucially linking verb type and intransitive frame productivity. The crosscut in (5) is easily captured by a well-known distinction between OEPV types sensitive to subject (+anim) reading (*worry* vs. *bother* types).

- (5) a. **John worries/alarms/upsets/fascinates (all day/in the meetings)*. (ENGLISH)
b. *Tarantino bothers/disturbs (a lot)*. (cf. *intimidates, stimulates, oppresses, ?seduces*)
c. #*Money limits and disturbs*.
(6) a. *Juan/El dinero preocupa/alarma/fascina*. (SPANISH)
(lit.) *Juan worries/maddens/fascinates*
'*Juan is worrying/maddening/alarms/fascinating*'
b. *Juan/El dinero molesta/asusta/fastidia/oprime*.
(lit.) *Juan/Money bothers/scares/disturbs/opresses*.

\Rightarrow agentive subject reading (DO x) (0KSpanish/0KEnglish)

\Rightarrow non-agentive subject reading (John=cause of \sqrt{N}) (0KSpanish/*English)

SPECTRAL CONSTRAINT. *Worry*-type intransitives (6)a are odd with aspectually-sensitive adverbials (habitual/frequentative as in (5)), while *bother*-intransitives (6)b are fine with them. Yet, the structures involved in each case have been crucially shown to reflect two sufficiently distinct kinds of (in)transitive alternations (Mangialavori & Ausensi, 2021). Both intransitive types are dispositional and generic, but there is a contrast between intransitive frames of manner transitive verbs (*Unexpressed Object Alternation*, Levin 1993; *Objectless Constructions*, Mittwoch 2005); and original atransitive alternates of verbs entering causative alternation. The former (cf. Characteristic Property of Agent/Instrument alternation [CPAI]) are eventive, require episodic instantiation, allow repetition, license iterative interpretations, and allow perception reports and location in space (7); and contexts inducing iterative or habitual readings visibly improve acceptability (8). Instead, intransitive variants of causative alternation verbs [IC] render non-eventive, nonepisodic (deontic) predications (previous instantiations of the same eventuality not required) failing perception reports and spatial location coherent with their fully eventless nature.

Importantly, the former (9) (CPAI) are agentive and volitional, hence the restriction on subject type (8), whereas the latter (ICs) take inanimate subjects interpretable as possible *cause* (source of emotion) (10).

- (7) a. *Tarantino bothers, bothers and bothers.* (ENGLISH)
 b. *Tarantino bothers (all day/in staff meetings/on purpose)*
 c. *Many saw Tarantino bother (at the meeting).*
- (8) a. *Cats/[#]Noice disturbs (at night).*
 b. *My sister[?] (always) disturbs (in my study/in class).*
 c. *She really disturbs[?] (with her tweets).*
- (9) CHARACTERISTIC PROPERTY OF AGENT INTRANSITIVE (SUBJECT DO $\sqrt{}$)
 a. *Tarantino molesta/fastidia (todo el día/en las reuniones/una y otra vez/aposta).*
 b. *He visto a Tarantino molestar.*
- (10) (NONVOLITIONAL) INTRANSITIVE CAUSATIVE (SUBJECT CAUSE \sqrt{N})
 a. *#Tarantino/El árbol molesta/fastidia (todo el día/en las reuniones/una y otra vez/aposta).*
 ‘*Tarantino/The tree bothers all day/at the meetings/over and over/on purpose*’
 b. *#He visto a Tarantino/el árbol molestar.*
 ‘*I’ve seen Tarantino/the tree bother*’

PRESENT TENSE IMPLICATIONS. Facts above point to a semantic-aspectual difference between Romance and English. In English, eventive (or episodic) expressions in the present tense normally have either habitual or generic interpretations and cannot refer to an actual eventuality ongoing at present (Binnick 2005 *i.a.*), while ‘ongoing activity’ readings require special marking. In Romance, present tense of eventive verbs is instead ambiguous between a generic, habitual reading and an episodic (ongoing-event) reading.

If the verb is not inherently eventive, and psych verbs are known for their stative behavior, the eventive, ongoing reading will not be available (*#Tarantino is knowing the truth*). Intransitives forms of OEPVs are only allowed iff an eventive interpretation of the verb is available. Thus, *John bothers* is fine insofar as it yields a generic habitual (repetitive) reading—in fact, to most native speakers, repetition/habitual-inducing adverbs improve dramatically its acceptability, as in (7). The eventive ongoing reading unavailable, the composite (be+ing) construction becomes an option for the generic, non-episodic, ILP predication with the sole argument as a probable cause (*John is bothering* [cause \sqrt{N}]). Nonetheless, and quite crucially, the ongoing progressive is licensed, only that under a completely different structuring; i.e., an anticausative (progressive)—i.e., an eventive—reading (*Juan is upsetting* > *J causes upset* / *J is getting upset*). By the same rule, the present tense (*Juan worries* > *Juan gets worried*) applies. In Spanish, things are different: ICs being available, the be+ing (analog) phrase to express subject=cause \sqrt{N} is generally unproductive in noneventive causative readings (**Juan es molestante/fastidiante/asustante/divirtiente*), and simple present tense is naturally available to express either noneventive, nonvolitional causation or agentive, volitional habitual (property-of-agent-like) eventualities. The *worry*-type allows be+ing simply since an agentive/volitional (habitual intransitive) reading is not available according to the (lexical)semantic underpinnings of the verb (*^{ok}Tarantino/#La economía es preocupante*). Corpus data in fact indicate that subjects allowing eventive readings are tolerated in English (e.g., *The exposition/performance/infection worries*).

A distinction between external-argument-licensing heads is useful to attempt a constructional analysis in line with semantic/aspectual observations. vDO, often linked to activity-like predications, could explain choice of subject (probable agent, animated/volitional, Folli & Harley 2007 *i.a.*) and productivity in English (episodic, allows iterative/ habitual entailment predication naturally compatible with English present tense). vCAUSE, the other external-argument v^o, requires subjects interpretable as *possible cause* (like ICs). The generic, non nonepisodic, nonhabitual entailments of ICs explain limited productivity in simple tense, especially if the verb is stative. Making recourse to be+ing composition in English falls out, we advance, as a means to convey a dispositional individual-level property of the subject). Insofar as Romance (Spanish) does not impose similar restrictions, intransitive forms in simple present are expected to be fine (and, thus, be systematically productive).

Lexical Selection in Bolognese Clitic Allomorphy
Edward J. Rubin and Aaron F. Kaplan - University of Utah

Bol(ognese), the Gallo-Italic grammar of Bologna, displays clitic allomorphy that is simultaneously characteristic of Romance languages and divergent from the norm in analytically challenging ways. In this paper we develop an analysis of the 3MS.NOM clitic, whose allomorphs cannot be derived from a single underlying representation. We argue for a modification to Lexical Selection (LS; Mascaró 2007, McCarvel 2016) that allows this theory to capture the facts. In LS, a theory of allomorphy couched in Optimality Theory, each of a morpheme’s allomorphs is stored lexically; a hierarchy is imposed on these allomorphs encoding preferences: the constraint PRIORITY penalizes candidates using dispreferred allomorphs. When the favored allomorph violates constraints outranking PRIORITY, these dispreferred allomorphs may surface. We argue that the list of allomorphs for a morpheme must include not just allomorphs for that morpheme, but allomorphs that represent the combination of that morpheme and some other morpheme.

In Bol, the 3MS.NOM clitic has three allomorphs. Generally, it surfaces as [l] prevo-cally ([l = ar'spand] ‘he responds’) and as [al] preconsonantly ([al = 'vad] ‘he sees’). However, when this clitic precedes both a dative and an accusative clitic, or one of them followed by a C-initial verb, it appears to surface as [a], as shown in (1). The expected pre-C allomorph [al] is only optional (e.g. [al = v = 'di:z]). The puzzle is the following: why is [al] not required in (1)? And if [a] is an available allomorph, why is [al], which introduces a violation of NOCODA, obligatory elsewhere?

- | | | | | |
|-----|----|---|----|---|
| (1) | a. | a = v = 'di:z 3MS.NOM = 2P.DAT = say ‘he says to you.p’ | b. | a = s = 'tsa:ma 3MS.NOM = 1P.ACC = call ‘he calls us’ |
|-----|----|---|----|---|

To answer the first question, we argue that the strings [av] and [as] (and comparable strings arising in other 3MS.NOM clitic combinations) are single lexical items, not strings of clitics. That is, in (1-a) [a] is not the 3MS.NOM clitic, and [v] is not the 2P.DAT clitic. Rather, [av] is the fusion of these morphosyntactic categories; (1-a) is properly transcribed as [av = 'di:z] (3MS.NOM.2P.DAT = say). Likewise for [as] in (1-b).

This reanalysis accounts for the 3MS.NOM clitic’s realization in the context of other clitics, and it now becomes apparent that this clitic’s allomorphs cannot be derived from a single underlying form. LS provides a formalism for this arrangement. The hierarchy of allomorphs we adopt is {[av], [as]} > [l] > [al]. That is, the allomorphs representing the “fusion” of multiple clitics are highest ranked—the language prefers to use these allomorphs wherever possible (no ranking between these allomorphs can be determined). When these allomorphs cannot be used (i.e. when the morphosyntactic conditions are not met), [l] is the preferred option. In turn, [l] is ruled out preconsonantly because it violates Bol’s sonority sequencing requirements (*[l = vad]); the allomorph of last resort, [al], appears in this case.

The analysis is shown in (2). The input includes the allomorph hierarchy for each morpheme, which are omitted for space. The 3MS.NOM hierarchy is given above; the one for 2P.DAT is [av] > [v]. PRIORITY assigns one violation per step down the hierarchy a chosen allomorph is: one violation for [l] and two for [al]. (2-a) involves two clitic

hierarchies whose violations are separated by commas. REALIZE MORPHEME (RM; Kurisu 2001) requires each morpheme to have a phonological exponent. Candidate (d) in (2-a) violates RM because 2P.DAT is not phonologically realized. DEP-MorphFeat (DEP-MF) and SONSEQ can force the appearance of dispreferred allomorphs. DEP-MorphFeat penalizes a candidate that includes morphosyntactic features not found in the input: in (2-b), candidate (a) has the clitic [av] which bears the features 2P.DAT, but these features are not in the input. SONSEQ enforces sonority requirements, which onsets like [lv] violate. In (2-b) we need only descend one step on the 3MS.NOM hierarchy: [l] violates neither DEP-MorphFeat nor SONSEQ and better satisfies PRIORITY than [al]. But in (2-c), [l] violates SONSEQ and the least favored allomorph surfaces. Finally, *FUSION penalizes items bearing incompatible morphosyntactic features. For example, [av] bears both NOM and DAT. The optionality described above ([a = v = 'di:z] ~ [al = v = 'di:z]) arises from variation in the ranking (Anttila 1997) between PRIORITY and *FUSION.

This analysis supports two related innovations in the LS framework. First, the fusional allomorphs must be listed in the hierarchy for 3MS.NOM even though their morphosyntactic features are a superset of 3MS.NOM. Second, each of these fusional allomorphs must appear in the hierarchies of multiple lexical items: [av] is included in the hierarchies of both 3MS.NOM and 2P.DAT.

| | | | | | | | |
|-----|----|---------------------------|----|--------|--------|----------|---------|
| (2) | a. | / 'di:z, 3MS.NOM, 2P.DAT/ | RM | DEP-MF | SONSEQ | PRIORITY | *FUSION |
| | | ☞ a. av = 'di:z | | | | | * |
| | | b. l = v = 'di:z | | | *! | *, * | |
| | | c. al = v = 'di:z | | | | *!*, * | |
| | | d. al = 'di:z | *! | | | ** | |
| | b. | /ar'spand, 3MS.NOM/ | RM | DEP-MF | SONSEQ | PRIORITY | *FUSION |
| | | a. av = ar'spand | | *! | | | * |
| | | ☞ b. l = ar'spand | | | | * | |
| | | c. al = ar'spand | | | | **! | |
| | c. | / 'vad, 3MS.NOM/ | RM | DEP-MF | SONSEQ | PRIORITY | *FUSION |
| | | a. av = 'vad | | *! | | | * |
| | | b. l = 'vad | | | *! | * | |
| | | ☞ c. al = 'vad | | | | ** | |

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Examining the vulnerability of the syntax-discourse interface: the role of the methodology in Heritage Italian WHY-interrogatives.

Svenja Schmid (University of Konstanz)

The Interface Hypothesis (IH) proposes that the syntax-discourse interface is vulnerable to crosslinguistic influence in a language contact situation (Sorace, 2011). However, some recent work casts doubt on this general claim and shows that heritage speakers (HSs) do not always face difficulties with respect to linguistic structures at the syntax-pragmatic interface (Leal, Rothman, & Slabakova, 2014; Gondra, 2020). This study examines the IH by analyzing an understudied structure in Italian heritage language research, namely word order variation in WHY-interrogatives with a special focus on the role of the methodology.

In contrast to most other Italian *wh*-interrogatives, word order in WHY-interrogatives is less restricted and information structure affects subject position, as shown in (1) (Bianchi, Bocci, & Cruschina, 2017). More precisely, the subject in (1a) is interpreted as focal, while in (1b) the subject is non-focal.

- (1) a. Perché balla Maria_[+Focus]?
 why dances Mary
 ‘Why does MARY dance?’
 b. Perché Maria_[-Focus] balla?
 why Mary dances
 ‘Why does Mary dance?’

Accordingly, word order in WHY-interrogatives requires the integration of both syntactic and pragmatic information. This kind of integration is generally assumed to be vulnerable in language contact situation, as it is the case for heritage speakers (White, 2009; Montrul 2011; Sorace 2011; Kupisch & Rothman 2016). However, there are some studies that disagree with this assumption since they do not find diverging results for HSs and the (monolingual) control group (see Leal, Rothman, & Slabakova (2014) for clitic right dislocation and Gondra (2020) for the interplay of word order and focus in unergative constructions). Kupisch & Rothman (2016) suggest that these different results may arise due to differences in methodology. Most of the studies that question the IH only focus on judgment data or combine it with a written short answer task.

The objectives of this study are (i) to add a new perspective to the debate on the IH by considering an understudied syntax-discourse interface phenomenon in Romance heritage language acquisition, namely information structure related word order variation in Italian ‘why’-interrogatives, and (ii) to investigate whether different methodologies (oral elicited production task vs. acceptability judgment task) lead to different results. To address these issues, I ran an experimental study that consisted of an oral elicited production task and an acceptability judgment task. Both studies examine the effect of focus on word order in Italian ‘why’-interrogatives with transitive verbs in which the subject and the direct object are realized lexically and compare Italian HSs with a monolingual control group (L1). The elicited production task contains two independent variables: first, focus with two levels: focal subjects vs. non-focal subjects, and second, language background: HSs vs. L1. The acceptability judgment task consists of three independent variables: first, whether the subject receives a focus interpretation or not. Second, I included three different word order patterns: ‘why’SVO, ‘why’VSO, and ‘why’VOS, and finally, I controlled for the language background: HSs vs. L1. A total of 30 Italian HSs (mean age = 26, range = 18-50, 19 female, 11 male, meanDiaLang: 56.3) with German as a majority language participated in the study, as well as 30 Italian

monolinguals (mean age = 27, range =18-40 , 25 female, 5 male, meanDiaLang: 68.5). The participants of both groups were matched with respect to the dialectal regions in Italy.

The results of the production task revealed that the focal subjects occur significantly more often in a word order pattern that deviate from ‘why’SVO than non-focal subjects ($\beta = -1.13$, $SE = 0.43$, $z = -2.64$, $p < 0.01$). This finding holds for both monolinguals and HSs. The statistical analysis further shows that the L1 group produces a significantly higher rate of ‘why’SVO than HSs for both information structural interpretations of the subject ($\beta = 2.14$, $SE = 1.07$, $z = 2.00$, $p < 0.05$). By contrast, the results of the acceptability judgment task show that the rating of the HSs differ only in one of the six possible combinations from the rating of the L1 groups, as illustrated in Table 1.

| Comparison of language background (HSs vs. L1) | | | | | |
|--|--------|---------|-------|--------|--------|
| | focus | β | SE | t | p |
| ‘why’SVO | [-Foc] | -1.361 | 0.426 | -3.197 | < 0.01 |
| | [+Foc] | -0.274 | 0.993 | -0.079 | 0.289 |
| ‘why’VSO | [-Foc] | 0.321 | 0.239 | 1.344 | 0.536 |
| | [+Foc] | -0.302 | 0.224 | -1.352 | 0.531 |
| ‘why’VOS | [-Foc] | 0.2373 | 0.271 | 0.876 | 0.817 |
| | [+Foc] | -0.1134 | 0.272 | -0.417 | 0.976 |

Table 1: Comparison of language background (HSs vs. L1) across word order patterns and focus conditions of the subject.

To sum up, the two experiments show contradictory results regarding the IH. On the one hand, we found a significant difference for the oral elicited production task that speak in favor of the IH and consequently on the vulnerability of the syntax-discourse interface. On the other hand, the findings of the acceptability judgment task contradict the IH and showed a target-like performance of the HSs, as it is the case in the studies of Leal, Rothman, & Slabakova (2014). The results of current and previous studies suggest that the HSs’ spontaneous production at the syntax-discourse interface is more vulnerable than their passive knowledge. Consequently, the methodology should be reflected carefully before coming to final conclusions in heritage language acquisition theory, as well as for the bridging to formal approaches.

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Diminutive constructions in bi/multilingual speech: a cross-community analysis of Spanish-English codeswitching in Northern Belize and Miami

Margot Vanhaverbeke (Ghent University)
Renata Enghels (Ghent University)
Osmer Balam (College of Wooster)

The present cross-community analysis of the diminutive sheds new light on when, how, and why bi/multilingual speakers alternate their languages – in our case Spanish and English – in two bi/multilingual contexts, namely Miami and Belize. Miami accommodates one of the largest Hispanic populations outside Latin America (Carter & Lynch, 2015). Although English remains the dominant language in this community, Spanish-English bilingualism is incontestably the social norm among U.S.-born Spanish heritage speakers. In the Central American country Belize, language alternation is also a common practice as a result of widespread societal multilingualism (Balam, 2014). The contemporary linguistic landscape of Belize is marked with Spanish as the majority language, English as the official language and Belizean Kriol as the country's lingua franca (Balam, 2017; see Balam, 2013 for a detailed overview).

The cross-community analysis that we propose focuses on the diminutive construction in bi/multilingual speech, and especially in a codeswitching context. The semantic-pragmatic linguistic category of diminutiveness can be used to convey a dimensional, scalar or temporal reduction (e.g. *a tiny window, a small group, a little while*), but can also serve to express a wide array of positive or negative affective connotations and personal attitudes towards the diminutivized entity (e.g. *my hubby, that nasty little dog*) (i.a. Bagasheva, 2020; Schneider, 2003; Vanhaverbeke & Enghels, in press). With regard to its morphological configuration, various apparatus can be employed to form diminutives, including affixation (e.g. *miniskirt, kitty*), reduplication (e.g. *a goody-goody*), compounding (e.g. Cuwabo *mwáná-múyaná* child_{DIM.CN}-woman 'little woman'; Gibson, Guerois & Marten, 2017:14), truncation (e.g. *hon < honey*), and periphrastic constructions (e.g. *a little mouse, the tiny castle, a little strange*) (Schneider, 2013). How speakers express diminutiveness may thus strongly diverge across languages, as is the case in Spanish and English. While Spanish primarily makes use of synthetic diminutive suffixes (*-ito/a, -illo/a, -ico/a, -uelo/a*, etc.; RAE, 2011), English mostly turns to analytic periphrastic constructions (article + *little (bit of), small, tiny*, etc. + N; *a little (bit) + Adj/Adv*) (Hägg, 2016; Schneider, 2003). As a result, the diminutive construction potentially acts as a conflict site in Spanish-English codeswitching (Enghels & Vanhaverbeke, 2020). The primary aim of this presentation is therefore to examine and contrast the diminutive construction in the two multilingual communities of Miami and Belize.

The present study discusses the formation and the use of diminutive constructions in the conversational Bangor Miami corpus¹ and in a corpus of sociolinguistic interviews carried out in Belize (Balam, 2016). The results show that from a morphological perspective, the multilingual speakers of Miami and Belize have different tendencies regarding how they form diminutives. Both with regard to token frequency and type frequency, Miami bilinguals use significantly more analytic markers than Belize multilinguals. Moreover, with respect to synthetic diminutive markers, both communities turn to different suffix types (e.g. *-ico* in Miami corpus and *-ino* in Belize corpus), although *-ito* remains the most popular suffix in both communities. Remarkably, multilinguals in Belize significantly apply more codeswitching within the diminutive construction (e.g. *unos lee kids, un lee pursito, un baguito, un poquito más de freedom*) than Miami bilinguals. Furthermore, the data of both communities largely

¹ See <http://bangortalk.org.uk/speakers.php?c=miami> for more information on this online corpus.

support Poplack's Universal Constraints (1980), as well as our hypothesis based on Myers-Scotton's Matrix Language Frame model (1993) that the diminutive marker is considered an early system morpheme and consequently can be provided by both the Matrix and the Embedded Language.

From a functional perspective, the speakers of Miami and Belize again seem to use the diminutive expression in different manners. Only in the Miami community do bilinguals make a distinction in function and diminutive language, using English markers mainly to express objective meanings (e.g. *un little estante*) and Spanish ones for affective connotations (e.g. *un partimecito*). These results are in line with Gumperz' Metaphorical Codeswitching Framework (1982), which states that the choice of language in bilingual conversations has social meaning, i.e. Spanish being the more affectionate language and English the objective/impersonal language. In this regard, the diminutive language can be interpreted as a marker facilitating the correct interpretation of the diminutive meaning conveyed by the speaker. In Belize, speakers do not seem to make that distinction, using both Spanish and English markers to communicate either diminutive meaning.

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The phonological properties of Catalan and Spanish (ir)reversible binomials. Evidence from real data corpora and judgment tests

Clàudia Pons-Moll (Universitat de Barcelona)

1. Introduction. The focus of this talk are the phonological properties of binomials in Spanish and Catalan, a type of coordinated constructions that Malkiel, in his conspicuous essay of 1959, defined as «the sequence of two words pertaining to the same form-class, placed on an identical level of syntactic hierarchy, and ordinarily connected by some kind of lexical link», namely, structures of the type *fame or fortune, (without) rhyme or reason, trick or treat*, etc. The potential role of weight in the order the binomial's constituents adopt has extensively been explored in English (e.g. the precursor work by Malkiel 1959, in which many other languages are also considered, Bolinger 1962, Cooper & Ross 1975, Pinker & Birdsong 1979, or the more recent ones of Benor & Levy 2006, Molin 2013, Ryan 2019), and also in French (Pinker & Birdsong 1979) or in German (Müller 1997). Most of these studies conclude that, once semantic factors are controlled, weight (expressed through a larger number of syllables, V with more sonority, longer V, presence of margins, complex onsets and codas, less sonorous onsets and more sonorous codas) “decides” which order the components of the binomial adopt: the component that contains heavier elements tends to occur in second position (see, esp., Ryan 2019). Despite of their obvious phonological relevance, binomials in Spanish have only been addressed from the perspective of lexicology and semantics (García-Page 1998; Almela 2006) and translation (Andrades 2014, Rodríguez 2014); there are no studies focusing on their phonological properties, nor studies devoted to these type of constructions in Catalan.

2. Purpose. On the basis of the analysis of the *a) irreversible* (frozen) binomials collected in Espinal (2004, 2006) (n=492) and in Almela (2016) (n=350), this talk reviews the main metrical, rhythmic, and phonotactic properties that characterize binomials in Catalan and Spanish, and tries to determine which factors are more decisive in the order they adopt. In order to control the prevalence of all the factors that can eventually be undermined by the interaction with more robust factors (such as the number of syllables or semantic factors), this talk also presents the results of a judgment test in which 33 speakers with Catalan as L1 had to pick between two sentences containing both *b) reversible binomials* with coordinated real adjectival components differing either just in syllable number or just in basic syllable structure (presence / absence of margins; complexity of the margins) (n = 90 sentences x 2 possible combinations), and *c) reversible binomials* made up of coordinated nonce adjectival components, all monosyllabic and differing by only one of the following properties: *i) onset complexity; ii) onset sonority; iii) coda sonority; iv) vowel sonority* (n=41 sentences x 2 possible combinations).

3. Basic methodology and results. All Catalan binomials contained in the online Catalan idiom dictionary of Espinal (2014, 2016) and all Spanish binomials contained in Almela (2016), a paper devoted to their semantic features, were categorized according to the number of syllables of each component; binomials with an equal number of syllables per component were classified depending on the sonority of the stressed vowels, the presence or absence of word-initial onsets, the complexity of word-initial onsets, and the relative sonority of word-initial consonants; afterwards, the percentage for each circumstance was calculated. Here we only present the main findings. The most decisive factor in the order the binomials adopt is the number of syllables, as can be seen in FIG. 1, with very low percentages of A > B in both languages, and a clear preference for B > A followed by A = B in Cat., and for A = B followed by B > A in Spa. These results are in accordance with the higher frequency of monosyllabic words in Catalan and the higher frequency of bisyllabic words in Spa. The productivity of B > A is supported by many cases in which a syllable or a prefix is added to the base of the first component to construct the second one (*a les dures i a les madures, a ciencia y consciencia*). Moreover, in most cases in which A > B or in which A = B, the second component has a word-final heavy syllable (*cara o creu, cara o cruz*), so weight is balanced. Vowel sonority, which has proven to be quite relevant for English and French (Pinker & Birdsong 1979), is only apparent in binomials which combine deictic or onomatopoeic elements (*ni fu ni fa; que si patatín, que si*

patatán). The tendency in both languages, in fact, is to have stressed vowels with the same sonority (in about the 60% of the cases), although sonority reversals are more frequent than expected (about a 20% of the cases in both languages). Parallelism is also the tendency found for the rest of the factors: in a 83,17% of the cases, in Cat., and in a 81,6%, in Spa., both components have the same word-initial onset configuration (\emptyset - + \emptyset -; C- + C-; CC- + CC); the same tendencies apply for onset complexity. Onset sonority, though, shows an unexpected behavior, with high percentages for word-initial C of the second component with higher sonority (39,1% in Cat.; 39,4% in Spa. cf. 38,3% and 46,7 with equal onset sonority for Spa and Cat., respectively). Although not illustrated bellow, rhythmic aspects, such as the percentages of adjacent unstressed syllables (0, 1, 2, 3, etc.), were also considered, with these tendencies: 1 (49,7%) > 2 (30,2%) > 3 (13,6%) > 0 (2,8%) > 4 (2,4%) (the exact percentages correspond to Cat., here, but the hierarchy is applicable to both languages).

The results of the judgment test on real and nonce binomials in Catalan reproduce and, in some cases, “magnify” these tendencies (see FIG. 2 - FIG. 6), and reveal the crucial character of some additional factors, such as the preference to avoid syllabic transitions with hiatus (see FIG. 3 and FIG. 4) or the tendency to prefer second components with back vowels (see similar findings in Cooper & Ross 1975). Due to space reasons, we only expose, in the figures below, the results for some of the factors and conditions considered (see § 2, for a complete overview of all the metrical factors taken into consideration).

Overall, this line of research is relevant not only because of the lack of literature focused on this topic in Catalan and Spanish, but also because the structural distributions detected in the binomials are a window into the role of each of the factors adduced as “weight bearers” in the phonology of Catalan and Spanish, a window that would otherwise remain (at least) half closed.

FIG. 1. Irreversible binomials (corpora). Factor: syllable number

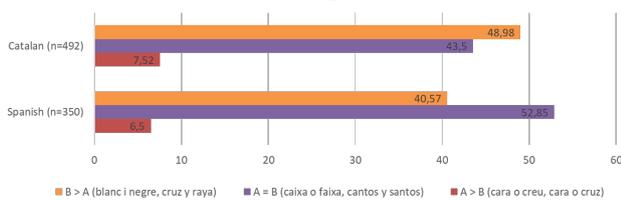
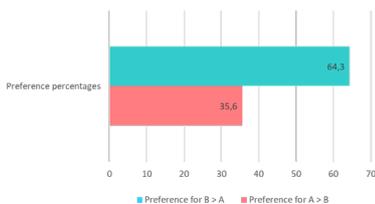
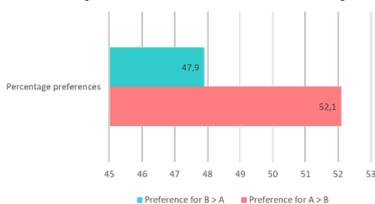


FIG. 2. Reversible binomials with real components (experiment). Factor: syllable number



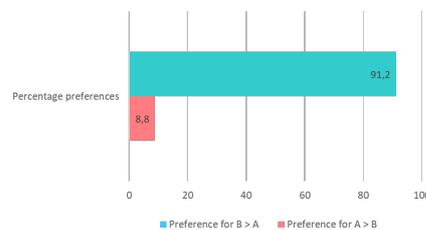
(n= 50: En Joan és just i modest vs. En Joan és modest i just; Includes all syllabic combinations: 1+2; 1+3; 1+4; 2+3, 2+4...)

FIG. 3. Reversible binomials with real components (experiment). Factor: syllable number inhibited by *HIATUS



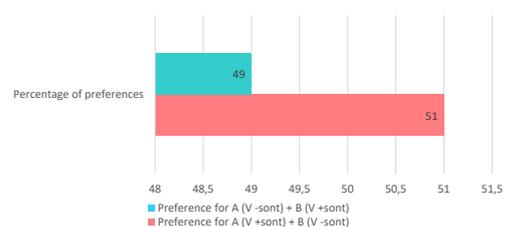
(n= 13: En Joan és fort i àgil vs. En Joan és àgil i fort)

FIG. 4. Reversible binomials with real components (experiment). Factor: syllable number magnified by *HIATUS



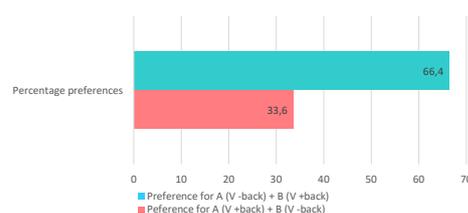
(n= 1: En Joan és alt i morè vs. En Joan és morè i alt)

FIG. 5. Reversible binomials with nonce components. Factor: vowel sonority (→ reversal behavior)



(n= 18: El sofà és prec i prac vs. El sofà és prac i prec)

FIG. 6. Reversible binomials with nonce components. Factor: +/- back character of the vowel



(n= 15: El sofà és prec i pruc vs. El sofà és pruc i prec)

Pedagogical Linguistics and Teaching Linguistics

Ingo Feldhausen (Université de Lorraine)

The relationship between (formal) linguistics and didactic questions has a long tradition (e.g. Glyn Lewis 1974, Moser 1975, Seelbach 1983), but it has not always been peaceful (e.g. Peyer & Portmann 1996, Hudson 2004). It is therefore exciting to notice the current growing interest that the fields of "Pedagogical Linguistics" and "Teaching Linguistics" are experiencing. Recently, "Pedagogical Linguistics" has started to (re-)explore what the potential importance of formal linguistic research might be for language pedagogy (cf. Trotzke & Rankin 2020:5; see also Rothstein 2010, Whong et al. 2013, Rothman & Slabakova 2018, Costa 2019 (= *Going Romance keynote*), Feldhausen & Biedebach 2020 and others). Similarly, recent developments in higher education put more emphasis on 'good teaching' – and these do not circumvent the discipline of (formal) linguistics: "Teaching Linguistics" concentrates on the teaching of our own subject matter in higher education, and it addresses pedagogical approaches, challenges, and resources that support the teaching of linguistics in higher education (cf. Petray 2004, Feldhausen 2021:§4, Hiramatsu & Temkin Martinez 2021).

After a short general introduction to the two areas, I will demonstrate how linguistics can make important contributions to language pedagogy by drawing on my work on the subjunctive in Spanish and on the intonation of French and Spanish. Next, I will show how research-led teaching at university can be employed to teach about intonation and how this might feed into linguistic research. In addition, I will showcase how academic skills can be explicitly integrated into linguistics classes – skills that are, according to my experience, expected of students but are rarely taught by lecturers on purpose.

The talk demonstrates shows that linguistics matters, and it shows how the two didactic-oriented approaches discussed here are beneficial for the entire discipline of linguistics.

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